



The Rise of Spine Care Pathways

A. Introduction

MOST PATIENTS WITH LOW-back pain (LBP) still consult their family physician. There are a variety of reasons – some chosen by patients, some forced upon them by the health care system.

This is despite now compelling evidence that most family physicians do not have expertise in the management of patients with back pain, do not follow evidence-based guidelines and treatment approaches that would produce best results, and that the management of these patients remains remarkably inefficient and expensive.^{1,2}

Health care systems, reacting to patient pressure and even more to the concerns of third party payers, are finally reacting and devising methods for improved spine care. The development of evidence-based clinical guidelines has been an important first step but has proved to be an inadequate response by itself. Most clinicians simply ignore them and follow their own belief systems despite education.

2. This is why we now see the current development of multidisciplinary spine care pathways, which will assume a dominant role in the years ahead. Features of these include:

- Classification of patients into clinical sub-groups, using criteria and language common to all professionals engaged in spine care (e.g. MDs, chiropractors, PTs).
- Evidence-based management according to those sub-groups.
- Incentives and structures to support the use and efficient operation of these pathways.
- Built-in on-going measurement of results and research to sustain and support the pathways – not only assessing safety and effectiveness but with a new focus on cost-effectiveness and patient satisfaction and the *value* of care.

- Dramatic reductions in imaging, other expensive diagnostic testing and invasive treatments and surgery.

In other words, improved care is no longer reliant upon an individual clinician being willing to adopt guidelines, improve performance and be ready to refer to other spine care professionals as appropriate. Improved care comes from a wider system of care.

If individual clinicians wish to have continued access to patients and to benefit from various financial and other incentives offered, they must support and adopt the dominant spine care pathway developed and accepted in their healthcare community.

In this issue of The Chiropractic Report we review two new spine care pathways. The first, previously discussed in this Report, is the Jordan Spine Care Pathway, developed in the USA principally by chiropractors; the second is the Saskatchewan Spine Pathway, developed in Canada principally by medical specialists and surgeons.

The Saskatchewan Spine Pathway provides the new model of multidisciplinary care being used in the Province of Saskatchewan and spreading across Canada, for example to the Province of Ontario where family medical practice is being reorganized into primary care networks which incorporate the services of a variety of health professionals including chiropractors.

Well-known spine care authority Dr Scott Haldeman of Los Angeles, Chair of the Research Council of the World Federation of Chiropractic, warns that the chiropractic profession must be actively involved in the development and implementation of this new paradigm of managing spinal disorders, because “spine care pathways will greatly influence the way that patients will be managed in the future”.³

Professional Notes

Chile – Graduates First Chiropractors

The first university in Chile to open a chiropractic program, Central University in the capital Santiago, graduated its first class of 19 chiropractors last month on April 19.

Most of Chile's 90 chiropractors are kinesiologists, similar to physical therapists in other countries, who re-qualified as chiropractors through a conversion course for health science graduates delivered between 2001 and 2005 by the Southern California University of Health Sciences (formerly the Los Angeles College of Chiropractic) and then the Anglo-European College of Chiropractic.

Their national association is the Chilean Corporation of Chiropractic (CCQ) which represents Chile in the Latin American Federation of Chiropractic (FLAQ – www.flaq.org) and the World Federation of Chiropractic (WFC – www.wfc.org).

The practice of chiropractic is legal and now growing in Chile, but not yet recognized or regulated by legislation. Development of chiropractic education in one

B. Jordan Spine Care (JSC)

3. Background

Following his graduation from New York Chiropractic College (NYCC) in 2002, Dr Ian Paskowski returned to Plymouth, Cape Cod in his home state of Massachusetts to find the typical widely-varying and ineffective management of patients with back pain. There was the “supermarket” of over 200 treatments for back pain as described by Haldeman and Dagenais⁴.

These treatments were employed by many different types of provider in the community and the local Jordan Hospital, a 160-bed community-based hospital serving 12 communities with a combined population of approximately 260,000 people.

