



Current Concepts in Physiatric Pain Management

Controlling the Midfield: Treating Patients With Chronic Pain Using Alternative Payment Models

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Abstract

The entire American health care system is turning upside down, except for the parts that aren't— yet. For physiatrists who manage pain problems, the future is complex. The usual challenge of treating these devastating and costly problems that cannot be measured physiologically is compounded by the requirement to do so in a health care system that doesn't know what it wants to be yet. Payment, regulation, and the very structure of practice are changing at a pace that is halting and unpredictable. Nonetheless, knowledge about some structures is necessary, and some themes almost certainly emerge. I propose that the role of the pain physiatrist is best understood through a soccer analogy. Whereas the casual spectator of the past might note the goals scored by surgical colleagues and shots missed by primary care partners, sophisticated health care systems of the future will learn that the pain game is won by creating a strong physiatry midfield. Physiatrists can reach to the backfield to help primary care with tough cases, send accurate referrals to surgeons, and reorganize the team when chronic pain complicates the situation. Current and emerging payment structures include insurance from government, employers, or individuals. Although the rules may change, certain trends appear to occur: Individuals will be making more choices, deductibles will increase, narrow groups of practitioners will work together, pricing will become important, and the burden on primary care colleagues will increase. Implications of each of these trends on pain medicine and specific strategy examples are addressed. A general concept emerges that, although procedure- and activity-based practice is still important, pain physiatrists can best prepare for the future by leading programs that create value for their health care system.

Recently the best-performing accountable care organization in the United States suffered financially because it succeeded too quickly in moving away from the fee-for-service model [1]. The practice of pain medicine is also moving toward but not quite approaching value-based care. This article looks at the way forward, focusing on building resiliency that will serve pain physiatrists and their patients best in the current world and in the future.

A major framework of this discussion will be reflected in the soccer adage, "Control the midfield" (Figure 1). The reality is that physiatrists are midfield players. We don't score big financially or clinically as often as our offense-minded surgical colleagues do, nor do we often take on the role of the primary care "defense players" who block all types of bad things from happening but often cannot advance the patient to full success. Midfield players must have a holistic perspective on the field, certain technical skills unique to the midfield, and the judgment required to redirect the flow of the game.

By taking a critical look at the flow of patients back and forth from primary care to surgical care, the PM&R pain physician can find important unmet needs. Vision, skill, and flexibility create resilience, or the ability to respond optimally to any challenge. This position of resilience is the reason why PM&R might lead pain management in the future.

New Pressure to Control the Midfield

The role of PM&R pain physicians has always been in the midfield. However, changes in health care mean that the midfield is becoming more important than ever. This discussion must begin with a brief review of some models of care that many readers are familiar with.

In the past, fee-for-service medicine was the primary model of payment. In this model, the provider is paid more for doing more regardless of the outcome. Patients may access fee-for-service medicine through an insurer or by paying out of pocket. Insurers attempt to

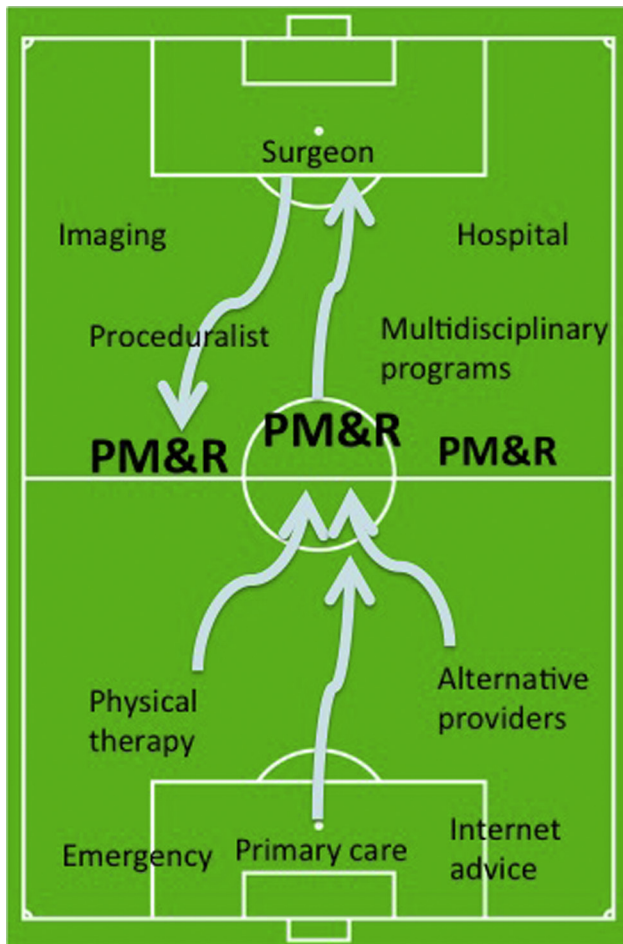


Figure 1. The pain management playing field. PM&R is a midfield player critical in managing patients who fail to respond to primary care, handing off appropriate patients for expensive and invasive interventions, and managing patients who fail to respond to or do not qualify for these expensive or invasive interventions.

