Filling the Shortage of Primary Care Health Care Providers in Wisconsin:

The Primary Spine Care Physician, a new class of health care provider.

A Wisconsin Chiropractic Association Policy White Paper.

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According to a 2011 report by the Wisconsin Hospital Association, Wisconsin must add 2,196 extra physicians in addition to those already expected to enter the workforce to meet the demand by 2030. This equates to just over 100 extra physicians each year. The impending shortage will hit hardest in the primary care sector, where 80 percent of the shortage is expected to fall. This problem is exacerbated in rural areas where communities struggle to attract and keep well-trained health care providers (Mareck, 2011), and by the thousands of new Wisconsin patients who now have health insurance coverage through the Affordable Care Act.

The Wisconsin Medical Society's paper, "Who Will care for Wisconsin?" reported an expected increase in total office visits from 18,783,000 in 2006 to 21,288,000 in 2020 and 22,906,000 by 2030. This represents an increase of 22 percent. This shortage leaves primary care physicians with large patient panels that only continue to grow and results in decreased patient access and continuity of care.

Primary Care Physicians (PCPs) spend significant time dealing with spine-related disorders (SRDs) including low back and neck pain. In fact, low back pain is the second most common reason for a patient to see their primary care physician (Cypress, 1991, Wolsko, 2003). Additionally, low back pain (LBP) is the leading cause of disability worldwide, with neck pain ranking fourth (Lim et al., 2012). Moreover, a recent systematic review showed that LBP rates sixth in terms of overall disease burden, (Hoy D et al., 2014). Wisconsin's obesity epidemic likely exacerbates SRDs as obesity is a precursor to joint disease, among other chronic conditions, as well as a risk factor in spinal impairment (University of Wisconsin School of Medicine and Public Health Wisconsin Partnership Program Five-Year Plan, 2014; Liuke M, 2005; Vismara, 2010). A recent survey of Wisconsin adults shows that 73 percent were either overweight or obese (UW School of Medicine and Public Health, Wisconsin Partnership Program Five-Year Plan, 2014).

The Problem: The significant burden of spine-related conditions on the health care system and the shortage of physicians in the state of Wisconsin.

The burden of SRDs weighs heavily on our health care system, society and industry. Between 1999 and 2008 the mean inflationary adjusted costs for ambulatory neck and/or back pain increased by 95 percent in the United States (Davis et al, 2012) with LBP accounting for 27 million patient visits per year and neck pain 10 million visits (Haldeman, 2013). Most of the increased spending was associated with increased specialty visits and not primary care evaluation (Davis et al, 2012). With the significant increase in spending one would expect outcomes to improve. In fact, disability from SRDs is rising (Kosloff et al 2014; Murphy, 2011). The annual direct costs for spine care in the US have been estimated to be about $102 billion, with about $14 billion in lost wages (United States Bone and Joint Decade, 2008).

Low back and neck pain were previously thought to be self-limiting conditions, yet current research shows that the conditions significantly increase the risk of limited physical and social functioning many years after onset (Thelin et al, 2008). Gureje, Simon, and von Korff reported that about 50 percent of LBP patients experience persistent pain for at least 12 months following its onset and between 50 percent and 75 percent of those who report neck pain continue to experience the pain one to five years later.

Several evidence-based guidelines have been published on appropriate management of LBP. However, recent studies have shown that providers are not implementing these guidelines appropriately, especially with regard to overutilizing advanced imaging, specialist referrals and invasive procedures (Finestone et al 2009, Williams et al, 2010; Buchbinder et al 2009). Treatment that is incongruent with guideline recommendations is associated with higher overall costs related to SRDs (Allen et al).

It is not difficult to think that the inappropriate treatment of acute LBP can lead to patients developing chronic low back pain. Studies show that patients with chronic low back pain have double the overall health care costs compared to those without (Jhawar, 2006). Part of the struggle in managing SRDs is that the potential causes of spinal pain are multifactorial and may be related to structural, neurophysiological or psychosocial issues.

Patients often consult their PCP for diagnosis and management of their SRDs. Several peer reviewed studies and published articles show that SRDs may be challenging for the PCP to manage appropriately. A University of Rochester School of Medicine and Dentistry study showed that between the second and fourth year of medical school, students scored better when being tested on musculoskeletal conditions, but reported that their clinical confidence over this same period remained low. Despite the low levels of clinical confidence, a high percentage of SRDs are managed in primary care. Given the increasing burden of musculoskeletal disorders combined with low clinical confidence, an escalation of health care cost is possible (DiGiovanni et al).

