NEJM Catalyst | Innovations in Care Delivery

ARTICLE

Managing Multiple Irons in the Fire: Continuing to Address the Opioid Crisis and Improve Pain Management during a Public Health Emergency

Trevor Lentz, , Christine Goertz, , Isha Sharma, , Jonathan Gonzalez-Smith, , Robert Saunders,

Vol. No. | June 22, 2020
DOI: 10.1056/CAT.20.0208

Poorly managed pain, a key contributor to opioid misuse and use disorders, continues to be a significant public health problem in the time of Covid-19. Multidisciplinary integrated pain management programs can significantly reduce the burden of pain, but are not well-resourced or implemented. This article outlines six major challenges that health care organizations, payers, policymakers and providers must overcome to operationalize integrated pain management programs and ensure continued progress in combating the opioid crisis, despite an ongoing public health crisis.

While Covid-19 has rightly grabbed the attention of health care organizations and policymakers, other health care challenges, like the opioid crisis, persist under the radar. Many people continue to suffer from poorly managed pain, and, in fact, may face additional challenges accessing quality and timely health care given that almost all non-urgent care is being delayed or foregone.[1,2] While the health care system focuses on the current pandemic, it is important to avoid regressing on the nation's recent progress in combatting opioid misuse and use disorders.[3] In this article, we outline the ongoing challenges that health care organizations, payers, policymakers and providers must overcome in the current and post-Covid-19 era to deliver effective pain management, a component critical to fighting the opioid crisis.

Improving pain management

Pain is a leading cause of disability in the US, with recent data showing that low back and neck pain account for the highest amount of annual health care spending ($134.5 billion in 2016) among all common medical conditions.[4] These and other data[5,6] strongly support the need for changes in the

way we manage pain. Many recent attempts at pain management reform have come in response to the ongoing opioid epidemic, a response that has been likened to managing a house on fire.[7] The most immediate need was to extinguish the fire, which naturally led to health care policies and interventions that were largely downstream such as encouraging change in prescriber behavior, addressing and managing opioid use disorder, and reducing opioid-related overdose and mortality.

> *"Many recent attempts at pain management reform have come in response to the ongoing opioid epidemic, a response that has been likened to managing a house on fire."*

The current approach has demonstrated some initial success in bending mortality curves,[8-10] but by itself is not sufficient to fix the underlying problem which is the need for safer and more effective pain management strategies. Such strategies should focus on:

1) ensuring that patients are getting effective pain management when they initially access care, an upstream intervention that can drastically reduce unnecessary opioid initiation

2) development and delivery of effective care models for patients who continue to experience significant pain after they are tapered off of opioids.

Multiple national organizations and federal agencies, including a recent National Academy of Sciences workshop on Non-Pharmacological Approaches to Pain Management[11] and the HHS Pain Management Best Practices Inter-Agency Task Force,[12] are delivering a clear and consistent message: we have enough actionable evidence to pursue significant health care system change. These organizations and other national stakeholder groups have clearly outlined next steps.[13,14] They include:

- Re-configuring health care delivery models
- Leveraging published clinical practice guidelines, such as those developed by the American College of Physicians for low back pain (LBP)
- Providing early non-pharmacological management

Integrated pain management (IPM), focused on individualized patient needs, has the ability to coalesce these steps into a cohesive strategy for action.

Formally, IPM programs use an array of treatment modalities across a variety of disciplines to address the biopsychosocial and functional needs of the patient with pain. IPM treatments can include both pharmacological and non-pharmacological management; psychological, psychiatric, and behavioral health interventions; rehabilitative approaches (physical, occupational, chiropractic, and others); integrative health approaches (acupuncture, yoga, and others) and surgical management.[15-17] A variety of health care providers and disciplines may participate in care delivery,

underscoring the importance of integration, coordination, and communication among members of the care team.

However, despite data supporting the benefits of IPM programs[18-21] and guidance from federal agencies and national organizations promoting integrated, multidisciplinary care,[11-13,22] IPM programs are not widely implemented.

