National Quality Partners Playbook™: Opioid Stewardship

NATIONAL QUALITY FORUM

NATIONAL QUALITY PARTNERS PLAYBOOK™: OPIOID STEWARDSHIP

ABOUT NATIONAL QUALITY FORUM

Founded in 1999 and based in Washington, DC, the National Quality Forum (NQF) is the nation's resource for healthcare quality measurement and improvement. NQF is an independent, not-for-profit, membership-based organization that brings healthcare stakeholders together to recommend quality measures and improvement strategies that reduce costs and help patients get better care. Through its multistakeholder membership of more than 400 organizations, NQF facilitates an open and thorough dialogue on healthcare measurement and improvement, and strives to lead national collaboration to improve health and healthcare quality for all Americans.

National Quality Partners™

National Quality Partners™ (NQP™), an NQF initiative, is an active forum for NQF members to connect, collaborate, and provide thought leadership on quality improvement strategies to achieve national health and healthcare quality goals. NQP leads practical, action-oriented initiatives to drive meaningful and lasting change for patients and their families.

NQP addresses the nation's high priority healthcare issues by engaging stakeholders from across the care continuum. To help curb the opioid epidemic, NQP brought together 40 experts and national stakeholders from the public and private sectors to form the NQP™ Opioid Stewardship Action Team. Drawn from NQF's diverse membership, the Opioid Stewardship Action Team worked together to identify key barriers and solutions to advance opioid stewardship on a national scale.

CONTENTS

ACKNOWLEDGEMENTS

NQF gratefully acknowledges the National Quality Partners™ Opioid Stewardship Action Team members, and other key contributors, who served as technical consultants as NQF developed and produced the *NQP Playbook™: Opioid Stewardship*.

The conclusions, findings, and opinions expressed by individuals contributing to this publication do not necessarily reflect the official position of the U.S. Department of Health and Human Services, the Public Health Service, the Centers for Disease Control and Prevention, or any contributor's affiliated institution.

Use of trade names is for identification only and does not imply endorsement by Centers for Disease Control and Prevention, by the U.S. Department of Health and Human Services or any contributor's affiliated institution.

Action Team Roster

Action Team Co-Chairs

Centers for Disease Control and Prevention
Christina Mikosz

Trinity Health
Paul Conlon

Action Team Members

Aetna
Traci Sellers-Pullen

Agency for Healthcare Research and Quality
Richard Ricciardi

American Academy of Orthopaedic Surgeons
David Ring

American Academy of Physical Medicine and Rehabilitation
Andrew Friedman

American Nurses Association
Mary Beth Bresch White

American Physical Therapy Association
Alice Bell

American Society of Health-System Pharmacists
Deborah Pasko

Appriss Health
James Huizenga

BlueCross BlueShield Association
Kim Holland

Centers for Medicare & Medicaid Services
Marsha Smith

Council of Medical Specialty Societies
Norman Kahn

Dental Quality Alliance
Paul Moore

Elevating Home
Danielle Pierotti

Geisinger Health System
Perry Meadows

Harborview Medical Center
Debra Gordon

Health Resources and Services Administration
Judith Steinberg

HealthPartners
Sue Knudson

Henry Ford Health System
Cathy Frank

Heron Therapeutics
Mike Mathews

Hospice and Palliative Nurses Association
Judith Paice

Hospital Corporation of America
Michael Schlosser

IBM Watson Health
Lisa Patton

Institute for Behavioral Healthcare Improvement
Leon Evans

Institute for Healthcare Improvement
Mara Laderman

Kaiser Permanente
Carol Forster

Kentuckiana Health Collaborative
Stephanie Clouser

Magellan Health, Inc.
Caroline Carney

Mayo Clinic
Elizabeth Habermann

Memorial Sloan-Kettering Cancer Center
Vinay Puttanniah

Partners Behavioral Health Management
Barbara Hallisey

Patient & Family Centered Care Partners, Inc.
Joan Maxwell

Pharmacy Quality Alliance
Loren Kirk

Premier Healthcare Alliance
Patricia (Trish) Iovino

Press Ganey Associates
Thomas Lee

Substance Abuse and Mental Health Services Administration
Laura Jacobus-Kantor

U.S. Pharmacopeial Convention
Donna Bohannon

Veterans Health Administration
Erin Krebs

Vizient, Inc.
Jim Lichauer

Key Contributors

Elie Aoun
American Psychiatric Association Foundation

Elisa Arespacochaga
American Hospital Association

Parker Beene
Pennsylvania Department of Health

Jay Bhatt
American Hospital Association

Leslie Blackhall
University of Virginia Health System

Lindsey Grumbo
Pharmaceutical Researchers and Manufacturers of America

Rachel L. Levine
Pennsylvania Department of Health

Penny Mills
American Society of Addiction Medicine

Andy Morgenstern
American Optometric Association

Anne Myrka
IPRO

Meghna Patel
Pennsylvania Department of Health

Jeanmarie Perrone
University of Pennsylvania School of Medicine

Kathryn Spates
The Joint Commission

Eleni Theodoropoulos
URAC

Seth Waldman
Hospital for Special Surgery

Tricia Lee Wilkins
Academy of Managed Care Pharmacy

THE NATIONAL URGENCY FOR OPIOID STEWARDSHIP

The opioid epidemic in America is one of the most urgent public health threats facing the nation today. The crisis seemingly affects every single person in some way and leaves no life unaltered.[1] Over the past several years, research studies and vital statistical data have documented the worsening epidemic, from the growth in prescription opioid use to the challenges of addiction, overdose, and death.[2,3] Although appropriate indications exist for prescribing opioids, including acute pain, active cancer treatment, palliative care, and end-of-life care, limited evidence supports the medical community's use of long-term prescription opioids for the treatment of chronic, noncancer pain.[4]

In 2016, more than 46 Americans died every day from a prescription opioid-related overdose.

Many factors—including fractured healthcare delivery, third party payment issues, the desire of clinicians and accrediting bodies to effectively manage patients' pain, and a lack of knowledge of and/or access to a broader array of pain management options—have contributed to the worsening opioid epidemic that faces our nation today.[5] Nearly 20 years ago, professional medical associations and pain experts encouraged clinicians to treat pain more aggressively in response to concerns of inadequate pain control.[6,7] During this time, the addictive properties of prescription opioids were not widely appreciated, and other pain management options were not always readily accessible (and when accessible, were often expensive or time-consuming). This resulted in many clinicians prescribing opioids without fully understanding the risks and long-term consequences of opioid use disorder (OUD).[8]

As of 2014, almost 2 million Americans have prescription-related OUD.[9] Prescription opioid sales in the United States have nearly quadrupled from 1999 to 2014, despite no change in the amount of pain that Americans reported in that time period.[10] Deaths from prescription opioids have quadrupled over the past 18 years, and in 2016, more than 46 Americans died every day from a prescription opioid-related overdose.[11]

In addition to increasing deaths attributed to prescription opioids, overdose deaths due to heroin have dramatically increased in recent years, and deaths due to synthetic opioids other than methadone have also spiked, attributed primarily to illicitly manufactured fentanyl.[12] The increased availability and low cost of these drugs have contributed to their rise across demographics, regions, and states.[13,14] There are also clear connections between the use of prescription opioids and illicit opioids, as a large proportion of new heroin users reported misusing prescription opioids prior to initiating heroin use; however, emerging data shows increasing use of heroin as an initiating opioid of abuse, demonstrating the evolution of this epidemic.[15,16,17,18]

The staggering statistics of human harm, suffering, and death from the opioid epidemic have garnered national attention. Before releasing the landmark **Surgeon General's Report on Alcohol, Drugs, and Health** in November 2016, former U.S. Surgeon General Dr. Vivek Murthy sent a letter and opioid prescribing pocket card to 2.3 million doctors, nurses, dentists, and other clinicians across America imploring them to help address America's escalating opioid epidemic.[19] This request was the first time in the 145-year history of the Office of the Surgeon General that a letter was issued specifically to

medical professionals calling them to action.[20]

Subsequently, in March 2017, President Donald J. Trump signed an Executive Order establishing the President's Commission on Combating Drug Addiction and the Opioid Crisis, which focuses on studying ways to combat and treat drug abuse, addiction, and the opioid crisis. In October 2017, the President declared the opioid crisis a public health emergency under the Public Health Services Act.