In one interview study, PCPs perceived back pain as a low clinical priority and uninteresting in comparison to the major chronic illnesses such as heart disease, or diabetes that they must manage for their patients (Sanders et al). In the same study, shifting this population of patients to a non-physician provider was perceived by PCPs as a positive step towards alleviating their burden of work. A study published in the European Journal of Pain in 2007 reported that some PCPs lacked confidence in their ability to assess and supply evidence-based care for back pain and that some expressed anxiety about not being able to help or give adequate explanations (Breen et al, 2007)

The Solution:

The previously discussed papers by the Wisconsin Hospital Association and Wisconsin Medical Society both support the idea of team-based care, in which health care providers work together to efficiently manage patient care and disseminate best practices while maintaining improved access and continuity of care.

Because of the acute need for a class of healthcare providers who can effectively take the lead in managing patients with spinal pain, it is proposed that Wisconsin establish a Primary Spine Care Physician (PSCP) certification that allows providers who obtain it to act as a primary point of contact for patients with SRDs. Primary Spine Care Physicians (PSCPs) will work with a team of other providers and will help alleviate the primary care physician shortage in two ways;

1. By managing a large percentage of patients with spine-related conditions in a manner that produces better outcomes and is more cost effective (Paskowski et al).

2. By allowing PSCPs to manage patients with SRDs, PCPs will have more time to effectively manage major chronic illnesses and other health concerns.

To achieve this goal such a provider would need:

• Astute diagnostic capability, including the ability to differentiate systemic/inflammatory disease from degenerative processes as well as other causes of spinal pain including occasional red flags;

• Effective and efficient management of the majority of spine conditions;

• Delivery of evidence-based care, with infrequent referral to other providers;

• Specialized training in SRDs and numerous forms of non-operative alternatives including manual therapies, management of pharmaceutical therapies, percutaneous invasive therapies, rehabilitation and other treatments;

• Familiarity with surgical interventions and their evidence-based indications and implications to make appropriate and timely referrals based on this evidence;

• Intimate awareness of the abilities and limitations of other spine care providers and specialists who can provide necessary complementary interventions (both surgical and non-surgical);

• Evidence-based, scientifically defensible, cost-effective, clinically-relevant, collaborative, patient-centered care practices for SRDs;

• Appreciation for minimalism and quality of care to combat excess spending and the development of treatment dependency;

• Understanding of the unique aspects of work-related and motor vehicle collisions-related SRDs;

• Broad perspective on the public health correlations with SRDs including smoking, obesity, lack of exercise, mental health disorders;

• Ability to screen for psychosocial morbidity and professionally communicate with appropriate providers of care for these conditions and other aspects of bio-psychosocial rehabilitation;

• An understanding of pain and chronicity from a biological and clinical research perspective, with a working knowledge of effective case management, the clinical implications for proper patient communication, and establishing realistic patient expectations.

• A commitment to addressing modifiable risk factors, activities and other behaviors during daily life, work and recreation;

• Ability to coordinate care among numerous practitioners and follow patients for a prolonged period of time if necessary.

Chiropractors are ideally suited to fill this role and help meet the growing need for an appropriate patient-centered treatment paradigm working within a team-based delivery system.

Chiropractors receive extensive training (4820 hours) in differential diagnosis and procedures with a heavy focus on management of spinal conditions. Chiropractors are trained in and have the ability to order appropriate imaging and laboratory testing as needed under their current scope of practice in Wisconsin. Additionally chiropractors have additional training in addressing exercise, diet and rehabilitation associated with SRD health concerns.

Chiropractic care has been shown to be effective for a wide variety of SRDs. Evidence supports the efficacy of chiropractic treatment for back pain, neck pain, and headaches. (Murphy et al; Tuchin et al; Bronfort et al, 2004; McMorland et al; von Heymann et al; Bronfort et al, 2012). This efficacious and cost effective care is also consistently associated with high patient satisfaction (Butler et al; Hertzman-Miller et al). Furthermore there is evidence that properly accessed and provided chiropractic treatment has the potential to reduce health care costs in the treatment of SRDs (Allen et al; Legorreta et al; Manga et al; Michaleff et al; Sarnat et al).

In a study tracking a major self-insured workforce, patients that sought chiropractic care were least likely to receive treatment that went against guideline recommendations in the areas of imaging, surgeries and medications (Allen et al). In that same study, chiropractic care was also linked to lowest total costs of all treatment options. The Allen study also reported that surgery was tied to highest overall costs of all treatment options.

Researchers who studied workers compensation claims in the state of Washington found that patients who sought care from a chiropractor first were much less likely to end up having surgery–1.5 percent–than those that sought care from a surgeon first–42.7 percent (Keeney et al). Studies following the same group of workers compensation claims linked chiropractic care with lower odds of chronic work disability and early use of MRI, which is against guideline recommendations in most cases (Graves et al; Turner et al).