Treatments were being given at Jordan Hospital and in the community without guiding principles, and often with extensive diagnostic testing and specialty consults, when effective lower cost interventions were overlooked. Two things came together to produce the result that he was soon the newly-appointed Medical Director of the Back Pain Program at Jordan Hospital.

- First, Paskowski on his own initiative set about developing evidence-based protocols for collaborative care that led to frequent medical referrals and excellent patient results in terms of effectiveness, cost-effectiveness and patient satisfaction. He had been motivated to do this by his NYCC internship with Dr Bill Morgan at the National Naval

Medical Centre in Bethesda, Maryland where he had experienced successful collaborative chiropractic and medical care for patients with back pain and other neuromusculoskeletal disorders.

- Second, independently of that Jordan Hospital had recognized that several prevalent and costly conditions were being managed poorly in its hospital, its affiliated out-patient clinics and the wider community. In 2005-2006 it wanted to embark on the development of evidence-based, clinical care pathways for each of these conditions in order to standardize and improve quality and cost of care. One such condition was low-back pain (LBP). These improved care pathways were for use not only in the hospital but in its out-patient clinics and the community.

Paskowski’s work was directly relevant and was being adopted successfully in the community. Jordan Hospital appointed him Director of its Back Pain Program and asked him to develop and implement Jordan Spine Care (JSC).

JSC and its clinical results have now been described in a first paper published in JMPT in February 2011.⁵

Other authors are Michael Schneider, DC, PhD and Joel Stevans, DC from the School of Health and Rehabilitative Sciences, University of Pittsburgh, and John Ventura, DC and Brian Justice, DC, both in private practice in Rochester, New York. All authors are members of the West Hartford Group, a society of US chiropractors that has worked collectively to adopt the new approach to spine care seen in the JSC. Paskowski, Justice and others of this group recently presented their methods and results to a standing-room only audience at the Association of Chiropractic Colleges’ Research Agenda Conference (ACC RAC) in Las Vegas in March.

4. JSC - Description

The JSC spine care pathway needed to be based on a standardized approach to initial evaluation and then management of patients with LBP that would be used by multiple clinicians/providers in many programs. Therefore it was developed by a multidisciplinary team, incorporating existing concepts and approaches where possible. The pathway is summarized in Figure 1.

A central and new feature is a treatment-based classification of different sub-groups of patients with LBP. That is summarized in Figure 2. Traditionally

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there has been a pathology-based classification of patients (e.g. those with joint dysfunction, spondylosis, sacroiliac fixation, disc herniation etc.). Problems with this arise from the difficulty of identifying the exact tissue or tissues that are the source of the back pain in the more than 80% of patients diagnosed as having “non-specific” back pain. Further, where there is pathology seen on imaging it is frequently not the cause of pain.

For a full description of the JSC pathway see the paper in JMPT, but features include:

- From first patient contact there is adoption of the standard approach to physical examination, case history, diagnostic triage, general case management and clinical record keeping established by the US National Center for Quality Assurance Back Pain Recog-

Figure 1

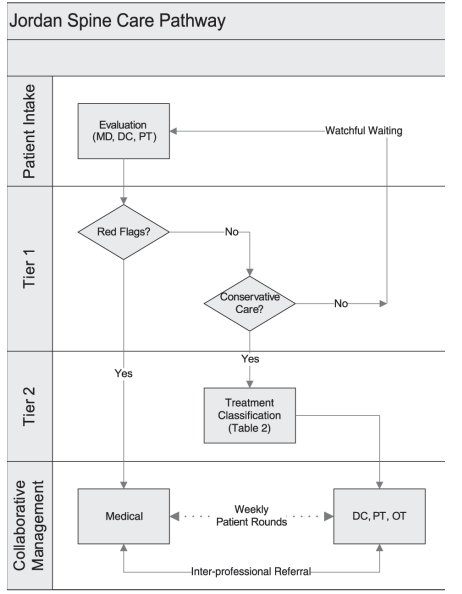


Figure 2 The 5-category treatment classification system and treatment strategies (tier 2) used by JSC clinicians

