



BANBURY CENTER REPORTS

Non-Opioid Management of Chronic Pain: Developing Value-Based Models for Diagnosis and Treatment

Banbury Center, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, USA
September 16-19, 2018

Organizers:

Daniel Clauw, University of Michigan, Ann Arbor, USA

Linda Porter, National Institute of Neurological Disorders and Stroke, Bethesda, USA

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Please note: This report is based on discussions at the September 2018 Banbury meeting, but does not necessarily represent views of individual participants / organizations.

SUMMARY

Advances in our understanding of chronic pain provide an opportunity to introduce innovative care models that could increase the quality of care while reducing costs. This meeting convened stakeholders, constituents and thought leaders to develop value-based models for diagnosis and treatment of chronic pain. Discussions helped form the basis for brainstorming sessions during which participants were challenged to identify existing or new care models for individuals with chronic pain that would form the basis for better alignment of patient/payer benefits with payment schemes, as well as new cross-sector and cross-discipline relationships and collaborations beyond the meeting.

It is widely acknowledged that the care of chronic pain patients is suboptimal throughout the world. A recent series of articles in *The Lancet*¹ reviewed the current state of chronic low back pain management worldwide; the interdisciplinary group of authors bemoaned the under-utilization of evidence-based treatments, and over-use of non-evidence-based treatments that often do more harm than good (e.g. bed rest, opioids, surgery). Undoubtedly, some of this occurs due to lack of education amongst providers, especially given the significant advances in our understanding of pain within the past few decades that have yet to be integrated into routine clinical care. However, much of this poor-quality care occurs because of system-wide problems in reimbursement, integration, and coordination of care for chronic pain patients (CPPs).

Throughout the meeting, participants described existing models, and emphasized that perhaps most neglected in the care of chronic pain, especially in the U.S., was a *value-based care model*, in which the least expensive, most efficacious, and least harmful treatments would be used first, and only after failing these therapies would patients receive expensive and/or more potentially harmful therapies. The group was unable to identify a country or geographical region with an optimal care system for chronic pain that could serve as a model. Nevertheless, participants pinpointed several barriers or gaps in knowledge which needed to be addressed before the optimal care models can be adopted:

Barriers I: Integrating chronic pain care into existing models

¹ <https://www.thelancet.com/series/Postoperative-pain-management-and-opioids>



The first identified gap in knowledge was how the care of chronic pain could be optimally integrated into existing care models. It was widely acknowledged that chronic pain is so common that it needs to be primarily managed by primary care physicians (PCPs); there are not nearly enough pain medicine trained specialists in any country to provide this care. Yet, PCPs typically feel overwhelmed by the care of CPPs - both because they lack appropriate knowledge, and are not adequately compensated for the time it takes to provide high quality care to these patients. This problem is further exacerbated in the U.S. and many developed countries by the fee-for-service reimbursement models that predominate. These models favor the use of inexpensive, but marginally efficacious and unsafe therapies (e.g. opioids, bed rest), whilst encouraging expensive procedures with marginal efficacy.

Stepped care models emerged as the most promising method proposed for the care of CPPs, and those with some evidence. In these models, *Step One* starts before the person with chronic pain enters a healthcare system. The individual is surrounded with resources and treatments easily accessible for self-management, including websites, apps, and other sources of information. These tools can encourage simple, proven cognitive-behavioral strategies such as activity/exercise, cognitive-behavioral therapy, improved sleep, stress reduction. With this initial step, persons with pain (even before they become patients) can potentially avoid the need to access the healthcare system, in which more care for pain does not necessarily lead to better outcomes (e.g. opioids, surgery). Importantly, these resources and treatments account for the fact that many individuals with pain live in rural areas, where access to in-person therapies may be limited, making internet- or telephonically-based strategies even more appealing. Meeting participants were particularly impressed with recent work in Australia addressing this need².

When individuals do not respond to Step One interventions, treatment moves into the healthcare system (*Step Two*), and treatment managed by a PCP with a supporting team of providers and additional resources. Finally, *Step Three* includes extended care strategies with adjunct and specialty support for CPPs who require longer term treatment and management.

These new care models require reimbursement for care integration and coordination, and need to incorporate as many different types of providers as possible: Physicians, nurses, occupational and physical therapists, psychologists, social workers, pharmacists, and many others in the health system can all provide meaningful contributions to the care of individuals with chronic pain. Beyond established providers, new models will need to determine how to license and certify a large variety of other potential care providers (e.g., yoga and tai chi instructors, acupuncturists, marijuana dispensaries) so that they are eligible for reimbursement.