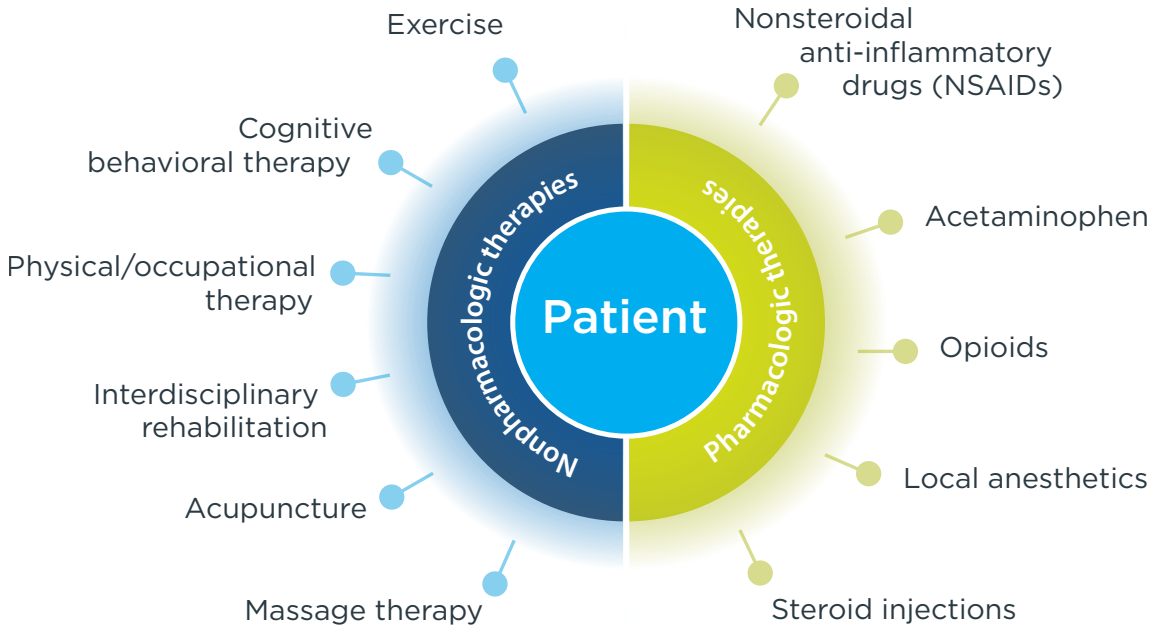
Charting a Better Pain Management Path

Pain management is a complex topic that is central to the issue of opioid stewardship. Healthcare organizations must reevaluate their pain management efforts and offer patient-centered multimodal pain management strategies, including both nonpharmacologic therapies and pharmacologic therapies (see Figure 1). Clinicians directly responsible for the treatment of pain must understand pain classifications (e.g., acute, chronic, and/or cancer), pain pathology, and psychosocial factors that may affect a patient's pain intensity. Clinicians should perform a comprehensive assessment to identify the safest, most effective treatment modalities for each individual patient.

Figure 1 depicts examples of nonpharmacologic and pharmacologic pain management strategies. Clinicians may use these examples as part of a broader multimodal pain management strategy when caring for patients with pain. The strategies included in Figure 1 are illustrative pain management approaches and are not intended to be an exhaustive list.

To curb the opioid epidemic, opioid stewardship must be a cornerstone of the coordinated commitments and actions between healthcare organizations and the community to promote the appropriate use of opioids while reducing the risks of addiction, overdose, and other adverse events. Opioids are important pain relievers, especially for patients undergoing active cancer treatment, palliative care, and end-of-life care, and clinicians can prescribe opioids cautiously as part of a multimodal approach that takes advantage of a variety of interventions that relieve pain. Opioids should not be the focal point of the approach to manage patients' pain; rather, a patient's individual values, goals, informed preferences, concerns, and circumstances, as well as a careful balancing of treatment risks and benefits, should be the foundation of an effective pain management strategy.

FIGURE 1. PAIN MANAGEMENT OPTIONS



USING THE NQP PLAYBOOK™

The *NQP Playbook™: Opioid Stewardship* provides concrete strategies and implementation examples for healthcare organizations and clinicians committed to effective pain management and opioid stewardship. The *NQP Playbook* aligns with the Centers for Disease Control and Prevention (CDC) **Guideline for Prescribing Opioids for Chronic Pain** (March 2016), but also provides broader guidance on opioid stewardship for other types of pain in other practice settings besides primary care. Since this *NQP Playbook* specifically focuses on opioid stewardship, readers interested in a deeper understanding of all pain management strategies should consult supplemental resources.

The *NQP Playbook* is not a list of "must do's," but instead lays out a variety of options from which to choose depending on specific context, organizational resources, and patient and staff needs. While the *NQP Playbook* is not a checklist, it does strive to provide guidance to design effective, high-quality, and sustainable opioid stewardship programs.

The *NQP Playbook* is organized by seven fundamental actions of opioid stewardship.

For each fundamental action, the *NQP Playbook* offers a brief overview, implementation examples, potential barriers and suggested solutions, and sample tools and resources. **Appendix B** includes hyperlinks to all tools and resources by fundamental action area. Organizations can use the implementation examples to design, refine, and strengthen their opioid stewardship programs and increase the potential for success.

The examples progress from basic to intermediate to advanced approaches—categories that are approximate based on likely resource-intensiveness and organizational effort. Basic examples are ones that organizations can undertake relatively quickly and with limited resources. Intermediate and advanced examples may require more intensive resources and organizational effort. An organization need not pursue all implementation examples across all categories, nor begin with basic approaches before moving to intermediate and advanced approaches. Rather, organizations can determine which approaches are best for them based on their own organizational context.

OPIOID STEWARDSHIP FUNDAMENTAL ACTIONS

The National Quality Forum identified seven fundamental actions to support opioid stewardship in healthcare organizations:

1. Promote leadership commitment and culture
2. Implement organizational policies
3. Advance clinical knowledge, expertise, and practice
4. Enhance patient and family caregiver education and engagement
5. Track, monitor, and report performance data
6. Establish accountability
7. Support community collaboration

The National Quality Forum developed the *NQP Playbook™: Opioid Stewardship* in March 2018 with input from the NQP Opioid Stewardship Action Team. The NQP Playbook intends to be a practical resource and provides a range of strategies to advance opioid stewardship in healthcare settings. Healthcare organizations and leaders may find many of the implementation examples, barriers, solutions, and resources applicable across care settings, including acute care, ambulatory care, and home and community-based care settings. A comprehensive, interdisciplinary and multimodal strategy for appropriate pain management, and opioid stewardship, should extend across the full continuum of care, regardless of setting.

Fundamental 1:
Leadership Commitment and Culture

Strong leadership drives the effectiveness of a healthcare organization's efforts to implement pain management and opioid stewardship. Successful programs benefit from clear direction and support from organizational leadership at all levels, including the board of directors, chief executives (C-suite), and departmental and team leaders. Leadership must elevate awareness of the scope of the opioid problem, while instilling confidence and expectations that actions taken will help combat the opioid epidemic while also sustaining high-quality pain care. Organizational leadership should provide support and resources for opioid stewardship and for the development of comprehensive, evidence-based pain management programs. Leadership must promote a culture of appropriate and best-practice opioid prescribing, and also discourage the stigma of opioid use disorder (OUD).

Implementation Examples

BASIC

- Assess organizational readiness to implement or improve pain management and opioid stewardship efforts
- Elevate awareness and the urgency of the opioid crisis by:
  - Integrating opioid stewardship in the organization's strategic plan and annual goals
  - Engaging the board of trustees/board of directors in making opioid stewardship a priority
  - Sharing stories, and morbidity and mortality data, to highlight the impact of OUD on patients, families, and the community
  - Instilling confidence and expectations that better stewardship will help combat the opioid epidemic
- Avoid stigmatizing language and negatively stereotyping individuals with OUD
- Ensure a consistent message about appropriate opioid prescribing by:
  - Framing opioid stewardship as a patient safety issue, reaffirming the commitment to zero harm
  - Ensuring the focus is on adhering to best practices and not simply on reducing opioid use
  - Describing nonopioid pain management methods (both nonpharmacologic and pharmacologic) as essential first-line modalities instead of "alternatives" to opioids
  - Emphasizing that opioids are beneficial for managing pain in certain patient populations and situations
  - Ensuring clinicians are not prescribing opioids in response to other expectations, such as achieving high patient experience scores

INTERMEDIATE

- Identify a clear and shared vision for improved pain management and opioid prescribing that resonates across the organization
- Identify a champion, executive sponsor(s), and a team member to serve as a system point of contact to build support and drive change, ensuring the inclusion of clinical and peer opinion leaders, patients and family caregivers, and community stakeholders
- Invest in staff education on appropriate pain management strategies, opioid stewardship, and effective patient communication techniques
- Support the development of, or access to, an integrated interdisciplinary care team, inclusive of rehabilitation professionals, social work, and mental and behavioral health specialists
- Provide leadership support and resources to partner with the community in joint opioid stewardship efforts (See the **Community Collaboration** section)

ADVANCED

- Consider specific opioid stewardship accountability metrics for the leadership team(s), and integrate opioid stewardship goals and metrics into performance reviews for senior and clinical leaders
- Support a data-driven learning infrastructure by:
  - Improving existing electronic health record systems to allow clinical decision support and enhanced data analytic capacity to support opioid stewardship efforts
  - Sharing best practices and data analytics to facilitate tracking of opioid stewardship and improved pain management practice
  - Promoting patient and clinician access to data and information
  - Investing in integrating prescription drug monitoring programs (PDMPs) into the electronic health record
  - Hardwiring the use of data to ensure systems and processes do not change with leadership turnover

Potential Barriers and Suggested Solutions

Lack of leadership support/buy-in of opioid stewardship

Suggested Solutions

- Educate leaders and mentors about the scope of the opioid epidemic through data and stories from patients, families, and the community
- Educate leaders on how upfront investment in opioid stewardship can pay off long-term and provide a return on investment (ROI)
- Encourage leadership participation in a quality improvement collaborative to learn about successful opioid stewardship examples from peers and to motivate change
- Invite patients and advocates to share stories about the impact of opioids and opioid stewardship
- Engage patient safety and legal experts to understand implications for patient safety and risk management

Cost to the healthcare organization

Suggested Solutions

- Perform an ROI analysis for opioid stewardship activities, including quantifying the impact on opioid-related drug events, length of stay, emergency department utilization, workforce absenteeism, and drug diversion
- Present the business case for investing in addiction medicine, social work, and mental and behavioral health partners
- Collaborate with payers to ensure coverage of evidence-based nonopioid pain management options and addiction treatment services

Competing priorities or "initiative fatigue"

Suggested Solutions

- Emphasize opioid stewardship as a public health, workforce, and patient safety issue