Flexion bias	Extension bias	Manipulation	Stabilization	Traction
<ul style="list-style-type: none"> • Older age (>50 y) • Directional preference for flexion • Imaging evidence of lumbar spine stenosis 	<ul style="list-style-type: none"> • Symptoms distal to the buttock • Symptoms centralize with lumbar extension • Symptoms peripheralize with lumbar flexion • Directional preference for extension 	<ul style="list-style-type: none"> • No symptoms distal to knee • Duration of symptoms <16 d • Lumbar hypomobility • Fear-Avoidance Beliefs Questionnaire for Work <19 • Hip internal rotation range of motion >35 	<ul style="list-style-type: none"> • Younger age (<40 y) • Average straight-leg raise (>90°) • Aberrant movement present • Positive prone instability test 	<ul style="list-style-type: none"> • Symptoms extend distal to the buttock(s) • Signs of nerve root compression • Peripheralization with extension movement or positive contralateral straight leg-raise test

Adapted from Hebert et al.

nition Program (NCQA BPRP). Details may be found at www.ncqa.org/bprp but this includes:

- i. Performing a comprehensive case history and physical examination in order to rule out ‘red flags’ of serious pathology
- ii. Using validated measures of pain, function, and mental health periodically during treatment to monitor progress
- iii. Advising the patient to remain active, avoid bed rest, and quit smoking
- iv. Recommendations for exercise and patient reassurance about a favourable prognosis
- v. Minimizing the use of unnecessary x-rays and advanced diagnostic imaging at the earlier stages of treatment
- vi. Appropriate timing of surgical and spinal injection procedures

All JSC MDs and DCs were trained for and received BPRP recognition status, and organizational recognition status was obtained for JSC, Jordan Occupational Health, the Jordan Hospital Pain Clinic and the Jordan Neurosurgery Clinic. This was to establish a standardized process across multiple providers and programs to promote acceptance and support from potential referring MDs in the community.

b. Treatment of the great majority of patients, those with no red flags for medical or surgical referral, is according to the classification system seen in Figure 2. This is based upon work by Hebert et al, a joint chiropractic and physical therapy research team, most recently described in a paper by Hebert, Koppenhaver and Walker last August.⁶ For example patients satisfying all or most of the five criteria for manipulation

should primarily receive manipulation. Those in other treatment groups may well benefit from manipulation also, but should primarily receive the relevant end-range loading exercise, stabilization or traction.

Jeffery Hebert, DC, PhD, formerly from the University of Utah, is now at the School of Chiropractic and Sports Science at Murdoch University, Perth, Australia. On one hand he and his team acknowledge that development of this new approach to classification of LBP patients is a work in progress. On the other hand they point to recent trials that indicate that “identification of the proper patient subgroup is more important to a successful outcome than choosing the right manipulative technique.”

In one trial from the University of Utah, in which clinical success was defined as a 50% improvement in Oswestry Disability Index score, less than half of all the back pain patients experienced clinical success with spinal manipulation – but the success rate increased markedly to 95% in the sub-group of patients meeting at least 4 of the 5 criteria for the manipulation subgroup.⁷

This result was supported in a further trial from the University of Utah group which showed that the clinical benefit of receiving matched treatment according to subgroup classification remained at 6 months.⁸

c. Outcome measures chosen to monitor progress in the JSC are the Numeric Pain Rating Scale (NPRS) and Bournemouth Questionnaire (BMQ – originally developed at the Anglo-European College of Chiropractic in Bournemouth in the UK), completed by patients at the initial visit, every two weeks thereafter and at discharge. In addition all patients answer a treatment satisfaction questionnaire at discharge and costs are monitored.

When the JSC protocols were finalized there was an internal education program aimed at emergency department physicians. Equally important was an external community outreach education program, which still continues, targeting primary care physicians, spine care specialists, occupational medicine clinics and patients in the general community. The outreach program was and remains comprehensive, and includes Grand Rounds presentations, primary care and other medical specialty office in-services, journal club presentations, newspaper articles, magazine articles and continuous education of providers on appropriate evidence-based care of LBP. JH has positioned its spine care program as the center of choice for

Dr. Paskowski speaks at the ACC RAC Conference workshop titled Thriving in Practice as a Primary Spine Care Practitioner in Las Vegas in March.



continued on page 6

The Chiropractic World

Chile – Graduates First Chiropractors

continued from page 1

or more quality universities has been seen as the key to full recognition. Central University (UCEN www.ucentral.cl) is just such a university. Founded in 1982 it is Chile's first autonomous private university and its 9 separate faculties include architecture, education, engineering, law, management, social sciences and health sciences – including nursing, and occupational therapy. It does not have a medical school.