control costs in fee-for-service medicine by discounting physicians' usual fees, restricting access to certain clinicians, tests, and treatments, and assigning case managers to expensive cases.

Health maintenance organizations are special types of insurance in which specialist physicians are still typically paid more for doing more. However, access to specialists is restricted to those referred by a primary care physician. Often the primary care groups assume some risk, making them "gatekeepers" who are given incentives not to refer. Many health maintenance organizations allow patients to bypass primary care physicians for services such as optometry, podiatry, psychology, or chiropractic.

In preferred provider organizations, patients have access to a panel of providers who are favored (preferred) by the insuring organization. Often treatment by non-primary care specialists involves either a referral from primary care or an extra charge.

Accountable care organizations, or ACOs, are groups of physicians, hospitals, and others who band together

to take on a contract for care of a population of Medicare beneficiaries. The federal government has structured the ACO system in such a way that a number of specific requirements and quality metrics are in place. These requirements and ACO payment to organizations have evolved and will continue to do so. As ACO organizations mature, they better understand their own cost structure and learn how to control quality and cost. This new business sophistication has resulted in some ACOs forming "ACO-like" contracts that take on the risk of a population insured by private companies.

The patient-centered medical home is a concept driven by the idea that care can be improved by having a primary care physician and a team of others as needed take overall responsibility for the patient's health. This model encourages creative use of various allied health providers and community services to optimally manage chronic disease. The Center for Medicare and Medicaid Services recently approved a \$42 case management fee; however, with copays and other strings attached, this dollar amount does not yet appear to have drastically changed practice.

Back to the soccer game. On the defensive side, primary care physicians are asked to cover more and more lives, so they strive for efficiency. Yet their skill set in managing pain is often less than optimal, with documented gaps in diagnostic testing and treatment for pain [2]. In addition, the roles of primary care physicians often are being filled by allied health professionals. These professionals range from nurse practitioners and physician assistants, who have less pain education than do most physicians, to physical and occupational therapists, who may have more training pertinent to pain than many primary care physicians. The gaps are also being filled by alternative practitioners, exercise clubs, Web sites, smartphone apps, and online telemedicine consultations. Pain physicians need to influence these groups and sometimes take over when the pain physician has more to offer.

An important way to influence these groups is to step outside of the daily grind of the isolated pain practitioner and try to help our colleagues. One example is the FastBack emergency department triage program [3]. To improve care in the emergency department, the investigators first looked at the complex reasons why back pain care went bad in emergency departments. They provided an equally complex network of help involving patient questionnaires that drove treatment, physician education and protocols, and rapid access to physical therapy and PM&R physicians for appropriate cases. The campaign resulted in an 80% drop in "bounce back" cases (ie, patients who returned to the emergency department within 30 days), with increased detection of dangerous disease, more appropriate medication use, and increased referrals to PM&R and physical therapy. It was a win-win-win-win situation for the emergency department, therapists, PM&R physicians, and patients.

On the offense side, the big scorers today are surgeons, radiologists, hospitals, and the PM&R physicians and anesthesiologists who primarily live by procedures. Although these procedures are currently highly profitable for both the practitioner and the health care systems, payment for procedures will become a cost to health care systems as they move toward responsibility for population health. Pain care is not alone in this regard, and the threat is not absolute. Americans still need cancer surgeons, invasive cardiologists, and positron emission tomography scanners. They need spine surgeons, too. However, the value of these players will be under increased scrutiny by their networks, with a lot of pressure to decrease, not increase, use.

Offensive players in pain management are at a much higher risk of being cut from the team than are others because of well-documented overuse and even abuse of surgery, imaging, and, increasingly, spinal and peripheral injections [4]. Contrary to an ongoing campaign to characterize pain measurement as "the fifth vital sign," pain is in real fact not a direct cause of death, and thus a dearth of high-cost offensive pain players may not be missed as much as a shortage of cancer surgeons.