- Discuss the potential impact on the healthcare organization brand if opioid stewardship is not prioritized
- Gain efficiencies by incorporating opioid stewardship efforts into existing quality improvement initiatives

Lack of a comprehensive plan to change clinician culture

Suggested Solutions

- Create collaborative and interdisciplinary teams to drive opioid stewardship and pain management, including clinical champions, patients, and key nonclinical professionals (e.g., information technology)
- Collaborate with medical, nursing, dental, and pharmacy schools to incorporate opioid stewardship and effective pain management into curricula, residency training, and continuing medical education requirements

Stigma of OUD

Suggested Solutions

- Educate healthcare clinicians that OUD is a chronic, relapsing disease and not a moral failing
- Promote nonstigmatizing language around the physical, psychosocial, and behavioral aspects of OUD and substance use disorder (SUD)
- Expand access to OUD treatment, including support for staff to obtain Drug Addiction Treatment Act of 2000 (DATA 2000) waivers to prescribe buprenorphine

Suggested Tools and Resources

Key National Resources and/or Guidelines

- The Joint Commission R3 Report on Pain Assessment and Management Standards for Hospitals
- The Joint Commission Sentinel Event Alert on Safe Use of Opioids in Hospitals
- CDC Guideline for Prescribing Opioids for Chronic Pain
- Pain Management and The Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use

Business Case for Opioid Stewardship

- Trends in Opioid-Related Hospitalizations
- Healthcare Cost and Utilization Project (HCUP) Fast Stats on Opioid-Related Hospital Use
- CDC Annual Surveillance Report of Drug-Related Risks and Outcomes
- The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States
- CDC Foundation Business Pulse on the Opioid Overdose Epidemic

Tools, Toolkits, and/or Implementation Guides

- Pennsylvania Hospital Engagement Network: Organization Assessment of Safe Opioid Practices
- Stem the Tide: Addressing the Opioid Epidemic
- Reducing Adverse Drug Events Related to Opioids (RADEO) Implementation Guide

Additional Organizational Resources

- First, Do No Harm: Marshaling Clinician Leadership to Counter the Opioid Epidemic
- The Opioid Epidemic, From Evidence to Impact

Fundamental 2: Organizational Policies

Organizational policies are a powerful tool for integrating opioid stewardship into a healthcare organization's culture. Policies should support the implementation and hardwiring of approaches to multimodal pain management that are based on the best available evidence. To enable optimal clinical practice, healthcare organizations should ensure that organizational policies support the use of tools that help patients and clinicians with safe and effective pain relief, such as organization-wide use of prescription drug monitoring programs (PDMPs), appropriate risk assessment strategies and tools, patient and family caregiver education, and clinician education and training programs. Healthcare organizations should also create policies that support access to needed care, including substance abuse treatment.

Implementation Examples

BASIC

- Integrate appropriate national guidelines into organizational policies and workflows
- Use organizational policies to establish processes for training, monitoring, and adhering to best practices for pain management and opioid prescribing
- Develop interdisciplinary teams to encourage an understanding of available pain management services
- Develop and promote the use of standardized risk assessment tools, while understanding their limits in predictive accuracy, to identify vulnerable or at-risk patients prior to prescribing opioids
- Identify individuals within the organization responsible for staying current with relevant evidence and best practices and disseminating key information to clinicians

INTERMEDIATE

- Develop core competencies in pain management for members of the interdisciplinary team, including clinicians responsible for and engaged in opioid stewardship
- Engage frontline clinicians in policy creation and development of tools and organizational guidelines to generate staff "buy-in" and support
- Develop clear patient education policies to enable clinicians to provide effective and consistent education on the risks and benefits of appropriate pain management options
- Implement strategies to mitigate risks and harms related to opioid prescribing (e.g., co-prescribing naloxone for patients at increased risk of opioid-related harms)
- Provide a model policy that discourages tying specific opioid dosages directly to pain severity rating scales
- Actively engage Patient Family Advisory Councils (PFAC) in development and review of policies
- Create policies to support clinicians obtaining the Drug Addiction Treatment Act of 2000 (DATA 2000) waiver, thus expanding the cadre of clinicians able to treat opioid use disorder (OUD) with buprenorphine in outpatient settings

ADVANCED

- Establish organizational guidance for the management of specific types of pain or specialty procedures for which national guidelines do not exist
- Leverage electronic health record capabilities to support opioid stewardship efforts by:
  - Embedding PDMP access and pain management protocols and policies into clinician workflow
  - Reviewing the default number of opioid doses in the electronic health record and consider reducing it if the default exceeds clinical guidelines
- Develop organizational policies to address the needs of patients with OUD and/or complex pain needs
- Develop protocols to standardize care for patients experiencing an opioid overdose
- Standardize processes for facilitating access to medication-assisted treatment (MAT) programs and ongoing care
- Develop program(s) to link patients to support groups
- Create programs that enable partnerships with community organizations

Potential Barriers and Suggested Solutions

Competing organizational priorities

Suggested Solutions

- Create leadership statements of support for the opioid stewardship initiatives, ensuring staff recognize the program as a high priority
- Demonstrate return on investment (ROI) to emphasize the importance of prioritizing opioid stewardship efforts
- Identify opportunities to synergize opioid stewardship with other priorities and highlight how they align across the organization
- Carve out protected time for leader(s) of the opioid stewardship program

Lack of resources

Suggested Solutions

- Quantify the costs of opioid use and OUD to demonstrate scope of the problem and the impact it has on the organization and community
- Engage key stakeholders in strategic planning with organizational leadership to prioritize limited resources and to garner support for the opioid stewardship program
- Direct resources to proven interventions in order to use limited resources most efficiently

Reluctance of clinicians to change habits and culture

Suggested Solutions

- Increase clinician engagement through education, peer opinion leaders, mentors, and patient partners
- Reiterate appropriate uses of opioids, including specific populations for whom opioids may be appropriate and beneficial
- Reinforce that guidelines and policies are intended to support optimal practice but not replace clinical judgement
- Use technology to provide resources, create prompts, and embed clinical algorithms within the workflow to aid clinicians in making decisions on appropriate pain management therapies

Patient and family caregiver request for, or insistence on, opioid therapy for pain management

Suggested Solutions

- Create multimedium patient education materials about pain management that include nonpharmacologic and nonopioid options
- Enable PFACs to engage with patients and family caregivers to promote the use of nonopioid pain management options when appropriate

Challenges with electronic health records and interoperability

Suggested Solutions

- Invest in IT tools and work with vendors to facilitate interoperability across the electronic health record platform, including interoperability between the PDMP, the electronic health record, and decision support applications
- Make the business case for investing in electronic prescribing

Difficulties with transitions to needed treatment services

Suggested Solutions

- Simplify the process of recommending, implementing, and following up on interdisciplinary treatment options (e.g., creating standard templates for discharge orders and patient discharge instructions)
- Enhance clinician knowledge of addiction treatment centers to promote warm handoffs[21] and collaborative care
- Develop relationships with local treatment centers to help prioritize appointments for MAT
- Support physicians, nurse practitioners, and physician assistants in obtaining DATA 2000 waivers to enable prescribing of buprenorphine

Stigma of OUD

Suggested Solutions

- Develop education campaigns for clinicians, patients and family caregivers, and the community to reduce the stigma of OUD
- Use nonstigmatizing language and processes across the organization

Risk of OUD for healthcare workers

Suggested Solutions

- Develop and enforce policies to prevent drug diversion (e.g., proper waste techniques)
- Provide support and resources for staff at risk of OUD

Suggested Tools and Resources

Key National Resources and/or Guidelines

- FDA Blueprint for Prescriber Education for Extended-Release and Long-Acting Opioid Analgesics

Tools, Toolkits, and/or Implementation Guides

- Veterans Health Administration Opioid Safety Initiative (OSI)
- Turn the Tide Pledge
- Pledge on Using Non-Stigmatizing Language

Drug Storage, Disposal, and Diversion

- ASHP Guidelines on Preventing Diversion of Controlled Substances
- Disposal of Unused Medicines: What You Should Know

Interdisciplinary Collaboration

- Vermont Hub-and-Spoke Model of Care for Opioid Use Disorder: Development, Implementation, and Impact
- Project ECHO Opioid Addiction Treatment

Implementing Organizational Programs

- Safer and More Appropriate Opioid Prescribing: A Large Healthcare System's Comprehensive Approach
- Multifaceted Program Featuring Guideline, Training, and Incentives Reduces Prescribing of High-Dose Opioid Therapy in Patients With Chronic Pain
- Impact of an Opioid Prescribing Guideline in the Acute Care Setting
- Opioid Dose Reduction in a VA Health Care System—Implementation of a Primary Care Population-Level Initiative

Fundamental 3:
Clinical Knowledge, Expertise, and Practice

An understanding of the science of pain, comprehensive pain assessment and management, and opioid prescribing guidelines for acute and chronic pain serves as the backbone for appropriate opioid prescribing. Healthcare leaders and clinical experts should develop and promote core competencies in evidence-based pain management, including knowledge of nonpharmacologic and nonopioid strategies, and clinicians should be well-versed in patient communication techniques. Clinicians can use standardized risk assessment tools and approaches, while understanding their limits in predictive accuracy, to help identify patients at-risk of opioid-related adverse events and opioid use disorder (OUD). Additionally, an understanding of the referral needs for individuals with OUD and the mechanisms for referral is essential. Clinicians also must be trained and aware of populations for whom opioids may have a beneficial role as part of a multimodal approach, such as patients undergoing active cancer treatment, and those receiving palliative and end-of-life care.