AECC conversion course graduate Dr. David Lopez (*right*) is Director of the chiropractic program at UCEN. That program, as with others in countries such as Brazil and Japan, has begun as a conversion program for kinesiologists and other health science graduates. All of this is in accordance with WFC's Tokyo Charter on the introduction of chiropractic education, and WHO's Guidelines on Basic Training and Safety in Chiropractic.

Last month's new graduates are the first of three classes that will graduate from a 3 year conversion program with a bachelor's degree in chiropractic. As the Vice Rector for Academic Affairs, Margarita Ocares, announced at the graduation ceremony, UCEN will now proceed to develop a full 5 year chiropractic program.

UCEN's partner in commencing chiropractic education is the CCQ, assisted by both FLAQ, the regional body for Latin America similar to the ECU in Europe, and the WFC. At the time of the graduation FLAQ held an education symposium attended by leaders from the 5 universities in Latin America that now have chiropractic programs – Feevale University and the University Anhembi Morumbi in Brazil, the State University of the Valley of Ecatepec (UNEVE) and the State University of the Valley of Toluca (UNEVT) in Mexico, and now Central University in Chile. Also present were leaders of planned further schools in Brazil, Mexico, Peru and Costa Rica.

One keynote speaker was Dr. Len Faye of Los Angeles, known internationally because of his leadership in motion palpation and clinical training. He spoke of the importance of these new schools in Latin America having a common, core approach to chiropractic technique as demonstrated on his DVD lectures (www.chiropracticmentor.com) and summarized curriculum and faculty requirements. Another keynote speaker was Dr. Reed



Shown at the graduation at Central University on April 19 are (from right) Dr. Raul Guinez, President, CCQ, Dr. David Lopez, Director, Chiropractic Program, UCEN, Dr. Carlos Ayres of Peru, FLAQ President, Margarita Ocares, UCEN Vice Rector, Sabina Moreno, Secretary, Faculty of Health Sciences, Maria Valdes, Director, Occupational Therapy Program and WFC Secretary-General, David Chapman-Smith.

Phillips, Executive Director, CCE International (CCEI). CCEI represents chiropractic accrediting agencies in various world regions, and is now assisting Latin America as it moves to establishing its own CCE.

In the mid 1990s there were fewer than 100 chiropractors throughout Latin America and not a single school of chiropractic. Under the direction of FLAQ and the WFC the profession is expanding more rapidly there than in any other world region.

The London Olympics – Chiropractic Services

Athletes have two options for health care services at an Olympic Games – either they turn to members of the sports medicine team travelling with their national team, or alternatively to members of the host country medical services team available to all athletes at the Games' central health care facilities or polyclinics.

For the London Olympics, as usual, many national teams will have team chiropractors. However for the first time at a summer Olympics there will also be sports chiropractors as part of the elite, multidisciplinary host medical services team provided by the Local Organizing Committee.

These 28 chiropractors will be led by London Organizing Committee of the Olympic Games (LOCOG) member and Head Chiropractor Dr. Tom Greenway of London, who until recently served as team chiropractor for several seasons with the famed Chelsea Football Club. They will serve for the 74 days of the Olympic and Paralympic Games at the 3 polyclinics – at Weymouth for sailing, Eton for rowing and at the main Olympic Park in London for all other sports.