In spine care, payers have tried for years to cut surgical costs, and now they have a tool. Recently, Priority Health Insurance required PM&R consultation for any patient sent by primary care for elective spine surgery consultation [5]. The result was a 30% drop in back surgery and a substantial drop in overall cost, yet with maintained patient satisfaction. This practice occurred across the entire western side of the state of Michigan, an area notorious for excessive surgery. It happened whether the PM&R was independent or actually employed by the same group as the surgeons. Smaller studies reaffirm the role of nonsurgeons in limiting spine surgery [6].

The Priority Health Insurance project showed that the problem is not just the surgeons. Akin to the goalie who attempts a long downfield pass to the center forward, the primary care physicians were making bad passes to spine surgeons. In many excellent multidisciplinary spine and pain programs, PM&R has an established role in holding back patients who should not have surgery and making precise, well-organized referrals that improve the efficiency of surgeons. The difference in the Priority Health Insurance experiment was that surgeons were taken out of the control loop and replaced by physiatrists. The restriction imposed on surgical referrals was not sufficient to make this process work. To shift the practice pattern of busy PM&R physicians from other work to timely surgical screening, the insurer had to pay a premium for surgical referral cases seen within a certain time frame.

Notably, the Priority Health Insurance project was not motivated by some new payment system but by a traditional insurance company that wanted to save money. The consequences were profound in Western

Michigan and will be profound across the United States regardless of future payment schemes. What does one do with spine surgeons who are no longer busy? Recall that these doctors are among the smartest, most talented, richest, and influential members of the health care system. One could imagine orthopedic spine surgeons turning to joint replacement, with the aging population driving an increased need for those procedures. However, neurosurgeons would have to find more brain tumors or aneurysms, and these conditions are limited. The underemployed surgeons might just live with the pay cut, retire early, or move away. More likely, spine surgeons will seek to provide more nonsurgical care, including spinal injections. Ironically, by restricting surgical opportunities, physiatrists may actually force surgeons to be their competition in nonsurgical care.

Across the United States, health system executives are caught between the self-interest of their superstars and the reality of a capitulated market. The superstars' procedures still pay the bills. What is a solution? Controlling the midfield before the competition does. In western Michigan, the system that lost the least business was the one that already effectively used PM&R physicians to screen for their surgeons. They already controlled their midfield. Thus the faster a health care system transitions its triage of spinal care to PM&R physicians, the more prepared it will be for change, without actually hurting the current bottom line. In essence, by having physiatry capture a larger market of appropriate cases from the competition, the wise health care system protects its good surgeons.

Changes to Expect and Potential Strategies for Pain Physicians

University of Michigan Associate Dean for Clinical Affairs David Spahlinger, MD, characterizes a number of expected changes in American health care, including movement from group to individual purchasing of health insurance, high-deductible health plans, narrow network development, and reference pricing and price transparency. In addition to these expected changes is the increasing pressure on primary care physicians that will predictably change their behavior.

Movement From Group to Individual Purchasing of Health Insurance

The construct that an employer should be in charge of one's health is an odd one, and it begins to look more and more odd as government exchanges mean more universal coverage regardless of employment status. Whether the employer provides a panel of choices or the individual becomes insured outside of employment, this means that marketing of health care programs to the patient will be more important.

Pain is common and costly to the patient and the payor; however, for healthy consumers who are shopping for insurance, it does not carry the weight of catastrophic injury, cancer, or heart disease. Thus a more efficient pain management program is unlikely to have positive value in the overall marketing of insurance plans directly to consumers. However, a negative message can be powerful. The stories of persons who did not receive appropriate care can drive customers away from plans. Pain physicians might influence this purchasing shift through rational means such as informing payors about the cost consequence of inappropriate pain management. That message has been carried for decades. Unfortunately, emphasis of the negative, not the positive, is more likely to be effective in influencing change. Pain clinicians and organizations may need to encourage consumer activism when and where appropriate procedures are not covered.

High-Deductible Health Plans

As annual deductibles increase to thousands of dollars, health insurance begins to act like its name implies—an insurance against catastrophe—and not a way of paying for routine care. The resulting health behaviors are interesting. For example, the very healthy will strive to avoid their first small costs. When possible, they will look for alternatives ranging from self-help books, Web sites, and apps to alternative practitioners to traditional care provided by less trained, less expensive providers to discounted expert practitioners outside of their required network. When they do need care, they will shop as if the money is their own—because it is. Once people estimate that they will cross the out-of-pocket ceiling before the year-end deadline, they will spend more freely and get all of their routine aches and pains and complaints checked out. As they approach the deadline, they may rush to complete workups, therapy, or surgery before the new clock begins to tick.