In a hospital setting in Plymouth, Massachusetts this type of team-based care with chiropractors acting as the primary point of contact has been shown to be effective both in patient outcomes and satisfaction (Paskowski et al). In this setting the mean cost of care was $302, pain levels on averaged dropped from 6.2/10 to 1.9/10 and 95 percent of patients rated care as "excellent".

In a survey study of PCPs, nurses and patients in the United Kingdom aimed at determining what

steps could be taken to improve access to care and outcomes for patients with low back pain, access to chiropractic care was repeatedly raised as a needed intervention (Breen et al, 2004).

In the UK and Sweden where non-medical providers have been put in place as front-line diagnosticians for patients with musculoskeletal problems, patient wait times to see rheumatologists and surgeons have been reduced and good patient outcomes have increased (Foster et al).

To be more effective at managing care, reduce the burden on primary care and decrease referrals to specialists, Wisconsin should expand the scope of practice for chiropractors trained as PSCPs to include limited prescription rights and the ability to perform some minor procedures. To obtain the appropriate training necessary for an expanded scope of practice, we propose a program similar to that required of nurse practitioners and physician assistants, who also have prescription authority in Wisconsin. This program would build upon the doctoral level training chiropractors already possess.

The components of this innovative health care reform initiative include:

- A two-year accredited Master's Level academic program delivered online and in class room.
- A ground-breaking clinical rotation program for Primary Spine Care Physicians similar to the chiropractic residency programs being piloted at six VA hospitals across the country.
- State funding for chiropractic graduate medical education (GME) similar to the funding Wisconsin currently provides for family medicine and primary care residencies.
- Eligibility for the rural health care loan repayment program to incentivize Primary Spine Care Physicians to practice in underserved areas.
- Modifications to the chiropractic scope of practice law and malpractice insurance coverage.

This program will give the 2,300 licensed doctors of chiropractic in Wisconsin the opportunity to obtain the additional training necessary to better treat and manage SRDs, thereby contributing toward alleviating the shortage of physicians and increasing access to quality, affordable health care for Wisconsin residents.

When considering how this would affect rural communities, a study in the American Journal of Public Health found that chiropractors provide a considerable amount of care in these areas (Smith et al). By expanding their scope of practice, chiropractors can expand the breadth of SRDs that they can manage effectively and improve access to quality care in rural communities. Provider retention has always been a struggle for rural areas and chiropractors who have established practices within these communities would be unlikely to leave once receiving PSCP training. This proposal builds upon steps that Wisconsin has taken to address the severe shortage of primary care available in underserved areas.

In its last state budget, Wisconsin approved grants to increase the number of primary care residencies located in more underserved areas. Wisconsin is also moving forward with creating new medical school programs in Green Bay and other regions of the state. In addition to being aligned with the position papers of the Wisconsin Medical Society and Wisconsin Hospital Association, this proposal also fits within the US Bone and Joint Initiative's (USBJI) recommendations for adding value to musculoskeletal care. The USBJI is a multi- disciplinary initiative that strives towards a goal of promoting patient-centered care to improve the prevention, diagnosis, and treatment of musculoskeletal conditions. At an interdisciplinary summit in 2013, the USBJI published their recommendations to move towards this goal. Their recommendations included training programs to advance the knowledge, skills and attitudes of providers in the management and diagnosis of musculoskeletal conditions, and expand the workforce of musculoskeletal care across all health care disciplines to meet the demands of the population. They further recommended the development of vertically-integrated models of care that encourage a collaborative, interdisciplinary approach to patient care and improved patient outcomes (Gnatz et al).

Furthermore, the Primary Spine Care Physician proposal builds upon the innovative change to Wisconsin Medicaid policy crafted as a result of the Affordable Care Act. Wisconsin took the unique step of rejecting Medicaid funds but still expanding Medicaid eligibility to all Wisconsin residents under 100 percent of the Federal Poverty Level. In general, those above that income threshold are expected to seek insurance coverage through the Federally Facilitated Marketplace, where over a dozen private insurance plans participate. This new Medicaid policy fosters patient choice in health coverage by em-

powering patients to choose the best coverage for them. Similarly, the PSCP proposal fosters patient choice in health care providers for spine-related conditions and offers effective measures to meet the impending physician shortage with a highly trained, evidence-based, cost-effective provider to manage a wide variety of spinal complaints.

Moreover, the proposal works to ensure patient safety and quality in health care by requiring chiropractors interested in becoming Primary Spine Care Physicians to undergo additional training (M.S. + 500 hour clinical) before being able to work under an expanded scope that includes pharmacological and more invasive treatment techniques. This is much more intensive than programs required of non-medical prescribers in Europe where training consists of 27 days in classroom and 12 days in practice under the supervision of an MD or DO (Courtenay et al).