Challenges facing integrated pain management programs

To better understand the challenges surrounding implementation of IPM programs, the Duke-Margolis Center for Health Policy and the Duke Department of Orthopaedic Surgery held a roundtable in February 2020 with more than 30 stakeholders including payers, purchasers, employers, health policy experts, pain researchers, front-line clinicians, and patient representatives. Discussions focused on key challenges associated with the development, implementation and maintenance of IPM programs. We highlight the most important takeaways from that meeting below.

Challenge #1. Financial incentives are misaligned with comprehensive, integrated care models under Fee-for-Service (FFS) payment.

Clinicians and health care organization leaders emphasize that financial and business considerations have stymied wide adoption of IPM programs. Part of the challenge is that the FFS payment system poorly supports care coordination and conversations with patients about their goals and needs. Another challenge is that complementary and integrative therapies form an important part of IPM, yet those services (e.g., yoga and acupuncture) are often not reimbursed by many health care payers.[23] Further, there are benefit caps or other payment restrictions on services commonly used for pain management, notably physical therapy and chiropractic care.[23]

Beyond the barriers associated with payment, many clinics struggle to implement a new integrated pain management program because they do not have the upfront capital they need to hire new staff, provide training in IPM approaches to existing clinicians and staff, or invest in new health information technology capabilities to identify and track patients with chronic pain: all barriers that have become even more difficult to overcome due to the financial and resource strain caused by Covid-19.

Challenge #2. Health care systems, payers, and purchasers need more comprehensive data to better establish the business case for sustainable programs.

Demonstrating program effectiveness and reducing direct costs is a critical first step but does not always lead to adoption of IPM programs. Health care organizations need additional data to understand the financial implications specific to their health care delivery system to make a strong business case for their leadership to invest in IPM programs. They need to understand how many people would use IPM services, for how long, and what specific services they need. Further, while some health care organizations may be able to repurpose existing care management infrastructure built to support alternative payment models, others do not have these supports. Importantly,

health care organizations are not homogeneous. Their needs vary based on local context (with high stresses on rural, safety net, and smaller practices).

Payers will require similar information, but also need to understand whether networks of providers are available to deliver IPM services. This is especially important for contracting with service providers for complementary therapies, like yoga and acupuncture, who may not have worked with health insurers before. Payers also work under constraints based on the type of insurance—for example, Medicare Advantage plans have different financial structures, quality measures, and populations from traditional Medicare or a Medicaid managed care plan or commercial insurance—which affects the business case for investing in integrated pain management.

Challenge #3. Delivering comprehensive, integrated care is often not feasible in underserved or rural areas.

The areas hardest hit by the opioid crisis are rural and underserved communities,[24] the same communities that are unlikely to have access to IPM programs and services. Access barriers may include: too few primary care providers or pain management specialists; lack of trained behavioral health professionals; limited or no availability of medication-assisted treatment; and uncertainty in how to identify/include local providers with expertise in pain management, such as doctors of chiropractic, as part of a health care team. In rural areas or areas with severely limited provider options, many patients cannot afford the time and cost of traveling to treatment.

Telehealth can help with access issues in rural areas, and the COVID-19 pandemic is likely to result in greater use of these capabilities.[1] Services like cognitive behavioral therapies and physical therapy have been effectively delivered through telehealth, but there remain payment and regulatory challenges to making this a common or preferred strategy.[23]

Challenge #4. Lack of consensus on how to measure quality and define program success.

Currently there is no consensus on how to measure quality in pain management, much less quality in IPM programs. An effective method to measure quality is critical for moving value-based payment programs forward, as payment reforms depend on performance measures to ensure that care quality is maintained or improved. One important area for measure development will be in patient-reported outcomes (PROs),[25] which can capture a person's functional status and quality of life. Such measures are in nascent use now, but are especially important for understanding the impact of pain. The success of PROs in certain bundled payment programs, like those for hip and knee osteoarthritis, bode well for their use in other aspects of musculoskeletal functioning.

Challenge #5. Inadequate workforce training/knowledge in appropriate pain care.