Strategies to provide care within these constructs are complex. The routine office practice of pain clinicians may need to be altered to accommodate patient deadlines. Helpful clinicians will understand various insurance benefit timelines and facilitate completion of therapies, diagnostics, pain procedures, and surgical treatment before the patient's year-end deadline.

Pain specialists may need to convince patients and their referral sources that pain deserves attention, even if it costs the patient money. The prototype for such messaging has come from chiropractors and other alternative health care providers who make a living on a cash-and-carry basis for problems that are often less serious or complex than the problems that pain specialists see. Pain programs might also teach their public that health insurers don't care about nonmedical costs such as lost work, missed vacation, or missed family

time, so they can convince patients that it saves money to pay out of pocket for faster and better treatment. The message that an ounce of prevention is worth a pound of cure does seem to resonate with some people as well. However, consumer decisions are often made on a more emotional than logical plane. The specific messages may vary, but pain programs that wish to succeed with out-of-pocket business need to put effort into direct-to-consumer marketing.

The wide-open market for treatments that are below the insurance deductible threshold means that less expensive nonphysician programs will see more patients with pain. These programs create referrals for more extensive pain management by PM&R. The small, private, cash-and-carry physical therapy practices can charge much less than hospital- or clinic-based therapists who must charge a uniform amount to maximize payment from Medicare and other insurers. Thus, for specialists who are inside a large organization, this may mean reaching out to outside practitioners. The networking might require openness to alternative practitioners and respect for the philosophies of patients who have chosen unproven or unconventional approaches.

Group therapies that do use expensive physicians or therapists may be financially viable for a practice, providing that service per patient is under the threshold for out-of-pocket payment. For example, at the University of Michigan Spine Program, it was recognized that obstetricians seldom referred pregnant women with back pain to the program, yet some of these women suffered substantially, missed work, and had treatable conditions. Thus the program set up an inexpensive weekly "pregnancy and back pain" group class, paid for by the patient out of pocket, and not requiring a physician referral. In addition to the immediate benefit for the women who participated, the program helped women with severe or unusual pain to seek appropriate referrals to physical therapy or physiatry. The therapist-instructor's time was sufficiently reimbursed when 5-10 women attended, and the class created visibility among the obstetricians about the needs of these women and the expertise of the local clinic. Practices that build highly targeted group therapies may increase their own reach. With bundled or capitated payment, they may also provide great value to their organization by helping avoid costly treatments when simple instruction is all that is needed.

Narrow Network Development

As Medicare and other insurers move from procedure-based reimbursement toward population-based payments, providers of primary care (with or without their hospitals and their specialists) are grouping together to capture populations and negotiate prices. These more organized groups are interested in 2 things: controlling

quality within their network, and controlling costs when care goes outside of their network. As midfield players, pain physiatrists might end up either within a core network or in a specialty contract outside of the network.

The grouping of primary care physicians into networks means that practitioners outside of a certain network will have a difficult time getting referrals. Obviously, one solution is for the specialist to be inside the winning network. However, the negotiations may involve concessions on payment and scrutiny regarding cost of referrals and treatments ordered by the practitioner. The network's ability to mine big data within its electronic medical records means it has strong leverage in negotiation. The physiatrist's tendency to request more magnetic resonance imaging scans or physical therapy can be viewed as negatively as costs paid directly to the clinician for injections and electromyography.

An interesting solution played out by some orthopedic groups is to purposefully stay outside of a core network but to be so efficient and so good that the networks readily choose them for tertiary and elective care. Thus they become part of the exclusive external provider network. Their customers include these primary care networks. However, they also include large employers such as Wal-Mart, who are developing exclusive networks of high-quality providers in small areas such as spine surgery. To win in this game, a physiatrist pain team needs to be either part of one of these centers of excellence or build itself into an independent cost and quality leader and then negotiate with many networks as the provider of choice.

What services should a pain practice offer? The wrong answer is, "They like what I do now." Variably that means clinical evaluation, electromyography, diagnostic injections, manual treatment, and medication management. The right answer is, "Everything they need, better, faster, and cheaper." This means program development. Because programs take time and expertise, the elegant answer for both the physician and the network might be "paid medical directorship." The PM&R physician can help the whole system improve, even outside of his or her scope of practice. A number of specific interventions are suggested throughout this article.