Implementation Examples

BASIC

- Create a team-based culture among clinicians that emphasizes the importance of appropriate prescribing and pain management options for different populations, including:
  - Acute/post-operative pain
  - Chronic pain
  - Chronic pain with acute needs
  - Serious illness, cancer, palliative, and end-of-life
  - Patients with history of or active OUD or substance use disorder (SUD)
- Provide education to ensure all prescribers understand "multimodal analgesia"—the combination of pain management techniques that act by different mechanisms
- Specify the diagnosis, drug, dose, duration, and de-escalation on every analgesic prescription
- Use activity- and function- based pain scales instead of 0-10 pain intensity scales
- Support consistent use of prescription drug monitoring programs (PDMPs) for all prescribers
- Ensure patients' pain needs are being adequately addressed and clinicians are not discharging or avoiding patients due to complexities involved in pain management
- Develop expertise for specialty populations and those vulnerable for OUD (e.g., pediatrics, maternity services)

INTERMEDIATE

- Require ongoing clinician training, education, and engagement to support effective pain management and opioid stewardship for prescribers and care teams, including robust support of evidence-based strategies like **academic detailing**
- Educate clinicians in enhanced communication techniques to better facilitate difficult conversations with patients and family caregivers (e.g., training on motivational interviewing)
- Include information in clinical training on safely tapering patients off prescription opioids

- Develop a standardized risk assessment process and/or screening procedure to identify patients with complex pain management needs, those at-risk of opioid related adverse events, and/or OUD, and ensure organizational policies detail their use
- Assess and address the psychosocial aspects of pain (e.g., stress, distress anxiety, depression) and coping strategies as a part of care planning
- Promote a sound understanding of referral networks for addiction services to facilitate formal addiction treatment plans, information about medication-assisted therapy (MAT), and warm handoff referrals to treatment prior to hospital discharge

ADVANCED

- Develop an interdisciplinary pain consultation service to assist with the management of complex patients, including addiction medicine specialists, pain specialists, and mental health professionals
- Establish a standardized naloxone program to ensure patients at an increased risk of opioid overdose are co-prescribed naloxone (e.g., those with a history of overdose, history of SUD, >50 morphine milligram equivalents (MME)/day, concurrent benzodiazepine use)[22]
- Collaborate with referral networks and providers to enable consistent handoffs and care transitions

Potential Barriers and Suggested Solutions

Lack of knowledge and competency in pain management

Suggested Solutions

- Require pain management education for all clinicians, including continuing medical education (CME) and academic detailing opportunities, with multiple offerings to fit different schedules
- Discuss pain management approaches broadly, ensuring that nonpharmacologic and nonopioid pharmacologic options are not referred to as "alternatives" to opioids, but rather as first-line options
- Integrate prescribing guidelines into the electronic health record to facilitate decision making and to ensure consistency across the care continuum
- Ensure clinicians are aware of populations for whom prescribing opioids is appropriate (e.g., patients undergoing active cancer treatment, palliative care, end-of-life care) and identify clinicians with expertise in pain management for these patient populations
- Include education on populations for whom prescribing opioids carry increased risk (e.g., youth, older adults, women of childbearing age, pregnant women, prior history of SUD)
- Identify designated individual(s) within the organization to synthesize resources, literature, and materials, and to share the most helpful resources with the broader clinician audience

Lack of understanding of pain pathophysiology and the biopsychosocial aspects of pain

Suggested Solutions

- Ensure clinicians have a clear understanding of the difference between nociception (the physiology of actual or potential tissue damage) and pain (the cognitive, emotional, and behavioral response to nociception)
- Educate prescribers on how behavioral health, stress, distress, coping strategies, and resiliency interact with the disease process and pain management
- Acknowledge there is wide variation in pain intensity for a given injury or tissue damage, and empower prescribers to learn about the factors that may influence their patients' perceptions of pain (e.g., sources of stress, distress, anxiety, nonoptimal coping strategies)

Patient and family caregiver request for, or insistence on, opioid therapy for pain management

Suggested Solutions

- Engage patients early in conversations about realistic expectations to be sure they understand the recovery process
- Provide patients with clear, accurate, and unbiased medical evidence about appropriate pain management options, and the risks and benefits of each option
- Use shared decision making to identify patient-specific values, goals, informed preferences, and concerns when creating a pain management plan
- Discuss approaches and strategies for pain management that align with the patient's needs regarding cost, time, and convenience
- Engage the interdisciplinary team, including nonclinicians, to educate patients on pain management options so that the responsibility does not fall solely on one clinician

Insufficient knowledge of referral centers

Suggested Solutions

- Disseminate information on local substance use referral centers to clinicians
- Ensure clinicians are aware of self-management resources to support patients with pain (e.g., education, exercise programs), as well as local pain and specialty clinics to refer complex patients when needed
- Use Patient and Family Advisory Councils (PFACs) and care navigators to maximize awareness of community referral centers and resources

Limited access to pain management specialists in rural or remote areas

Suggested Solutions

- Partner with other organizations to jointly contract with pain management experts
- Consult with local hospice and palliative care organizations for expertise
- Develop relationships with local pain management experts in remote practice areas
- Engage in and promote the use of a " hub-and-spoke" model to share clinical knowledge between specialists and primary care clinicians in local communities (e.g., Project Extension for Community Healthcare Outcomes [ECHO])[23]
- Use telehealth (e.g., live video, mobile health, etc.) to connect patients to pain management specialists

Stigma of OUD

Suggested Solutions

- Educate clinicians, patients, and family caregivers on the disease model of addiction
- Provide communication training on appropriate terminology related to OUD, avoiding stigmatizing language and slang terminology (e.g., "junkies," "drug seeking")
- Use role playing and peer modeling of difficult conversations to promote nonstigmatizing language
- Provide evidence for medication-assisted treatment (i.e., treatment with methadone, buprenorphine, or naltrexone, in tandem with behavioral health support), and counter misperceptions that such treatment is simply "substituting one addiction for another"

Concerns about drug diversion

Suggested Solutions

- Make PDMPs easily accessible to all prescribers and encourage electronic health record integration
- Ensure clinicians understand and communicate best practices for safe storage and disposal of opioids
- Educate clinicians on communicating with patients about the risks of drug diversion and accidental opioid exposure in the home
- Develop and educate staff on organizational policies on drug diversion by healthcare workers
- Educate healthcare workers on the risks and signs of clinician use of opioids and available treatment programs for clinicians

Suggested Tools and Resources

Key National Resources and/or Guidelines

- CDC Guideline for Prescribing Opioids for Chronic Pain
- CDC Checklist for Prescribing Opioids for Chronic Pain
- National Pain Strategy
- American Dental Association Statement on the Use of Opioids in the Treatment of Dental Pain
- Pain: Assessment, Non-Opioid Treatment Approaches, and Opioid Management

Acute Pain Management

- Management of Postoperative Pain: A Clinical Practice Guideline from the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council
- The American Dental Association (ADA) Practical Guide to Substance Use Disorders and Safe Prescribing
- Pain Relief Toolkit
- Opioid Prescribing Recommendations for Opioid-naïve Patients
- Clinical Policy: Critical Issues in the Prescribing of Opioids for Adult Patients in the Emergency Department

Chronic Pain Management

- CDC Guideline for Prescribing Opioids for Chronic Pain Resources
- Federation of State Medical Boards Guidelines for the Chronic Use of Opioid Analgesics
- A Treatment Improvement Protocol (TIP): Managing Chronic Pain in Adults With or in Recovery From Substance Use Disorder

Cancer, Palliative Care, and End-of-Life Care

- National Comprehensive Cancer Network® Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Adult Cancer Pain
- Virginia Association for Hospices and Palliative Care (VAHPC) Risk Evaluation & Mitigation Tool-Kit: Strategies to Promote the Safe Use of Opioids

Other Pain Resources

- Psychotherapeutic Approaches in the Treatment of Pain

Online Training Modules

- Applying CDC's Guideline for Prescribing Opioids: An Online Training Series for Healthcare Providers
- CDC Guideline for Prescribing Opioids for Chronic Pain Webinar Series
- Continuing Education Activity Search
- Centers of Excellence In Pain Education (CoEPEs) Interactive Modules
- Buprenorphine Training for Physicians

Patient Counseling and Communication

- The National Quality Partners Playbook™: Shared Decision Making

Interdisciplinary Collaboration

- Core Competencies for Pain Management: Results of an Interprofessional Consensus Summit
- Core Competencies for Interprofessional Collaborative Practice

Screening and Risk Assessment

- Chart of Evidence-Based Screening Tools for Adults and Adolescents

Opioid Prescribing and Dosing

- CDC's Calculating Total Daily Dose of Opioids for Safer Dosage
- Web-based Opioid Dose Calculator
- Prescribing Policies: States Confront Opioid Overdose Epidemic
- Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use—United States, 2006-2015.

OUD, Overdose Prevention, and Stigma

- Substance Abuse and Mental Health Services Administration (SAMHSA) Opioid Overdose Prevention Toolkit
- Facing Addiction in America, The Surgeon General's Report on Alcohol, Drugs, and Health
- The Role of Recovery Support Services in Recovery-Oriented Systems of Care
- The Unnecessary Stigma, Guilt, and Shame of Addiction

Fundamental 4:
Patient and Family Caregiver Education and Engagement

Healthcare organizations must engage patients and family caregivers in discussions about the risks and benefits of pain management options, including the use of nonpharmacologic and pharmacologic therapies. Patients and family caregivers should receive real-time education at the time of initial prescription, prescription fulfillment, and on an ongoing basis. Patients and family caregivers also should be engaged in setting realistic pain management goals based on expectations for safe and effective pain relief and functional outcomes. Patients should know how to use opioids safely once they have left the healthcare setting, and thus the healthcare team must teach techniques for safe drug use, storage, and disposal, as well as signs of drug overdose, diversion, and opioid use disorder (OUD). Patient and Family Advisory Councils (PFAC) can also help drive best practices for patient and family caregiver engagement.