IPM programs are not effective or sustainable if the health care workforce lacks adequate training in pain management best practices. Enhancing workforce training in pain management also provides novel options for delivering more comprehensive pain care through existing service lines. For example, the Duke Joint Health Program,[26] a comprehensive, integrated program for managing osteoarthritis, employs physical therapists with specialized training in applying cognitive behavioral theory to pain management. These specialized providers act as a health care system

navigator to coordinate guideline-adherent pain care for patients with other health care providers such as psychologists, behavioral health coaches, and nutritionists.

> *"IPM programs may face low consumer-level demand if the public views treatments like medication and surgery as the only viable options for pain management."*

Challenge #6. Lack of public knowledge regarding the risks and benefits of different pain treatments.

IPM programs may face low consumer-level demand if the public views treatments like medication and surgery as the only viable options for pain management. One of the few silver linings associated with the ongoing opioid epidemic is increased public awareness of the dangers associated with opioids, which contributes to individuals seeking safer pain management alternatives. Public education campaigns can be effective in driving guideline-adherent care. One classic example is a public advertisement campaign in Australia that used radio and printed advertisements, outdoor billboards, posters, seminars, workplace visits, and publicity articles to successfully modify beliefs and health care utilization related to low back pain.[27] Consumer demand for IPM may improve as a result of enhancing public knowledge of best practice and potential risks associated with use of early imaging, opioids, and surgery.

Looking to the future: How do we build and sustain IPM programs?

Emerging value-based payment models, coupled with the substantial personal and economic impact of pain, have provided a strong impetus to reconsider what is needed to develop sustainable, comprehensive approaches to pain management. Given the aforementioned challenges, and in consideration of existing literature and insights gained from the roundtable meeting, we propose that the ideal IPM program should be defined by the following principles:

1. Focused on delivering the right pain management care to the right patient at the right time, based on their individual needs and goals.

2. Takes a comprehensive, evidence-based, and guideline-concordant approach to pain management, which avoids low value and ineffective interventions and coordinates the multiple interventions that are needed.

3. Incorporates multiple provider disciplines and services, including but not limited to: psychological and behavioral health interventions; rehabilitative approaches (e.g., physical, occupational, chiropractic therapies); integrative health approaches (e.g., acupuncture, yoga, and others) and medical management (e.g., pharmacological and surgical interventions).

4. Encourages non-pharmacological, non-surgical treatments as frontline care.

5. Incorporates routine, standardized quality and outcomes measurement.

6. Provides options and flexibility for care delivery based on patient needs, including telehealth and in-home services.

Programs meeting these principles are generally poorly supported by fee-for-service payments, so development and sustainability of such programs will likely require more flexible payment models.

A clear message from roundtable attendees was that health care organizations, payers and employers need case examples of successful, sustainable IPM programs that have learned how to address these challenges. One exemplar is the U.S. Department of Veteran's Affairs (VA) Whole Health System.[28,29] The Whole Health System is a person-centered, systematic approach to providing comprehensive health care early in the relationship between VA and the veteran. While the system is not specific to pain management, chronic pain management is a frequent focus. Unlike traditional episodic care models, this system is designed for continuous engagement with the veteran throughout life. The model emphasizes self-care within the broader context of well-being, and incorporates a full range of conventional and complementary and integrative health approaches, such as stress reduction, yoga, tai chi, mindfulness, nutrition, acupuncture, and health coaching.[28,29]

The Whole Health System model is one example of what is possible for IPM programs. However, health care systems and payers looking to develop and implement IPM programs need exemplars of successful models across a variety of patient populations, reimbursement models, geographic regions, and delivery settings. To this end, we are working with initiatives such as the Alliance to Advance Comprehensive Integrative Pain Management (AACIPM) to identify IPM programs across the US and develop a knowledge base of best practices for program implementation. This resource will supply practical guidance for those organizations needing to develop, implement or sustain IPM programs.

Covid-19 will make some challenges even more difficult to overcome, while providing opportunities to better address others. For instance, the ongoing pandemic response has limited access to services that require in-person care, like acupuncture, physical therapy and some medication prescribing,[2] while facilitating expansion and reimbursement of telehealth services for pain management.[1]

In the longer term, Covid-19 could impact the ability and willingness of organizations to invest in IPM. Even prior to Covid-19, health care organizations needed sufficient capabilities to implement IPM programs, such as the ability to track and forecast utilization trends, and understand potential impacts on invoicing and revenue cycle management. But revenue uncertainty[30] and shifting organizational priorities during this public health crisis could discourage investment in these capabilities and other critical IPM components such as implementation of health information technologies (to identify and manage high-risk groups) and coordination of pain care across providers and patients.