When working within a network, the push to improve costs provides both challenge and opportunity. An uninformed network might blindly try to keep all pain problems within primary care, yet primary care physicians often get into trouble with too many tests, inappropriate drugs, and wrong counseling techniques. Some pain doctors are no better, of course. However, an outstanding pain physician likely has the training and judgment to do a better job than the primary care physician in this one area. The challenge is to convince the network policy makers, many of whom hold strong

beliefs in primary care control. Enlightened health systems can draw parallels to policies for direct access to ophthalmology/optometry for eye disease or psychology/psychiatry for mental health problems.

The allied health pairing in pain would be PM&R with physical therapy. For some persons, this pairing raises political and financial questions of direct access to physical therapy. Good evidence exists that physical therapists perform well in managing acute musculoskeletal pain [7-9]. Still, no direct comparison has been made between physiatry and physical therapy for pain, and overwhelming evidence shows that a physician-led team outperforms an individual therapist for complex problems. One can speculate that, because physical therapists are paid hourly and PM&R professionals are paid piecemeal, waste might come on one hand because physical therapists provide too many treatments while on the other hand PM&R physicians order too many tests and injections. What is clear is that, as primary care physicians are pressured to care for larger and larger pools of patients, PM&R specialists cannot be trained quickly enough to cover even the 5% of the population who seek care for back pain each year. This situation raises the question about the strategic growth of the field of PM&R in the coming decades. Regardless, it appears that physical therapy will become an important partner in pain management.

Both physical therapists and PM&R physicians need to recognize the challenges of their relationship. Acute back pain is perhaps the most well understood pain problem in this regard. Physical therapists are good at providing spinal diagnostics, and a number of therapy treatments have been proven to be effective. However, dangerous diseases do happen, and psychosocial factors predict most of the personal and financial cost of pain disability [10]. Also, therapist training, skill, and licensure regarding medical and psychosocial diagnosis and treatment is limited compared with that of physicians, and especially so regarding physiatrists. Fortunately, most people do not have dangerous disease, and the initial risk of chronic disability is small. Both can be screened for with questionnaires in the acute phase. Thus, with a basic screening questionnaire that is negative for "red flags" for dangerous diseases and "yellow flags" for risk of disability, therapists can do a great job fixing the acute back problem.

An intelligent health system recognizes and deals with the boundaries of therapy practice. What do therapists do when they detect risk of disability or dangerous disease? What do they do when they fail to cure after a few visits? Counseling regarding diagnostic tests, medications, and surgery is an important early intervention, and physician-directed return to work is therapeutic for many patients with acute back pain. Alone, therapists may ignore important clues, keep patients too long, or refer to primary care physicians who have no special tools to manage subacute pain and

disability—and this is just the simplest model of acute back pain.

An alternative scenario for a health care system is one in which therapy groups themselves set “hard stop” points in the treatment of specific problems (eg, perhaps 4 visits for acute back pain, 6 for an ankle sprain, and never physical therapy alone for chronic work disability). Reassessment at the point of the hard stop leads to appropriate referral to the correct expert. It is often a referral to someone who has a wider perspective than the therapist and more tools than the primary care physician. A known physiatrist partner often makes more sense than one of dozens of primary care physicians with varying but limited skills and interest.

Within or outside of a network, perhaps the most value a PM&R pain program can offer is a system for management of chronic pain. This means being the complete solution. In addition to the traditional diagnostics and procedures, for many practices 2 programmatic areas require attention: multidisciplinary rehabilitation and medication management.

Someone joked that the field of PM&R has changed from “physical medicine and rehabilitation” to “inpatient and spinal injection.” Indeed, one important and often missed process is the rehabilitation (as opposed to physical medicine cure) of chronic pain. The vast majority of patients with chronic pain are limited by reversible psychological problems and physical deconditioning, neither one of which is treated with an operation, a needle, or a spinal manipulation [11]. Rather, a multidisciplinary team is the best way to improve care. Without such a team, the health care system is trapped by primary care physicians prescribing more and more expensive pain medications, pain doctors repeating futile injections, and surgeons naively performing ill-advised operations. The patients who started out merely suffering from pain turn into depressed, deconditioned, unemployed, drug-using, obese users of more health care dollars who are loathed by their doctors and often enough by their families and even by themselves.

The PM&R-trained pain physician has unique although sometimes dusty skills in managing a team of experts. Every PM&R physician has spent a considerable portion of his or her training years leading inpatient team meetings. However, the skill is only partially transferable to outpatient pain rehabilitation. Few training programs actively teach about the physician leadership skills required for outpatient management of chronic pain. Aside from general team leadership skills, pain team leadership requires an understanding of evidence-based team protocols and of physiological, psychological, and social metrics best used by a therapy team to guide care. As team leader, the physician must be able to set goals and time frames, balance the interests when one discipline’s perspective conflicts with

another, intervene with purely medical treatments when they are appropriate, and communicate team recommendations with the patient, insurer, attorneys, employer, and others. These skills are not innate. PM&R and pain training programs must formally teach them, model them, and evaluate competency in performing them.