Implementation Examples

BASIC

- Educate patients and family caregivers on pain management options, reiterating that nonpharmacologic and low-risk pharmacologic pain management techniques are the preferred first line of treatment
- Use patient education materials in multiple mediums, including written, video, and virtual, on pain management options
- Engage patients and family caregivers as partners in setting pain management goals based on realistic expectations for safe and effective pain relief and functional outcomes
- Provide real-time education on risks and benefits of opioids at time of prescribing and on a consistent basis
- When prescribing opioids, promote patient and family caregiver education and awareness of:
  - Drug interactions and side effects, including signs of withdrawal and overdose
  - Safe drug storage and disposal
  - Risks and signs of drug diversion
  - Risks of dependence with opioid therapy
  - Naloxone availability, indications, and use
- Set expectations and discuss indications for drug tapering at the time of initial opioid prescription
- Use informed consent and/or opioid use agreements when prescribing opioids

INTERMEDIATE

- Develop patient resources focused on the quality and safety of pain management therapies
- Strive to have discussions with patients and family caregivers prior to surgery (e.g., even before arriving at the hospital or surgery center) and reiterate that some discomfort immediately after surgery may be expected
- Reduce the risk of drug diversion and OUD by:
  - Educating patients and family caregivers on limiting their home supply of medications to what is currently in use
  - Providing additional information about opioid dependence to patients who may be at an

increased risk of OUD (e.g., patients with depression, history of substance use disorder [SUD])

- Discussing the co-prescribing of naloxone with opioids to enhance awareness of the potential for overdose for individuals at an increased risk (e.g., those with a history of overdose, history of SUD, >50 morphine milligram equivalent [MME]/day, concurrent benzodiazepine use)[24]
- Referring patients and family caregivers to support groups and behavioral health treatments when concerns are identified

ADVANCED

- Identify specific team member(s) to review costs, options, and insurance coverage with patients for pain management options
- Engage PFACs to drive continuous quality improvement, raise awareness, and serve as peer and recovery coaches to provide support to current patients
- Use telemedicine consults to engage patients who otherwise may not be able to access a pain management specialist

Potential Barriers and Suggested Solutions

Patient and family caregiver lack of awareness of, or access to, nonopioid pain management approaches

Suggested Solutions

- Discuss pain management approaches broadly, ensuring that nonopioid options are not referred to as "alternatives" to opioids, but rather as first-line options
- Provide patients with easy-to-understand information, including the risks and benefits of appropriate pain management options
- Educate patients about their role in active pain management, and empower patients to ask questions about pain medication prescriptions and to inquire about nonopioid options
- Connect patients to other patients who have similar circumstances to share stories and insights on their experiences with nonopioid pain management approaches

Patient and family caregiver request for, or insistence on, opioid therapy for pain management

Suggested Solutions

- Promote awareness of national guidelines for opioid use, particularly for patients with chronic pain
- Use and refer to organizational policies for pain management to remove issues of judgement, or the perception of judgement, about the specific patient
- Educate patients on the rapid development of physical dependence on opioids even after only several days of opioid therapy[25]

Managing patients' expectation of zero pain

Suggested Solutions

- Communicate early and openly with patient and family caregivers about expectations for recovery from disease, injury, or surgery
- Substitute functional goals in place of pain intensity goals, and reiterate that zero pain may not be an appropriate expectation
- Engage in shared decision making to make optimal decisions for pain management approaches that align with evidence-based practice and with the patients' values, goals, preferences, and concerns
- Educate patients and family caregivers on the effectiveness of nonopioid techniques for successful pain management

Concerns about how best to engage family caregivers while protecting patient privacy

Suggested Solutions

- Develop protocols for engaging family caregivers while ensuring that patient privacy and the Health Insurance Portability and Accountability Act (HIPAA) are maintained
- Advocate for family caregiver involvement in discussion on pain management, when appropriate

- Disseminate general education materials on the safe use of opioids and the signs, symptoms, and prevention of OUD to patients and family caregivers
- Educate family caregivers on the use of naloxone when co-prescribing naloxone and opioids

Stigma of OUD

- Engage PFACs, patients, and advocates to spotlight success stories of individuals living in long-term recovery and how they successfully manage illness and pain without opioids
- Raise awareness of the complexities and pathways of recovery

Cost of pain management options

Suggested Solutions

- Educate patients on coverage and costs of pain management options
- Identify options in the community, including safety net sites, that may offer multimodal therapies for lower costs

Health literacy

Suggested Solutions

- Provide educational materials to patients in various media, including written, video, and virtual, at appropriate reading levels, and in their preferred language

Suggested Tools and Resources

General Patient Education Materials

- CDC Helpful Materials for Patients
- The American Academy of Pain Medicine's Patient Education and Resources

Patient Stories, Speakers, and Other Patient Resources

- CDC Rx Awareness Campaign
- Advocates for Opioid Recovery

Patient Counseling and Communication

- Sample Patient Agreement Forms
- Patient Counseling Document on Extended-Release/Long-Acting Opioid Analgesics
- Opioid Use, Satisfaction, and Pain Intensity After Orthopedic Surgery

Drug Storage, Disposal, and Diversion

- Disposal of Unused Medicines: What You Should Know
- Controlled Substance Public Disposal Locations
- Lock Your Meds® Pledge

OUD, Overdose Prevention, and Stigma

- Substance Abuse and Mental Health Services Administration (SAMHSA) Opioid Overdose Prevention Toolkit
- Opioid Addiction Treatment: A Guide for Patients, Families, and Friends

Fundamental 5:
Tracking, Monitoring, and Reporting

Regular tracking and monitoring of key quality metrics are critical to identify opportunities for improvement and to assess the impact of opioid stewardship efforts. The ongoing, systematic collection of opioid prescribing data, patient-reported outcomes, adverse events and the use of prescription drug monitoring programs (PDMPs) allow a healthcare organization to assess, monitor, and improve pain management and opioid prescribing practices. Standardized data collection and regular sharing of performance data with organizational leadership, clinicians, patients, and the public help strengthen these efforts and promote transparency. Data collection and interpretation should add value and not unnecessarily burden healthcare teams.

Implementation Examples

BASIC

- Engage the entire interdisciplinary team in tracking, monitoring and reporting data, not just prescribers
- Clarify the meaning and value of measures and goals to clinicians and patients
- Create a positive, not punitive, culture for clinicians to embrace feedback on prescribing patterns
- Create a patient-centered approach to measuring opioid stewardship, emphasizing pain management, function, and safety
- Track a short-list of meaningful measures to monitor the impact of opioid stewardship and pain management initiatives by:
  - Aligning measures with current evidence and national guidelines (see **Measurement section**)
  - Selecting measures based on clinical need and evidence, and not on what is easy to measure
  - Using a small number of relevant measures that are low effort and high impact
  - Including measures that assess for unintended consequences
  - Integrating one to two community measures to assess progress as a community partner
- Report high-level data outcomes to organizational leaders, key stakeholders, clinicians, and the community to support quality improvement efforts

INTERMEDIATE

- Create a culture that supports constant evaluation of pain management practices and uses data to inform and modify organizational policies and guidelines
- Use e-prescribing to monitor clinician referral and prescribing practices across the care continuum, and to assess and minimize variation among prescribers within similar service lines
- Share opioid prescribing data with clinicians on an ongoing and real-time basis by:
  - Creating and sharing easy-to-understand reports with opioid stewardship metrics
  - Integrating opioid stewardship measures into larger “dashboards”
  - Distributing clinician-level information on opioid prescribing and suggestions for improvement at the prescriber level
- Monitor for diversion and opioid use disorder (OUD) behaviors by identifying individuals using multiple prescribers and pharmacies

ADVANCED

- Invest in the integration of PDMP data into the electronic health record to monitor clinician PDMP use and track opioid prescribing
- Use agreed-upon benchmarks to identify outliers in opioid prescribing by service line, and include local and national benchmarks in feedback reports when applicable
- Align incentives and accountability to support the monitoring and reporting of opioid stewardship data and measures
- Assess and report on the referral, utilization, and effectiveness of nonpharmacologic modalities for pain management
- Stratify patients by individual risk factors to better understand patient risk profiles

Potential Barriers and Suggested Solutions

Burden of data collection

Suggested Solutions

- Engage the interdisciplinary team in data collection activities so the responsibility does not fall on one individual or discipline
- Use and adapt measures the organization is already collecting for other purposes to assist in monitoring opioid stewardship efforts (e.g., AHRQ Patient Safety Indicators)
- Develop electronic data collection facilitated by the electronic health record, whenever possible
- Use PDMP data whenever possible

Resistance and lack of "buy-in"

Suggested Solutions

- Use patient stories to motivate clinicians to see the importance of data collection and quality improvement
- Ensure involvement of the disciplines directly involved in opioid stewardship and pain management
- Select measures carefully and educate staff on how the measures align with national guidelines to avoid over-interpretation and overreaction to tracking and monitoring
- Ensure data and measures are comparing peers and similar service lines
- Monitor for emergence of unintended consequences of measure adoption, especially for measures tied to performance