This PSCP proposal would enable chiropractors to better meet the needs of patients in Wisconsin with SRDs by utilizing their training in less invasive (and less expensive) techniques while being able to utilize medication and other treatment options when absolutely necessary. The PSCP proposal also recognizes the importance of collaboration between PSCPs and other health care professionals. Indeed, working collaboratively with other professionals is not new for chiropractors. State law (Wis Stat. s. 446.02(7d)(c)) already requires chiropractors to refer patients to physicians when the practice of chiropractic is no longer able to treat the condition.

Such collaboration is not only required, but essential to the success of the Patient Centered Medical Home Model (PCMH) and Accountable Care Organizations (ACOs) emerging throughout the State. The success of these models is premised on a critical mass of primary care professionals who can effectively coordinate care across the spectrum of health and wellness providers. The proposal increases the number of primary care providers available for these models of care.

It is important to highlight that there is precedent for expanding the scope of practice of other professions in Wisconsin. Nurses who obtain additional training and certification may have prescribing authority as Advanced Practice Nurse Prescribers (Wis. Stat. s. 441.16.(2)). Permitting chiropractors to have such authority is the next logical step, particularly since chiropractic training is more closely aligned with Medical Doctors (MDs) and Doctors of Osteopathy (DOs).

In the United Kingdom, several professions can operate as non-medical or allied health prescribers. These include nurses, pharmacists, optometrists, physiotherapists, radiographers, chiropodists and podiatrists. (Courtenay et al) In 2009, the UK Department of Health (UK-DH) released a report stating that in an 18-month period none of the 60,000 medication incidents were related to allied health prescribers (UK-DH). As mentioned earlier, typical training for these prescription rights is 27 days of in class training and 12 days working under an MD/DO (Courtenay et al). In its report, the UK-DH states that non-medical prescribers have the potential to:

- Improve patient care without compromising safety.
- Make it simpler and more efficient for patients to get the medications they need.
- Increase patient choice in safely accessing medications including access to care closer to home.
- Make better use of the skills of health professionals and increase value for money.
- Contribute to introduction of a more flexible work team.
- Facilitate early discharge from hospital.
- Prevent hospital admissions altogether.

(Department of Health; Morris et al)

The PSCP program is also a new approach to healthcare education. It is an advanced education program where curriculum is designed around specific conditions and body systems. The complexity of managing SRDs has grown tremendously in the past decade and developing a new type of provider to manage those complexities requires a different approach. The PSCP program combines the clinical doctorate training in spine and musculoskeletal conditions of Doctors of Chiropractic with traditional pharmacological training, resulting in a condition-based program. The M.S. degree provides pharmacological training with evidence-based training focused on the spine and SRDs. The skills learned in the M.S. program will then be further developed in a 500-hour clinical rotation program where providers will have the opportunity to gain hands on experience. The result will be a specialist in SRDs that has the ability to provide evidence-based, patient-centered care required to optimize clinical outcomes in a cost-effective manner.

M.S. Degree in Advanced Clinical Practice: Board-certified Primary Spine Care Physician

The M.S. Degree is a two year, 55 didactic credit hour, 500 hour clinical rotation, board certification program. The board certification will allow providers an expanded scope of practice as a primary spine care physician. Graduates will be certified to provide primary diagnostic and therapeutic intervention for spinal related conditions (SRDs).

YEAR ONE: combination of on-line and on-ground course work.

Core Courses – Advanced Practices

- Primary Care Practice: Topics in Medicine
- Advanced Imaging & Laboratory Diagnosis
- Primary Care Practice: Case Mgmt. & Treatment Optimization
- Advanced Diagnosis
- Clinical Pharmacology
- Clinical Research and Epidemiology
- Interprofessional relations and Integrated Care

After year one the candidate will complete a core competency exam. Students with successful completion may enter year two as well as start clinical rotations at determined sites. 500 hour clinical training will include rotations in neuro / orthopedic spine surgery, pain management, orthopedic & neurology practices. After successful completion of year two and the 500 hour clinical rotation training candidates may take the board certification exam.

YEAR TWO: combination of on-line, on-ground and clinical rotation.

Concentration: MS - Primary Spine Care

- Causes of Spinal/Musculoskeletal Pain & Differential diagnosis
- Case Management and Coordination of Care in Spinal Pain Patients
- Spinal Injuries (correlated with diagnostic imaging)
- Public Health Issues and Epidemiology of Spinal Conditions
- Pharmacology in Primary Spine Care/Musculoskeletal Conditions
- Nutrition for Musculoskeletal Health
- Interpreting Research and Applying Evidence in Spine Care Practice

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