One efficient process designed to address this problem is the Rehabilitation Team Assessment, a single-visit multidisciplinary assessment designed around the principle of reproducible transdisciplinary problem solving. The prototype, the Spine Team Assessment, has been used in more than 1000 cases of chronic work disability [11,12]. It involves a detailed patient questionnaire, then codified visits with physical therapy, occupational therapy, pain psychology, and exercise physiology. A team meeting with a physiatrist results in a highly structured report that integrates physical and psychosocial factors into a treatment plan. Variations exist for geriatric spine cases, arm pain, and complex neurologic and orthopedic disabilities.

Whereas research on the team assessments primarily focuses on interactions between pain, function, and patient outcome, the leadership and business model is what is important here. A single, rapid planning session for patients with complex chronic pain can be an important point of input from primary care. When the program was active, the program primary care physicians were taught, “If your patient is work disabled for more than 3 months, bypass the initial PM&R consult and do the spine team assessment.” Surgeons were encouraged to send patients with failed back surgery syndrome or other chronic cases to the team assessment first. At the team meeting, the PM&R physician could then choose to see patients who require his or her skills. In cases in which the initial referral was to a physiatrist, that physician only needed to look for miracle cures and dangerous disease, because they would then send the problem on to the spine team, which would unravel the complex barriers to success.

The program was highly popular with insurers. Local insurers waived coverage for the single psychology visit, which might not have been included in their core benefits. Regional and national insurers brought patients to the program because the rehabilitation team assessments stopped inappropriate treatment and led to rational case closure with patient buy-in and good outcomes. Because rehabilitation team assessments meet the health care system’s needs and the patient’s needs, increase throughput in the PM&R physician’s office, and capture a larger market of workers compensation and other complex cases, it makes sense that a pain leader would adopt this strategy.

Management of pain with medication is a complex and increasingly deadly problem that frustrates primary care physicians and costs a lot of money. With dozens of Food and Drug Administration—approved drugs and

combinations to choose from and with often unrealistic expectations that the right drug might just relieve most of the pain [13], primary care physicians and their patients often get into a lot of trouble with escalating and often ineffective prescriptions. Primary care physicians hope that their consultant can help them with overuse, abuse, diversion, and difficult adverse effects. Many primary care physicians would rather not deal with chronic pain drugs at all. Yet these are expensive medications, and the care of chronic pain patients is expensive, too.

A pain specialist who can create the machinery to help is invaluable. However, many pain physiatrists do not want their clinic to be the "dumping ground" for the medication problems of their colleagues. The solution is to create a network of providers to manage chronic pain medications. At the core might be physician extenders whose sole job is to do the maintenance work. A go-to psychologist is important, as is an exercise class and nutrition program. A relationship with a detoxification and drug rehabilitation program is needed. Various specialists including psychiatry, anesthesiology, pain, internal medicine, and neurology might be called into the team as occasional experts or as leaders. This type of network requires coordination and time, which means investment by the health care system or by the carve-out pain group that will profit from the efficiencies and cost savings.

Reference Pricing and Price Transparency

Increasingly, both patients and payors desire more transparency about treatments. The patients want to know because they often have to pay, and they are increasingly outraged about the \$20 aspirin that shows up on their hospital bill. Payers encourage this consumerism, so it is clear that price transparency and quality of care will drive future business. Sometimes a payer will set a reference price, allowing the patient to seek more expensive treatment but pay the difference.

Depending on the community and the contractual relations, a pain physician may find himself or herself listing the prices for office visits, injections, and tests. This phenomenon is interesting because, aside from the high deductibles, the actual reimbursement is fixed by most payors such as Medicare and commercial insurance. Many hospitals and practices have very costly "list prices" so they can occasionally capture extra money from workers compensation and other payers who are required to pay the full listed rate. When a pain practice sets its fee schedule, the opportunity for additional income may need to be compared with the opportunity to get more business.