We will not understand the full impact of Covid-19 on our progress to combat the opioid crisis for quite some time. Nevertheless, overcoming these six challenges remains a high priority for improved pain care, and we strongly advocate that all stakeholders consider what they can do to

address these barriers now and in the future. Collective action will ensure that the meaningful gains we have made in the fight against opioid misuse and abuse will not be lost in the fire.

Trevor Lentz,
Assistant Professor, Orthopaedic Surgery, Duke University

Christine Goertz,
Professor, Duke University

Isha Sharma,
Senior Research Assistant, Duke-Margolis Center for Health Policy

Jonathan Gonzalez-Smith,
Research Associate, Duke-Margolis Center for Health Policy

Robert Saunders,
Research Director, Payment and Delivery Reform, Duke-Margolis Center for Health Policy,

Disclosures: Trevor Lentz, Isha Sharma, Jonathan Gonzalez-Smith, and Robert Saunders have nothing to disclose. Christine Goertz serves on the Advisory Committee for the Alliance to Advance Comprehensive Integrative Pain Management, serves as Chairperson on the Board of Governors for the Patient-Centered Outcomes Research Institute (PCORI), is CEO of the Spine Institute for Quality (SpineIQ), a member of the Interagency Pain Research Coordinating Committee (IPRCC), and a member of The Bone and Joint Decade Task Force on Low Back Pain. This work was funded by the Duke Endowment as part of the Duke School of Medicine Opioid Program portfolio.

References

1. Eccleston C, Blyth FM, Dear BF. Managing patients with chronic pain during the COVID-19 outbreak: considerations for the rapid introduction of remotely supported (eHealth) pain management services. Pain. 2020;161(6):889-93

2. Survey highlights vulnerabilities of chronically ill during COVID-19 pandemic. US Pain Found. April 2020. https://uspainfoundation.org/press-release/survey-highlights-vulnerabilities-of-chronically-ill-during-covid-19-pandemic/. Accessed April 28, 2020.

3. Drug overdoses climb during COVID-19 pandemic. Roll Call. Accessed June 2, 2020. https://www.rollcall.com/2020/05/27/drug-overdoses-climb-during-covid-19-pandemic/

4. Dieleman JL, Cao J, Chapin A. US Health Care Spending by Payer and Health Condition, 1996-2016. JAMA. 2020;323(6):863-84

5. Gaskin DJ, Richard P. The economic costs of pain in the United States. J Pain. 2012;13(6):715-24

6. Blyth FM, Briggs AM, Schneider CH, Hoy DG, March LM. The Global Burden of Musculoskeletal Pain-Where to From Here? Am J Public Health. 2019;109(6):35-40

7. Miller BF, Estes L. To Address Opioids And Diseases Of Despair, Communities Must Build Resilience. Health Aff https://www.healthaffairs.org/do/10.1377/hblog20171227.233294/full/Accessed April 28, 2020.

8. Franklin GM, Mai J, Turner J, Sullivan M, Wickizer T, Fulton-Kehoe D. Bending the prescription opioid dosing and mortality curves: impact of the Washington State opioid dosing guideline. Am J Ind Med. 2012;55(6):325-31

9. Sears JM, Fulton-Kehoe D, Schulman BA, Hogg-Johnson S, Franklin GM. Opioid Overdose Hospitalization Trajectories in States With and Without Opioid-Dosing Guidelines. Public Health Rep. 2019;134(6):567-76

10. Franklin G, Sabel J, Jones CM. A comprehensive approach to address the prescription opioid epidemic in Washington State: milestones and lessons learned. Am J Public Health. 2015;105(6):463-9

11. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Global Health; Board on Health Sciences Policy; Global Forum on Innovation in Health Professional Education; Forum on Neuroscience and Nervous System Disorders. The Role of Nonpharmacological Approaches to Pain Management: Proceedings of a Workshop. (Stroud C, Posey Norris SM, Bain L, eds.). Washington (DC): National Academies Press (US); 2019. http://www.ncbi.nlm.nih.gov/books/NBK541702/. Accessed April 28, 2020.