Barriers II: Improving the evidence base for pain treatments

The second gap in knowledge identified during the meeting was the current evidence base for pain treatments, especially non-pharmacological therapies. Meeting participants representing payers indicated an openness to modifying reimbursement and care models, but did not feel there was enough of an evidence base to support reimbursement for all non-pharmacological therapies in all CPPs. The evidence gap is particularly notable for the older adult population in the U.S., where the Centers for Medicare and Medicaid Services needs evidence applicable to its beneficiaries to meet statutory coverage requirements.

This knowledge gap is a point of emphasis in the planned National Institutes of Health HEAL (Helping to End Addiction Long-term) Initiative³.

² See painHEALTH <http://painhealth.csse.uwa.edu.au:8080/about.html>

³ <https://www.nih.gov/research-training/medical-research-initiatives/heal-initiative/heal-initiative-research-plan>



Barriers III: Formal research to meet evidence needs

The final gap identified was formal research into innovative or optimal care models. While promising approaches have been used in a single study or clinic, most have not been more broadly exported. The participants were impressed by recent work in the U.S. Department of Veterans Affairs (VA) and Department of Defense (DoD) systems to modify care models for CPPs. The VA and DoD have funded demonstration projects or research studies that have informed the transition to stepped care models that emphasize the early use of non-pharmacological therapies, and focus on outcomes important to patients. At present this is more of an aspiration than reality, but the fact that these very large self-insured health systems are forging this path will provide some of the necessary evidence to determine which of these strategies work, and which do not.

Daniel Clauw & Linda Porter⁴
April 2019

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MEETING SESSIONS

Session 1: Systems/Care Models I – Primary Care

Bill McCarberg, University of California, San Diego, Poway, USA
Kevin Gebke, Indiana University School of Medicine, Indianapolis, USA
Lynn DeBar, Kaiser Permanente Washington Health, Seattle, USA
Kurt Kroenke, Indiana University, Indianapolis, USA

SESSION 2: Systems/Care Models II – Integrating into Specialty Care

Helen Slater, Curtin University, Perth, Australia
Friedhelm Sandbrink, Veterans Affairs Medical Center, Washington, D.C., USA
Steven Stanos, Swedish Health Care Center, Seattle, USA
Ardith Doorenbos, University of Washington, Seattle, USA

SESSION 3: Systems/Care Models III – Patient Perspective

Christin Veasley, Chronic Pain Research Alliance, Brookfield, USA

SESSION 4: Managing Pain Without Opioids

Mary-Ann Fitzcharles, McGill University, Montreal, Canada
James D'Olimpio, Northwell Health, Lake Success, USA
Martin Cheatle, University of Pennsylvania, Philadelphia, USA
Chester Buckenmaier, Uniformed Services University, Rockville, USA

SESSION 5: Psychological Interventions

Jennifer Haythornthwaite, Johns Hopkins University, Baltimore, USA
Christine Rini, Hackensack University Medical Center, Hackensack, USA

SESSION 6: Payers Perspective

Shari Ling, Centers for Medicare & Medicaid Services, Baltimore, USA
Terri Postma, Centers for Medicare & Medicaid Services, Woodlawn, USA
Daniel Knecht, Aetna, New York, USA

SESSION 7: Pain in Special Populations

Rachael Coakley, Boston Children's Hospital, Boston, USA
Christine Chambers, Centre for Pediatric Pain Research, Halifax, Canada
Cary Reid, Weill Cornell Medicine, New York, USA

SESSION 8: Potential Future Directions Driven by New Research

Eric Bair, University of North Carolina, Chapel Hill, USA
Daniel Clauw, University of Michigan, Ann Arbor, USA
Linda Porter, National Institute of Neurological Disorders and Stroke, Bethesda, USA

SESSION 9: Closing Discussions



MEETING PARTICIPANTS



Eric Bair, University of North Carolina
Chester Buckenmaier, Uniformed Services University
Christine Chambers, Centre for Pediatric Pain Research
Martin Cheatle, University of Pennsylvania
Daniel Clauw, University of Michigan
Rachael Coakley, Boston Children's Hospital
Robert Cook, The MAYDAY Fund
James D'Olimpio, Northwell Health
Lynn DeBar, Kaiser Permanente Washington Health Research Institute
Ardith Doorenbos, University of Washington
Mary-Ann Fitzcharles, McGill University
Kevin Gebke, Indiana University School of Medicine
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Terri Postma, Centers for Medicare and Medicaid Services
Cary Reid, Weill Cornell Medicine
Christine Rini, Hackensack University Medical Center
Friedhelm Sandbrink, Veterans Affairs Medical Center
Helen Slater, Curtin University
Christina Spellman, The MAYDAY Fund
Steven Stanos, Swedish Health Services
Christin Veasley, Chronic Pain Research Alliance