Resource and time limitations

Suggested Solutions

- Demonstrate cost-effectiveness and return on investment (ROI) of tracking, monitoring, and reporting of opioid stewardship metrics
- Share policy templates or protocols across organizations

Lack of IT infrastructure and integration

Suggested Solutions

- Ensure that tracking and monitoring are discussed with IT staff and administration when engaging their support for opioid stewardship
- Engage organizational leaders in conversations about investing in the interoperability of systems and the ROI
- Garner leadership support for integrating the PDMP with the electronic health record by sharing the PDMP capabilities and added value
- Inform the organization about federal grant opportunities for electronic health record, e-prescribing, clinical decision support, or other IT investments

Challenges identifying the best measure(s)

Suggested Solutions

- Prioritize measures that align with national guidelines and outcome improvements
- Use carefully selected proxy measure(s) when necessary
- Stratify reports by patient population or service lines to better understand the data and identify the most appropriate benchmarking metrics

Privacy concerns with data sharing within the organization and with the public

Suggested Solutions

- Educate clinicians and patients on policies around protecting patient privacy

Suggested Tools and Resources

The Role of Measurement

- To Address the Opioid Crisis, Build a Comprehensive National Framework
- Addressing the Opioid Epidemic Through Measurement and Transparency
- Quality Improvement Initiative to Decrease Variability of Emergency Physician Opioid Analgesic Prescribing

Tools, Toolkits, and/or Implementation Guides

- Maine Quality Counts Chronic Pain Collaborative: Suggested Metrics for Chronic Pain and Opioid Management
- Dr. Robert BREE Collaborative Opioid Prescribing Metrics
- Patient-Reported Outcomes Measurement Information System (PROMIS)® tools

Health IT and Electronic Integration

- Health IT Playbook, Section 4: Opioid Epidemic and Health IT
- Prescription Drug Monitoring Program Training and Technical Assistance Center Notes from the Field. Enabling and Requiring Pharmacist Use of PDMP Data: Kroger's Access in Workflow Solution

Fundamental 6: Accountability

To establish accountability, the board of directors, chief executives (C-suite), and department and team leaders must set measureable goals for promoting, establishing, and maintaining a culture of opioid stewardship. Accountability should exist at the board, executive, leadership, team, and clinician level, with clearly articulated performance expectations and incentives to promote opioid stewardship.

Implementation Examples

BASIC

- Implement organizational leadership accountability for:
  - Establishing an organizational culture focused on comprehensive pain management
  - Ensuring that opioid stewardship is an organizational value reported on at the board level and modeled by clinician leaders
  - Setting clear goals for appropriate opioid prescribing and utilization
  - Monitoring organizational compliance with **The Joint Commission Pain Assessment and Management Standards**
- Implement team and clinician accountability for:
  - Discussing pain management options and developing a patient-centered pain management plan
  - Framing opioid stewardship with an emphasis on patient safety, pain management, and patient-centered outcomes
  - Reporting diversion issues to the hospital leadership

INTERMEDIATE

- Implement organizational leadership accountability for:
  - Developing processes to address clinicians whose prescribing practices are outliers amongst their peers
  - Developing systems to support the safety of clinicians, patients, and family caregivers around safe storage and disposal of opioids
  - Monitoring for healthcare worker drug diversion and holding staff accountable per organizational policies (e.g., compliance with controlled substance waste procedures)
  - Treating and providing support for healthcare workers who exhibit signs of opioid use disorder (OUD) or drug diversion
- Implement team and clinician accountability for:
  - Expecting peers to uphold opioid stewardship across the interdisciplinary care team
  - Providing education, resources, and referral services to patients in need of opioid addiction services and behavioral health support services

ADVANCED

- Implement organizational leadership accountability for:
  - Providing time, personnel, and resources to achieve goals
  - Integrating opioid stewardship and pain management into organizational key performance indicators

  - Instituting requirements for credentialing privileges, such as enrollment in prescription drug monitoring programs (PDMPs) and routine PDMP access
  - Achievement of performance measures (see **Measurement section**)

- Implement team and clinician accountability for:
  - Gathering data related to opioid stewardship and pain management approaches and outcomes
  - Developing interdisciplinary approaches to pain management with a focus on improving function and quality of life

Potential Barriers and Suggested Solutions

Fear of disciplining prescribing outliers and/or habitual prescribers

Suggested Solutions

- Ensure that team leaders are well supported by organization administration in their efforts to work with outlier prescribers
- Engage outliers and habitual prescribers in opioid stewardship efforts and encourage them to help develop organizational solutions
- Ensure opioid stewardship leaders have good communication skills and work with clinicians in productive ways, including using peer-to-peer education (e.g., academic detailing) and/or intervention
- Develop organizational policies to support peer-to-peer mentoring or counseling for outliers and/or habitual prescribers
- Establish organizational policies that promote transparency in prescribing practices for all prescribers, including independent clinicians

Lack of coordination of different disciplines and silos of care

Suggested Solutions

- Identify a core leadership team accountable for pain management and appropriate opioid use organization-wide
- Establish an interdisciplinary team, including clinicians responsible for and engaged in opioid stewardship and pain management efforts, with clear goals and metrics
- Ensure an opioid stewardship representative is integrated into each "silo" of care to facilitate communication across the organization
- Develop clear, concise, and consistent messaging related to opioid stewardship across disciplines and the continuum of care

Clinician compliance with opioid stewardship

Suggested Solutions

- Share data on prescribing practices with clinicians so they are aware of how their prescribing practices compare with peers
- Discuss prescribing pattern data to demonstrate when clinicians are not adhering to organizational policies or national guidelines
- Establish institutional policies that define noncompliance with opioid stewardship recommendations and identify corrective actions

Suggested Tools and Resources

Key national resources and/or guidelines

- The Joint Commission R3 Report on Pain Assessment and Management Standards for Hospitals
- CDC Guideline for Prescribing Opioids for Chronic Pain

Implementing organizational programs

- Shared Accountability
- Safer and More Appropriate Opioid Prescribing: A Large Healthcare System's Comprehensive Approach
- A Multifaceted Program Featuring Guideline, Training, and Incentives Reduces Prescribing of High-Dose Opioid Therapy in Patients With Chronic Pain

The role of measurement

- Addressing the Opioid Epidemic Through Measurement and Transparency
- Fighting Opioid Addiction With Data

Drug storage, disposal, and diversion

- ASHP Guidelines on Preventing Diversion of Control Substances
- Disposal of Unused Medicines: What You Should Know

Fundamental 7: Community Collaboration

An effective opioid stewardship program must include collaboration and coordination with community leaders and stakeholders to achieve maximum impact. Healthcare organizations should work toward developing open communication and shared accountability with community partners to promote appropriate opioid use, as well as the safe storage and disposal of opioids. Important partners include other healthcare entities, such as home-based care, pharmacies, rehabilitation providers, dental clinics, veterinary clinics, emergency departments, and first responders, as well as law enforcement, injury prevention centers, schools, faith communities, health insurers, and local, state, and federal government agencies or task forces.

Implementation Examples

BASIC

- Designate an individual or team responsible for acting as an integrator between the healthcare organization and the community
- Identify and actively engage in local opioid stewardship efforts occurring in the community
- Develop shared goals and accountability with community partners to jointly address the opioid epidemic
- Identify opportunities to collaborate with local community organizations to promote:
  - Appropriate use, storage, and disposal of opioids (e.g., partner in community take-back programs)
  - Harm reduction
  - Referrals and treatment
- Partner with local organizations to reinforce consistent public messaging about effective pain management strategies and risks of opioid use

INTERMEDIATE

- Engage the interdisciplinary team in community outreach and coordination efforts
- Collaborate with community partners to:
  - Encourage the use of standard terminology and nonstigmatizing language across organizations and parties (e.g., physicians, law enforcement, first responders, etc.)
  - Promote awareness of, and access to, nonpharmacologic and nonopioid pain management interventions and clinicians
  - Facilitate education on naloxone use, and naloxone distribution programs and events
  - Engage in efforts to destigmatize opioid use disorder (OUD)
- Educate staff on existing community resources to inform patient care and patient education (e.g., information on local addiction centers, exercise programs, and community education opportunities)

ADVANCED

- Communicate with external stakeholders regarding the positive impacts of community collaboration efforts on patient outcomes
- Establish data-driven goals for community collaboration centered on:
  - Public education events (e.g., increasing the number of youth education interactions)
  - Community pain self-management programs (e.g., increasing the availability of walking groups and exercise classes)
  - Increasing the availability of drug take-back programs
  - Increasing OUD treatment referrals and capacity
- Measure the effectiveness of community collaboration efforts through data and outcomes (e.g., overdose rates; emergency department visits for OUD)
- Partner with community centers to facilitate warm handoffs and addiction treatment referrals
- Support expanded prescribing of buprenorphine for OUD treatment outside of traditional addiction programs

Potential Barriers and Suggested Solutions

Resource and funding limitations

Suggested Solutions

- Establish mechanisms to measure and show the return on investment (ROI) and collective impact of community collaboration
- Align advocacy efforts with other stakeholders, including community partners, to secure additional funding and collaborate to identify grant opportunities
- Engage health insurers in covering and adequately reimbursing multimodal pain management strategies, including community-based resources
- Use "train the trainer" techniques to help with personnel limitations
- Engage members of the local community to share their stories, including members of law enforcement, first responders, teachers, spiritual leaders, and families

Lack of common messaging and goals

Suggested Solutions

- Develop clear and concise messaging that can be used across community settings and media avenues
- Reframe pain management as a journey with multiple options, with patients having an active role