The quality issue is important but dicey. Quality measures should not be taken at face value except in randomized trials or very large, tight data sets with singular defined outcomes. In a series of focus groups

with insurance case managers, the researchers asked about how the participants judged quality [14]. The logical answer, "return to work rate," came up again and again. However, whenever interviewers asked these professionals what rate of return to work was good, none had an answer. It should be that way. Assuming that all clinics used the same outcome metrics at the same time after discharge, with the same response rate (quite an assumption), there are still too many variables to make outcomes meaningful to a clinical pain practice. For example, the return to work rate for acute back pain should be very high, whereas even moderate success in return to work for patients with chronic pain is remarkable. Any admixture of hyperacute (<2 weeks) or very chronic (>2 years) patients would further corrupt the outcomes, as would the local economy and any change in referral pattern. With less common problems such as pelvic pain, the standard deviation of outcomes might be so high that it would take years before sufficient numbers resulted in statistical confidence that a real change in outcome occurred. In the meantime, turnover in treating staff, ongoing efforts to improve care within the practice, change in referral pattern, and local economics would likely make the old data useless. Because pain doctor offices typically have smaller numbers of diverse patients with varied qualitative goals, industrial-based quality processes are largely useless at the individual practice basis.

However...the act of measuring and reporting outcomes is absolutely critical, because these efforts create a culture of caring for long-term outcomes among the treatment team, and the numbers show patients and referral sources that the pain physician is interested in the patient's well-being and continuous improvement. Every once in a while the outcome measures themselves do show important information about patients who hate parking or avoid a rude doctor or incur a surprise complication. More often the process encourages someone who comes up with a problem that needs solving or a bright idea that can make a difference to speak up. Finally, and obviously, public release of results does impress referral sources and payers. It is unavoidable given trends in other areas of medicine.

Offloading Primary Care

Today the workload of primary care physicians seems to be of no immediate concern to the pain physiatrist. However, increased insurance coverage, the aging population, and a relative shortage of primary care physicians, along with new financial motivations to cover more lives with fewer doctors, will all join to create huge increases in patient loads for primary care physicians [15]. As coworkers within larger organizations, physiatrists can have a new value in re-engineering pain management within primary care. Redesign of primary care management involves traditional efforts to train physician and

allied health colleagues. It also involves the building of group programs or therapy protocols by the pain practice for the system, as previously discussed. Increasingly the solutions also involve use of technology to help patients manage themselves.

Apps for mobile devices will be part of the new future. Recently the IMS Institute for Health reviewed more than 40,000 health-related smartphone apps, and countless Web-based instruction series are available [16]. Some of these apps and instruction series might encourage primary care physicians to use technology to treat pain and to avoid unnecessary treatments [17]. As leaders within larger health organizations, pain physicians may be best situated to advocate for the most appropriate apps.

One example is the free online BackQuack video game [18]. Sponsored by the Center for Healthcare Research & Transformation and designed by Haig et al., Consulting, BackQuack begins with a serious patient questionnaire that consumers bring to their doctors, perhaps increasing detection of dangerous disease and risk of disability. Consumer responses also trigger the appearance of information pamphlets ranging from "sciatica" to "pain with concerning medical problems." Subsequently, the consumer is presented a cartoon "patient" whose complaints are somewhat like their own. The cartoon patient asks questions and the consumer/doctor is encouraged to choose the most absurd responses, with the room looking more and more like a dungeon as a reward. The effect is that patients learn to differentiate good from bad care, organize their thoughts for a physician visit, and insulate themselves from physician miscommunication.

BackQuack was successfully disseminated through doctors' offices, pamphlets and posters at schools and community centers, and local media in 3 communities. As part of the project, a contest was held among physician office staff to become the "Top BackQuack." The intent was to increase the sophistication of ancillary staff and perhaps draw the attention of the clinicians themselves. This process can be emulated in other communities. By helping the health system disseminate appropriate management, the PM&R physician again controls the midfield.

Winning the Game by Controlling the Midfield

The game that is alluded to throughout this article is not the same as soccer, of course. Patients win when they are safe, happy, and participating in life. Health care systems win when they can maintain their mission to provide good care while controlling costs. For the individual pain PM&R physician, winning comes from professional satisfaction and financial success.

When PM&R physicians are able to reach out and help their health system, they are most likely to create success in all 3 areas. Physiatrists must be engaged with

Table 1

System interventions for back pain that PM&R physicians might initiate

Issue	Intervention
Prevention	Launch programs to prevent disability and misadventure instead of pain prevention
Acute (<6 wk)	Develop programs such as FastBack for the emergency department Sponsor or develop early, limited physical therapy programs with medical and psychosocial outlets Find and advocate for smartphone apps and Web sites that can augment primary care
Subacute (6-12 wk)	Develop primary care and physical therapy triggers for referral to PM&R Perform surgical screening Perform early postsurgical follow-up Develop return-to-work programs
Chronic (>12 wk)	Perform single-visit rehabilitation team assessment

top leaders in their health care systems and must take leadership roles. They need to be employed by health care systems to make these changes. Even when there is not an immediate payback, they need to invest time and energy in helping primary care physicians, therapists, and surgeons do a more efficient job. Within their own practice they need to develop priorities and processes that add value to primary care and surgical care. Table 1 reviews many of the ways PM&R physicians can lead their health system.