Recently interviewed for BACKspace, the newsletter of the European Chiropractors' Union, Dr. Greenway expressed the view that there would be no shortage of work particularly since back injury and pain are the second most common cause of health complaints in sport. "At the Olympics in 2012 we will be able to show the world exactly what we can do, how well we can do it



News and Views

and how effectively that can work with physiotherapy, osteopathy and massage. The networks and the doors that experience could open for the profession remain to be seen but the possibilities are enormous and that is one of the things I am most excited about. We will have 74 days to show the world of sport how great and how effective a chiropractic approach is within the medical team."

Dr. Greenway sees integration as the future for the profession: "We, as a profession, are the cause of the barriers that exist against chiropractors. We think that we communicate our effectiveness and no-one listens but the reality is that we are just not communicating it in the right way. I hope that the integration we all experience at the Games will make us far more confident and aware of what exactly we need to do to get us more involved in mainstream health care provision in the UK."

Countries such as Canada and the United States, as in past years, will have several chiropractors in their sports medicine team. Smaller teams such as those from Colombia (Dr. Aleisha Serrano) and Costa Rica (Dr. John Downes) will have individual chiropractors.

Under a partnership between Life University of Marietta, Georgia, USA and the Costa Rican Olympic Committee, Dr. John Downes, Director of the Sports Science Institute at Life University has worked with a number of Costa Rican elite athletes during the past 7 years. He has been assisted in this by Life University graduates in Costa Rica Dr. Alejandra Rodrigues and Dr. Yolanda Camacho Kortman. The Costa Rican Track and Field team has invited Dr. Downes to the Olympics and the Pre-Olympic Training Camp in Spain, partly because of his recent work with leading Costa Rican track star Nery Brenes who on March 10 crossed the line in 45.96 seconds to win the gold medal at the IAAF Indoor Track and Field World Championships in Istanbul, Turkey.

The International Federation of Sports Chiropractic (FICS) is cur-



Nery Brenes of Costa Rica crosses the finish line ahead of the competition in the men's 400 metres final during the world indoor athletics championships at the Atakoy Athletics Arena in Istanbul, March 10, 2012.

rently compiling a list of all chiropractors serving at the London Olympics and Paralympics. If you are participating in the Olympics, or know someone who is, please forward details to FICS Executive-Secretary Christina Davis at www.cdavis@fics.org.

WORLD NOTES

Source: March Quarterly World Report of the World Federation of Chiropractic – available at www.wfc.org.

World Spine Care – Botswana

The vision of World Spine Care, the ambitious multidisciplinary project lead by Dr Scott Haldeman and bringing volunteer spine care services to underserved communities in the developing world, has now been transformed into action. Canadian chiropractor Dr Geoff Outerbridge and colleagues are now treating patients in the Shoshong Project in Botswana. Further centers are being considered in India, Malaysia and Tanzania. More information: www.worldspinecare.com.

continued on page 8

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primary care MDs who do not want to manage low-back pain patients in their offices. This has led to consistent and growing community referrals.

Importantly, JH is not limiting its outreach to MDs. Patients and the community in general are being exposed to JSC through patient lectures, newspaper articles and public service announcements on public access television. However Paskowski et al. note that, important as patient education has been, the strongest driver of patient volume and growth has been the discussions that have taken place with primary care MDs.

5. JSC - Results

The JSC program began seeing new patients on January 1, 2009. The paper by Paskowski, Schneider et al. in JMPT reports on the 518 new LBP patients evaluated and treated during the first 6 months. Results include:

- a. Of 518 patients 25 (5%) required medical referral, and 402 or 78% were managed by DCs.
- b. For those managed by DCs there was an average of 5.2 visits at an average cost of \$302, with 95% of the patients rating their overall satisfaction as excellent. Patients comprised all payer types including Medicare, group health, workers' compensation and auto accidents.
- c. Paskowski's team acknowledge limitations to their data as there was no comparison group or long-term follow-up to track recurrence rates or other downstream costs. Current and future research will address these matters.
- d. Most patients in the program were managed by DCs because two chiropractors were dedicated to the spine care program fulltime and had most flexibility to see new patients in a timely manner. The subset of 30 patients triaged to spinal stabilization exercise were managed chiefly by physical therapists because they were the clinicians providing general rehabilitative exercise services at JH.