Stigma of OUD

Suggested Solutions

- Promote nonstigmatizing language around the physical, psychosocial, and mental health aspects of illness, OUD, and substance use disorder (SUD)
- Change the narrative around OUD through effective communication with peers, professionals, and public figures
- Change attitudes about addiction by educating that addiction is a disease and not a choice
- Enlist patients and family caregivers to share success stories of overcoming OUD that highlight the value of, and need for, collaboration between healthcare organizations and community resources
- Address stigma around medication-assisted treatment (MAT) (i.e., the belief that it is just substituting one addiction for another) by providing education that OUD can be effectively treated and that MAT is an effective approach to OUD

Lack of data

Suggested Solutions

- Develop shared community- and organization-level metrics to measure opioid stewardship and impact
- Share data to promote transparency between healthcare organizations and community partners

Insufficient addiction medicine specialists

Suggested Solutions

- Maintain an easily accessible listing of local referral resources and addiction medicine specialists
- Promote the use of telemedicine to assist patients who otherwise may not be able to access a pain management specialist
- Enact policies that support increasing the number of staff trained in addiction medicine within your own organization, and consider joint efforts to increase the number of clinicians skilled in addiction medicine

Suggested Tools and Resources

Interdisciplinary Collaboration

- Emergency Department Warm Handoff: For Opioid Use Disorder
- Only One in Twenty Justice-Referred Adults in Specialty Treatment for Opioid Use Receive Methadone or Buprenorphine
- Project Lazarus
- Families Against Narcotics

Patient Stories, Speakers, and Other Patient Resources

- CDC Rx Awareness Campaign
- What's Up With Opioids
- The Steve Rummler HOPE Network

OUD, Overdose Prevention, and Stigma

- Substance Abuse and Mental Health Services Administration (SAMHSA) Opioid Overdose Prevention Toolkit
- Opioid Treatment Program Directory
- NARCAN Now Mobile Phone Application
- MATx by SAMHSA Mobile Phone Application

MEASUREMENT APPROACHES

Performance measurement is the cornerstone of any quality improvement program. This section of the *NQP Playbook* builds on Fundamental 5: **Tracking, Monitoring, and Reporting** and dives deeper into measurement approaches. Currently, four NQF-endorsed performance measures address opioid-specific issues for health plan populations. Measure developers and organizations must continue to develop meaningful measures that harmonize across the spectrum of current guidelines and recommended practices in order to assess and monitor opioid utilization, patient outcomes, and the quality and impact of opioid stewardship programs across the healthcare system.

NQF-Endorsed Measures

Health plans may use NQF-endorsed measures to assess health plan performance and to identify problem areas, target interventions, and monitor improvement. Although these measures are not specified for healthcare settings, similar approaches to measurement in healthcare organizations could promote consistency. Table 1 includes abbreviated specifications for each measure, with full measure specifications available in **NQF's Quality Positioning System™**.

TABLE 1. OPIOID-SPECIFIC NQF-ENDORSED MEASURES

Measures On Opioid Utilization

Measure Name	Measure Description	Numerator	Denominator
Use of Opioids at High Dosage in Persons Without Cancer (**NQF #2940**)* Measure Steward: PQA	The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer	Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer* *MED calculation is included in S.6 Numerator Details	Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
Use of Opioids from Multiple Providers in Persons Without Cancer (**NQF #2950**) Measure Steward: PQA	The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four or more prescribers AND four or more pharmacies	Any member in the denominator who received opioid prescription claims from 4 or more prescribers AND 4 or more pharmacies.	Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer (**NQF #2951**)* Measure Steward: PQA	The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four or more prescribers AND four or more pharmacies	Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer* AND who received opioid prescriptions from 4 or more prescribers AND 4 or more pharmacies. *MED calculation is included in S.6 Numerator Details	Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.

* The CDC Guideline for Prescribing Opioids for Chronic Pain recommends that clinicians should avoid increasing opioid dosages to ≥90 morphine milligram equivalents (MME) per day or carefully justify a decision to titrate dosage to ≥90 MME/day.

Measures On Opioid Use Disorder Treatment

Measure Name	Measure Description	Numerator	Denominator
Continuity of Pharmacotherapy for Opioid Use Disorder (**NQF #3175**) Measure Steward: RAND Corporation	Percentage of adults 18-64 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment	Individuals in the denominator who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days	Individuals 18-64 years of age who had a diagnosis of OUD and at least one claim for an OUD medication

Establishing a Measurement Framework for Opioid Stewardship

In addition to using NQF-endorsed measures, healthcare organizations may find it beneficial to employ a broader array of measures to identify opportunities for improvement and monitor progress. Healthcare leaders should develop a measurement strategy that is realistic, thoughtful, and strategic based on the resources and needs of the individual organization. Measurement strategies should include measures in different domains, such as opioid prescribing, utilization of nonopioid pain management services, adherence to best practices, and outcome measures. The information below includes examples of measures currently being explored or used by organizations engaged in opioid stewardship.

When implementing any new measure, it is imperative for the organization to consider the potential of unintended consequences and monitor for them. Organizational leadership must recognize that the goal of opioid stewardship is not to bluntly reduce opioid utilization, but rather to improve the appropriate use of opioids for the best possible patient outcomes. Organizations can refer to **NQF's Quality Positioning System™**, the **National Quality Measures Clearinghouse**, and the **U.S Department of Health and Human Services Measures Inventory** for additional measurement ideas.

Measurement Opportunity: Opioid Utilization

Healthcare organizations must measure how clinicians prescribe opioids to understand prescribing patterns, identify opportunities for improvement, and quantify the impact of quality improvement efforts. Organizations should collect and analyze opioid utilization by service line or specialty to identify variation in prescribing practices and potential outliers. Measurement examples include variation in system- and prescriber-level volume by specialty and/or procedure type, and rates of conversion from short-term to long-term opioid use, excluding patients undergoing active cancer treatment, or receiving palliative or end-of-life care. When measuring opioid utilization, organizations should emphasize that the goal is not for clinicians to simply reduce utilization, but rather to increase patient safety, reduce adverse events, and better manage patients' pain to improve their overall health and well-being.

Measurement Opportunity: Nonopioid and Nonpharmacologic Pain Management

Healthcare organizations can monitor use of nonopioid pain management services to assess uptake of multimodal pain management strategies, such as nonpharmacological treatments (e.g., exercise, cognitive behavioral therapy, acupuncture,

When measuring opioid utilization, organizations should emphasize that the goal is not for clinicians to simply reduce utilization, but rather to increase patient safety, reduce adverse events, and better manage patients' pain to improve their overall health and well-being.

massage, rehabilitation) and nonopioid medications (e.g., nonsteroidal anti-inflammatory drugs, acetaminophen, local anesthetics, topical agents) for specific service lines or procedures. By sharing this data with clinicians and patients, organizations may help reassure clinicians, patients, and family caregivers that pain management remains a high priority for the organization.

Measurement Opportunity: Best Practice Adherence

Healthcare organizations should ensure that clinicians are following best practices and organizational policies for opioid stewardship. As detailed in the *NQP Playbook*, many approaches support opioid stewardship, including screening tools, opioid use agreements, urine drug testing, and prescription drug monitoring programs (PDMPs). Measurement examples include monitoring the percentage of patients for whom risk assessment or screening tools were used prior to opioid prescribing; the percentage of patients on long-term opioid therapy with opioid-use agreements; the percentage of patients on long-term opioid therapy undergoing routine urine drug testing; and the percentage of prescribers accessing the PDMP prior to opioid prescribing.

Measurement Opportunity: Outcomes

Measuring outcomes of opioid stewardship is an active area of research. Although many organizations have begun employing process measures, further development of outcome measures must occur to evaluate opioid stewardship and its impact on patients. Organizations should focus outcome measures on patient safety and reducing patient harm. Measurement examples include adverse drug events or admissions/readmissions related to opioid use, as well as community impact measures, such as the rate of opioid-related overdoses or deaths. Although there are concerns about whether an overemphasis on pain scores contributed to the opioid crisis, clinicians should continue to monitor pain levels of their patients, but may consider mechanisms other than pain scales as the basis for measurement.

DRIVERS OF CHANGE

Several key areas can advance opioid stewardship, including accreditation, payment, reimbursement, licensure, education, workforce management, and the use and integration of prescription drug monitoring programs (PDMPs) into the electronic health record. Federal entities, accreditation agencies, and partners in quality improvement should support action in these areas to continue the advancement of opioid stewardship.

Accreditation and Certification

Organizational leadership must allocate resources in order for an opioid stewardship program to succeed, and regulatory and accreditation standards often serve as drivers of such support. As an example, although The Joint Commission does not have specific opioid stewardship standards, its **pain assessment and management** standards include the identification of appropriate opioid prescribing as an organizational priority for hospitals. The elements of performance detailed in the standards emphasize appropriate pain management techniques, including nonpharmacological options, as well as tracking and monitoring opioid use. Similar adaptations or alignment efforts by accreditation, certification, and credentialing organizations could further instill a sense of urgency to improve appropriate opioid use.

Payment and Reimbursement

Opioids are typically a less expensive and less time-consuming option than nonpharmacologic pain management techniques, which may serve as an incentive for individuals to pursue opioid therapy in lieu of safer treatment options. Conversations between patients, clinicians, and the interdisciplinary care team about pain management options are an imperative part of addressing the opioid epidemic, and payers should reflect their value in payment models as a worthwhile investment of clinician time. Payers can also promote and incentivize the use of

Education and training programs must emphasize the importance of engaging in shared decision making with patients regarding pain management options, so that each patient's goals, expectations, and preferences inform the care plan.

nonopioid pain management options by enhancing coverage of, and access to, these approaches, and adequately reimbursing multimodal nonopioid therapies.