PM&R physicians are perhaps the only specialists who receive formal training in team leadership. This skill set gives physiatrists who care to look at the big picture a huge advantage over others. The end result can be security for the physician, success for the health care system they are engaged in, and, most important, the right care by the right clinician for the patient.

References

1. Toussaint J, Milstein A, Shortell S. How the Pioneer ACO Model needs to change: Lessons from its best-performing ACO. *JAMA* 2013;310:1341-1342.
2. Webster BS, Courtney TK, Huang YH, et al. Physicians' initial management of acute low back pain versus evidence-based guidelines: Influence of sciatica. *J Gen Intern Med* 2005;20:1132-1135.
3. Haig AJ, Uren B, Diaz K, Loar S. FastBack: The consequences of a reproducible complex consultation process on emergency department management of back pain. Presented at the Academy Health 2012 Annual Research Meeting, June 24-26, 2012, Orlando, Florida.
4. Weinstein JN, Lurie JD, Olson PR, et al. United States' trends and regional variations in lumbar spine surgery: 1992-2003. *Spine* 2006;31:2707-2714.
5. Fox J, Haig AJ, Todey B, Challa S. The effect of required physiatrist consultation on surgery rates for back pain. *Spine (Phila Pa 1976)* 2013;38:E178-E184.
6. Rasmussen C, Nielsen GL, Hansen VK, et al. Rates of lumbar disc before and after implementation of multidisciplinary nonsurgical spine clinics. *Spine* 2005;30:2469-2473.

7. Murphy S, Blake C, Power CK, Fullen BM. The role of clinical specialist physiotherapists in the management of low back pain in a spinal triage clinic. *Ir J Med Sci* 2013;182:643-650.
8. Fritz JM, Brennan GP, Hunter SJ, Magel JS. Initial management decisions after a new consultation for low back pain: Implications of the usage of physical therapy for subsequent health care costs and utilization. *Arch Phys Med Rehabil* 2013;94:808-816.
9. Gellhorn AC, Chan L, Martin B, Friedly J. Management patterns in acute low back pain: The role of physical therapy. *Spine* 2012;37:775-782.
10. Melloh M, Elfering A, Egli Presland C, et al. Identification of prognostic factors for chronicity in patients with low back pain: A review of screening instruments. *Int Orthop* 2009;33:301-313.
11. Haig AJ, Geisser M, Michel B, et al. The spine team assessment I: A codified multidisciplinary assessment for persons with chronic back pain disability. *Disabil Rehabil* 2006;28:1071-1078.
12. Haig AJ, Geisser M, Michel B, et al. The spine team assessment II: Team decision making and a preliminary outcome study. *Disabil Rehabil* 2006;28:1079-1086.
13. Chou R, Huffman LH, American Pain Society, American College of Physicians. Medications for acute and chronic low back pain: A review of the evidence for an American Pain Society/American College of Physicians clinical practice guideline. *Ann Intern Med* 2007;147:505-514.
14. Haig AJ, Rich D, Hadwin K, Palma-Davis L, Theissen M. Insurance case managers' perception of quality in back pain programs: A focus study group. *Am J Phys Med Rehabil* 2001;80:520-525.
15. Petterson SM, Law WR, Phillips RL, Rabin DL, Meyers DS, Bazemore AW. Projecting US primary care physician workforce needs: 2010-2025. *Ann Fam Med* 2012;10:503-509.
16. IMS Institute for Health Informatics. Patient apps for improved healthcare. October 2013. Available at: http://www.imshealth.com/deployedfiles/imshealth/Global/Content/Corporate/IMS%20Health%20Institute/Reports/Patient_Apps/IIHI_Patient_Apps_Report.pdf. Accessed August 27, 2015.
17. Deyo RA, Cherkin DC, Weinstein J, et al. Involving patients in clinical decisions: Impact of an interactive video program on use of back surgery. *Med Care* 2000;38:959-969.
18. Haig AJ, Maslowski E, Loar S. The BackQuack video game: Consumerism rather than prevention for back pain. Presented at the Academy Health 2012 Annual Research Meeting, June 24-26, 2012, Orlando, Florida.

Disclosure

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