Paskowski notes that a fundamental or core value of the JSC standardized processes is that they can be "implemented in the same quality manner by any qualified healthcare provider in a profession-blind manner."

C. Saskatchewan Spine Pathway

6. Background

The Saskatchewan Spine Pathway (SSP) has been developed by a multidisciplinary team in the Province of Saskatchewan, Canada led by neurosurgeon Dr Daryl Fourney from the Royal University Hospital, Saskatoon. This is a hospital best known in the chiropractic world as the home of the collaboration between Dr William Kirkaldy-Willis, orthopaedic surgeon and Dr David Cassidy, chiropractic scientist and epidemiologist, in the 1980s. Fourney, Dettori, Hall et al. describe the SSP in a paper in Spine in October 2011.⁹ In summary, the reasons why the SSP was developed, they say, were:

- LBP "is a prime target for quality improvement efforts" because of its substantial costs and the large variation in practice patterns. In plain language, it is very expensive and poorly managed.
- Development of clinical guidelines has had limited success because clinicians do not comply with them despite extensive educational efforts.
- Spine surgeons in Saskatchewan realized that "by working

together with various stakeholders in the spine care community (referral physicians, chiropractic, physiotherapy, and pain clinics, etc.) they could reduce variations in practice patterns by developing a systematic care pathway for the management of LBP"

Rather than just press for better adoption of clinical practice guidelines, the much broader and more ambitious objective of development of the SSP was to "change both the structure and process of LBP care in the Province of Saskatchewan." That makes it clear why this new movement to develop defined clinical pathways for improved spine care for all patients in a community or geographical region is so important for chiropractors.

7. Fourney et al. list these "defining characteristics" of clinical pathways:

- a. A clear description of the objectives and key components of care, based on best evidence including patient expectations. (There is nothing new there.)
- b. Coordination of treatment, including incorporation of multidisciplinary care. (It is still new for medical care planning to incorporate chiropractic and other care.)
- c. Facilitation of communication among practitioners, using new developments such as electronic medical records (EMR) accessible to all practitioners, and "a classification system for a common language between diverse specialists." (Are chiropractors ready to adopt a common language not only amongst themselves but with others in the management of back pain, necessary for participation in this development?)
- d. Continued monitoring of the performance of the pathway, "including patient satisfaction with processes and outcomes." (There is not much new here, but note the growing emphasis on patient satisfaction – and the definite move from physician-centered to patient-centered care.)
- e. "Appropriate resource allocation for the pathway to function." Simply put, this means there will be funding and financial incentives for the professionals and the patients who choose to select and support these new and improved clinical pathways – but not for others.

8. SSP - Description

Figure 3 provides an overview of the SSP. Fourney et al. note the many similarities between this and Jordan Spine Care (JSC). A key similarity, at the heart of both, is that treatments are based on a classification approach. The great majority of LBP patients seen in primary care, all of whom have been medically labelled as having "non-specific" LBP - a label which gives little guidance for non-surgical management, are classified in a way that helps to direct treatment.

However the SSP uses a different classification system from the JSC. It is one developed in Canada by Hamilton Hall et al. and based upon four patterns of mechanical LBP, meant to include all possible presentations of mechanical LBP with and without nerve root involvement. These are:

- **Pattern 1:** Back dominant pain aggravated by flexion, and either:
 - a. Group 1 – Fast responders: Increased pain on flexion and relief with unloaded passive lumbar extension.
 - b. Group 2 – Slow responders: Increased pain on flexion and extension.

- **Pattern 2:** Back dominant pain aggravated by extension but not increased with flexion.
- **Pattern 3:** Leg dominant pain that is constant, associated with positive neurological findings and aggravated by back movement.
- **Pattern 4:** Leg dominant pain that is intermittent, aggravated by activity in extension and relieved by rest in flexion.

Back-dominant Pattern 1 and Pattern 2 are mutually exclusive. The leg-dominant Pattern 3 and Pattern 4 occasionally co-exist.

Treatment algorithms for each pattern of mechanical pain are at www.spinepathwaysk.ca and comprise patient education, physical measures including manipulation and medications.