12. Report on Pain Management Best Practices: HHS.gov. https://www.hhs.gov/ash/advisory-committees/pain/reports/index.html. Published December 17, 2018. Accessed April 28, 2020.

13. Von Korff M, Scher AI, Helmick C. United States National Pain Strategy for Population Research: Concepts, Definitions, and Pilot Data. J Pain. 2016;17(6):1068-80

14. U.S. Pain Foundation. https://uspainfoundation.org/. Accessed April 28, 2020.

15. Bonakdar RA. Integrative Pain Management. Med Clin North Am. 2017;101(6):987-1004

16. Cheatle MD. Biopsychosocial Approach to Assessing and Managing Patients with Chronic Pain. Med Clin North Am. 2016;100(6):43-53

17. Purcell N, Zamora K, Tighe J, Li Y, Douraghi M, Seal K. The Integrated Pain Team: A Mixed-Methods Evaluation of the Impact of an Embedded Interdisciplinary Pain Care Intervention on Primary Care Team Satisfaction, Confidence, and Perceptions of Care Effectiveness. Pain Med. 2018;19(6):1748-63

18. Dorflinger LM, Ruser C, Sellinger J, Edens EL, Kerns RD, Becker WC. Integrating interdisciplinary pain management into primary care: development and implementation of a novel clinical program. Pain Med. 2014;15(6):2046-54

19. Dorflinger L, Moore B, Goulet J. A partnered approach to opioid management, guideline concordant care and the stepped care model of pain management. J Gen Intern Med. 2014;29(6):870-6

20. Pangarkar SS, Kang DG, Sandbrink F. VA/DoD Clinical Practice Guideline: Diagnosis and Treatment of Low Back Pain. J Gen Intern Med. 2019;34(6):2620-9

21. Otis JD, Keane TM, Kerns RD, Monson C, Scioli E. The development of an integrated treatment for veterans with comorbid chronic pain and posttraumatic stress disorder. Pain Med. 2009;10(6):1300-11

22. Institute of Medicine (US) Committee on Advancing Pain Research, Care, and Education. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington (DC): National Academies Press (US); 2011. http://www.ncbi.nlm.nih.gov/books/NBK91497/. Accessed April 28, 2020.

23. Heyward J, Jones CM, Compton WM. Coverage of Nonpharmacologic Treatments for Low Back Pain Among US Public and Private Insurers. JAMA Netw Open.

24. Langabeer JR, Chambers KA, Cardenas-Turanzas M, Champagne-Langabeer T. County-level factors underlying opioid mortality in the United States. Subst Abus.

25. Getting To The Next Generation Of Performance Measures For Value-Based Payment. https://www.healthaffairs.org/do/10.1377/hblog20190128.477681/full/. Accessed April 28, 2020.

26. Malay MR, Lentz TA, O'Donnell J, Coles T, Mather Iii RC, Jiranek WA. Development of a Comprehensive, Nonsurgical Joint Health Program for People With Osteoarthritis: A Case Report. Phys Ther. 2020;100(6):127-35

27. Buchbinder R, Jolley D, Wyatt M. Population based intervention to change back pain beliefs and disability: three part evaluation. BMJ. 2001;322(6):1516-20

28. Krejci LP, Carter K, Gaudet T. Whole health: the vision and implementation of personalized, proactive, patient-driven health care for veterans. Med Care. 2014;52(6):S5-8

29. Bokhour BG, Haun JN, Hyde J, Charns M, Kligler B. Transforming the Veterans Affairs to a Whole Health System of Care: Time for Action and Research. Med Care. 2020;58(6):295-300

30. Chernew M. How To Read National Health Expenditure Projections In Light Of COVID-19: Uncertain Long-Run Effects, But Challenges For All. Health Aff https://www.healthaffairs.org/do/10.1377/hblog20200417.842451/full/. Accessed April 28, 2020.