9. Fourney et al. reference the research that has shown the inter-observer reliability of this classification system and the effectiveness of treatments based upon it. Reasons it is appealing, like the JSC classification system, are:

- Classification can be done as part of a routine first assessment visit in primary care, and without need for imaging studies or other expensive investigations.
- The criteria used in the classification “allow providers with different training backgrounds and biases (physicians, chiropractors, physiotherapists) to communicate more consistently with each other and the patient.”

10. Saskatchewan, like all other provinces in Canada, has a single, government-funded medical care system, with no

alternative or parallel private system. This means that the SSP is being implemented there with the active support of the Ministry of Health and government as third party payer. To promote compliance with the SSP various strategies being employed include:

- Comprehensive continuing medical education (CME) courses, online and in hands-on seminars, together with information sessions for key stakeholders, specifically including physicians, chiropractors, and physiotherapists.
- Financial incentives. Physicians who complete CME on pathway pattern diagnosis and associated treatment algorithms are entitled to receive special billing codes.
- Specialized pathway clinics. The goal of the SSP is that most patients can be managed in primary care, but for physicians who prefer to refer all patients or those not improving with initial care, there are special pathway spine clinics with multi-disciplinary resources.
- Structured referral forms for pathway clinics – shown to improve the appropriateness of referrals.
- Priority access for surgical referrals. By completing the SSP course primary care providers are eligible to arrange priority early referrals via SSP clinics.

D. Conclusion

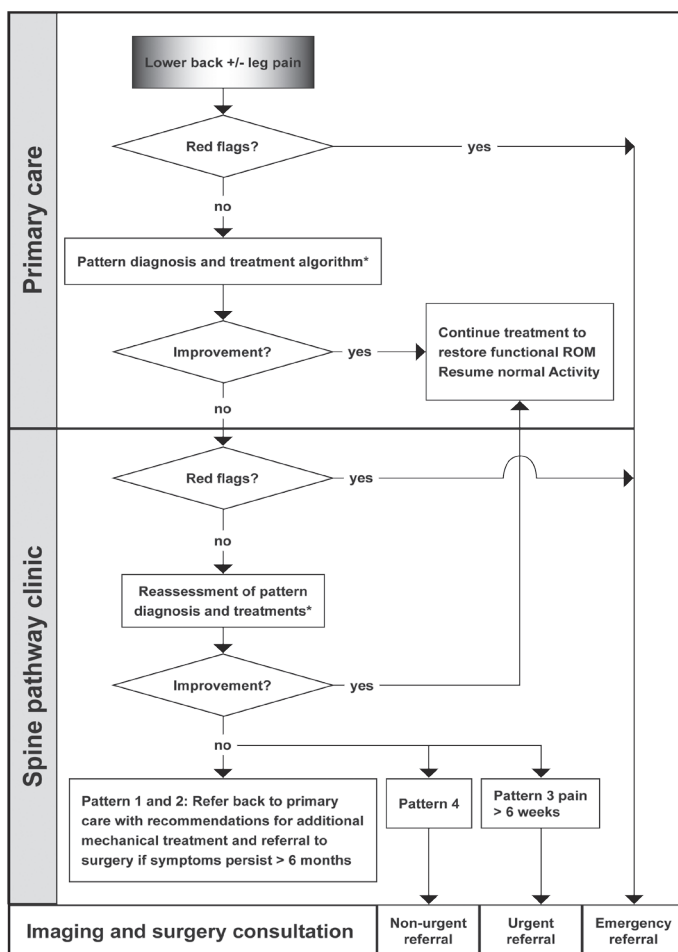
11. Many individual organizations – for example hospitals, multi-disciplinary clinics, networks of providers, managed care organizations and clinical guidelines panels – have developed patient management algorithms to help direct treatment decisions for patients with various conditions. What is new in the JSC and SSP spine care pathways just discussed is that they employ latest evidence and best practices to construct and promote a more comprehensive management approach designed to incorporate all professionals and patients in a geographical area – be that in Plymouth, Massachusetts or the Province of Saskatchewan or elsewhere.

Additionally, there is a new emphasis on the best interests of the patient and payer rather than the provider. This is patient-centered care with a central and unapologetic focus on *value*. The health professionals who will thrive under these pathways will be those who focus on, measure and deliver value – for which key measures are cost-effectiveness and patient satisfaction.

When Paskowski and other panellists from the West Hartford Group gave their workshop at ACC RAC in March titled *Thriving in Practice as a Primary Spine Care Practitioner* there was a fundamental message – those who will succeed must talk and deliver value. Paskowski from Massachusetts, Dr Bill Defoyd of Texas, Dr Brian Justice of New York and Dr Chris Coulis of Connecticut described not only the spine pathway they had jointly developed and were using, but also the business model that now existed for financial success in chiropractic practice on this pathway or model.

Finally, a comparison of JSC and the SSP illustrates why it is important, as Haldeman says, for chiropractors to be actively involved in leadership roles in developing this new paradigm of management. In JSC, with chiropractic leadership, there is a pathway or model that leads to many primary care physicians referring most or all back pain patients to chiropractors and physiotherapists, clinicians with specialized training and expertise in this field. In the SSP, with medical special-

Figure 3 Saskatchewan Spine Pathway



From: Fourney et al. Spine, 2011 (9)

ists adopting the leadership role, there is a pathway that is designed to have most non-specific or mechanical low-back pain patients under primary management by their family physicians.

These are exciting but challenging times. The bar is being raised for everyone. Because of their proven success and research base in the management of spinal pain, chiropractors have new doors open to them in mainstream policy and practice. It is important that they choose now to walk through these doors and collaborate with others if they are to maintain their reputation as the experts in spinal health. **TCR**

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continued from page 5

Israel – A First School of Chiropractic

Following legislation to recognize and regulate the chiropractic profession in Israel in 2010 the past several months have seen well-developed plans for a first chiropractic school in Israel. This will be in Jerusalem in affiliation with a local university, and with the University of Bridgeport College of Chiropractic in Connecticut in the USA as an academic partner. Israeli Chiropractic Society leaders for this project are Dr Richard Gakner (Logan College, 1998) and Dr Nimrod Liram (AECC, 1989). Anyone wanting to assist should contact Dr Gakner at polegchiropractor@yahoo.com.

Japan – Kazuyoshi Takeyachi DC – 1943-2012

Kazuyoshi Takeyachi DC of Tokyo, an outstanding and much admired leader in the profession in Japan and internationally, passed away after a long fight with cancer on February 22, 2012 at the age of sixty nine. Dr Takeyachi graduated from the National College of Chiropractic (NCC) in Chicago in 1968 and became the first chiropractor to graduate and return to Japan since the Second World War. He was a son of Yoneo Takeyachi, the selftrained Japanese chiropractor who brought then NCC President Dr. Joseph Janse to Japan in 1965 and later founded the Japanese Chiropractic Association (JCA) and sent three sons to NCC.

Dr. Takeyachi followed his father as President of the JCA, serving in that position for 19 years. He was the pioneer in bringing high standards of education and practice to Japan, leading to the establishment of the RMIT University Chiropractic Unit Japan in 1995. This program, now called the Tokyo College of Chiropractic, became the first accredited chiropractic school in Asia in 2005. Dr. Takeyachi received a WFC Honor Award in recognition of outstanding services to the chiropractic profession at the Centennial Congress in Washington DC in 1995, and was admitted to the Hall of Honor at NCC, now the National University of Health Sciences (NUHS), in 2006.

Lebanon – Spine Conference

The combined annual conference of the Eastern Mediterranean and Middle East

Chiropractic Federation (www.emmechirofed.org) and SPINE (www.neareastspine.org), the Middle East regional body representing spine surgeons and other medical spine specialists, takes place at the Intercontinental Phoenicia Hotel in Beirut, Lebanon June 27–30, 2012. Whether you are from the EMMECF region or elsewhere, plan to be at this exciting inter-professional meeting which features separate tracks on spine care, rehabilitation and pain management. For the program, registrations, accommodations and all information go to www.emmechirofed.org.

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