Furthermore, current reimbursement models often do not provide coverage for counseling, coping skills, and treatment services for opioid use disorder (OUD). Many individuals are unable to access OUD treatment programs when they are needed most because of the financial burden. Healthcare coverage plans must consider the long-term impact and potential cost savings for enhancing access to more intensive patient care needs, including evidence-based treatments for OUD.[26]

As the conversation intensifies around the opioid crisis and healthcare organizations take action to promote opioid stewardship, it is critical to review policies on payment and reimbursement. In particular, federal agencies and health plans are uniquely positioned to recognize strategies to improve payment and reimbursement models to support pain management and opioid stewardship activities.

Workforce Needs

Although medical, nursing, dental, and pharmacy schools have recently moved toward more robust pain management programs, historically, many training and residency programs have not focused on rigorously educating students on nonpharmacological pain management techniques.[27,28,29] Education, training, and residency programs must include pain management as a core competency for healthcare disciplines, including medicine, nursing, pharmacy, and dentistry. Education and training programs must emphasize the importance of engaging in shared decision making with patients regarding pain management options, so that each patient's goals, expectations, and preferences inform the care plan.

Many training and residency programs have also only recently increased their focus on substance use disorder (SUD) services.[30] Importantly, there is a growing number of **accredited addiction medicine fellowships** available to healthcare professionals to advance clinician knowledge and expertise in managing the medical, social, and psychiatric elements of care for patients with OUD and/or SUD.

Education must continue after clinicians complete formal training and enter clinical practice, thus ensuring clinicians are up to date with current best practices for pain management. There are many educational opportunities available to clinicians, including federal trainings, peer-to-peer trainings, and interdisciplinary trainings. The **Conjoint Committee on Continuing Education (CCCE)** is a national coalition of 27 organizations representing a variety of health professions, and it uses an interdisciplinary approach to strengthen and align continuing education in health professions to improve healthcare.[31] The current strategic focus of the CCCE is educating clinicians in risk evaluation and mitigation strategies for extended release and long-acting opioid analgesics, with hopes that enhancing education across disciplines will contribute to an impact on the opioid crisis.

In addition to increasing the focus on pain management during professional education and training programs, healthcare professionals must collaborate across disciplines to identify individuals with, or at-risk of developing, OUD.[32] Clinicians must develop individualized treatment plans, using multimodal pain management strategies whenever possible, and refer their patients for OUD treatment when needed, if not trained to facilitate such treatment themselves.

Additionally, medication-assisted treatment (MAT) with buprenorphine can be initiated by any licensed physician, nurse practitioner, or physician assistant who has completed required training and obtained a

Drug Addiction Treatment Act of 2000 (DATA 2000) waiver via the Substance Abuse and Mental Health Services Administration.[33,34] Expanding the number of clinicians trained and able to provide this care is a crucial step in addressing the opioid epidemic, as currently the majority of people with OUD do not receive MAT.[35] Healthcare organizations are well positioned to champion these efforts on a system-wide basis, such as providing time and support for staff to undergo the necessary training for, and even providing incentives for clinicians to obtain, a DATA 2000 waiver.

Use and Integration of Prescription Drug Monitoring Programs

Prescription drug monitoring programs (PDMPs) enable the tracking of state-level, controlled substance prescriptions and can provide clinicians and authorities with timely information about prescribing patterns and patient behaviors to identify individuals at risk of opioid misuse, abuse, and overdose.[36] Many states have reduced the prescription of opioids by mandating clinician review of PDMPs; however, states currently have differing laws about the use of PDMPs.[37] Public health authorities can promote the use of existing PDMP data-sharing infrastructure, or build additional capacity, to communicate uniformly and consistently across state lines to facilitate data sharing and align PDMP mandates.

Federal agencies, public health authorities, and healthcare organization leadership can prioritize the integration of PDMPs into the electronic health record to encourage routine use and access of these systems and remove the burdens on clinicians who often must access multiple portals prior to prescribing. PDMPs are powerful tools when clinicians use them universally and in real time, but the easier it is for a clinician to access information in the PDMP, the more likely it is that the clinician will use it.[38] Healthcare organizations should invest in the integration of the PDMP into the electronic health record to ease the workflow burden on clinicians and to ensure that clinicians access and use PDMPs to their full potential.

Lastly, as the opioid epidemic evolves, PDMP administrators should consider the collection of additional data relevant to opioid stewardship and the safe prescribing of opioids. These additional data could include factors that may indicate the potential for OUD or overdose, such as nonfatal overdoses, naloxone administration, and relevant criminal justice data (e.g., arrest for possession of heroin). Mandatory state reporting, in combination with the collection of additional data, would help augment the functionality of the PDMP by enhancing integration with state and community data. Additionally, PDMP administrators should consider ways to use the PDMP to promote continuity of care, such as by allowing PDMP users to upload documents (e.g., opioid use agreements or care plans).

CALL TO ACTION

With 46 Americans dying every day from a prescription opioid overdose, improving opioid stewardship is imperative to improve patient outcomes and to curb the national opioid epidemic.[39] Moving forward, it is essential that healthcare organizations and public health authorities track, monitor, and report the impact of stewardship programs for learning and improvement. The identification of nationally accepted measures on opioid stewardship, particularly patient-centered outcome measures, is an important area for future work.

As our nation increases the focus on the appropriate use of opioids, it is critical to remember that there are scenarios in which it is appropriate to prescribe opioids. Patients undergoing active cancer treatment and those receiving palliative or end-of-life care often benefit from the use of opioid therapy. Healthcare organizations must ensure that these individuals are able to receive their medications and that medical professionals, and the larger community, do not stigmatize them for taking opioids appropriately as prescribed by their healthcare teams.

The National Quality Forum, through the *NQP Playbook: Opioid Stewardship,* is issuing a national call to action for all healthcare organizations, public health agencies, community organizations, insurance providers, and clinicians to partner to protect patients by prioritizing, implementing, and strengthening opioid stewardship efforts. Although the *NQP Playbook: Opioid Stewardship* focuses primarily on clinical behaviors and practices, the opioid crisis is complex with many contributing factors. Healthcare organizations must collaborate with community partners to prevent the harms associated with inappropriate opioid use and to develop clear support systems and infrastructure to help treat individuals with OUD. The opioid epidemic is a crisis that affects us all, and healthcare organizations must take the lead in advancing opioid stewardship to improve patient outcomes and the health of our nation.

The National Quality Forum, through the *NQP Playbook™: Opioid Stewardship*, is issuing a national call to action for all healthcare organizations, public health agencies, community organizations, insurance providers, and clinicians to partner to protect patients by prioritizing, implementing, and strengthening opioid stewardship efforts.

ENDNOTES

1 Centers for Disease Control (CDC). Drug overdose deaths in the United States continue to increase in 2016 website. https://www.cdc.gov/drugoverdose/epidemic/index.html. Last accessed February 2018.

2 Surgeon General of the U.S. Turn the tide: the Surgeon General's call to end the opioid crisis website. http://turnthetiderx.org/#. Last accessed February 2018.

3 CDC. National Center for Health Statistics system mortality data website. https://www.cdc.gov/nchs/nvss/deaths.htm. Last accessed February 2018.

4 CDC. Opioid overdose prescription opioids website. https://www.cdc.gov/drugoverdose/opioids/prescribed.html. Last accessed February 2018.

5 Surgeon General of the U.S. Turn the tide: the Surgeon General's call to end the opioid crisis website. http://turnthetiderx.org/#. Last accessed February 2018.

6 Surgeon General of the U.S. Turn the tide: the Surgeon General's call to end the opioid crisis website. http://turnthetiderx.org/#. Last accessed February 2018.

7 Joint Commission. Joint Commission statement on pain management website. https://www.jointcommission.org/joint_commission_statement_on_pain_management/. Last accessed February 2018.

8 Surgeon General of the U.S. Turn the tide: the Surgeon General's call to end the opioid crisis website. http://turnthetiderx.org/#. Last accessed February 2018.

9 CDC. CDC guideline for prescribing opioids for chronic pain website. https://www.cdc.gov/drugoverdose/prescribing/guideline.html . Last accessed February 2018.

10 CDC. Prescribing data website. https://www.cdc.gov/drugoverdose/data/prescribing.html. Last accessed February 2018.

11 CDC. Opioid overdose understanding the epidemic website. https://www.cdc.gov/drugoverdose/epidemic/index.html. Last accessed February 2018.

12 Rudd RA, Seth P, David F, et al. Increases in drug and opioid-involved overdose deaths — United States, 2010-2015. *MMWR Morb Mortal Wkly Rep*. 2016;65:1445–1452. Available at http://dx.doi.org/10.15585/mmwr.mm655051e1. Last accessed February 2018.

13 CDC. Opioid overdose synthetic opioid data website. https://www.cdc.gov/drugoverdose/data/fentanyl.html. Last accessed February 2018.

14 Dowell D, Noonan RK, Houry D. Underlying factors in drug overdose deaths. *JAMA*. 318(23):2295-2296.

15 Compton WM, Jones CM, Baldwin CT. Relationship between nonmedical prescription-opioid use and heroin use. *New Eng J Med*. 2016;374(2):154-163.

16 Muhuri PK, Groerer JC, Davies C. Associations of nonmedical pain reliever use and initiation of heroin use in the United States. *Center for Behavioral Health Statistics and Quality Data Review*. 2013. Available at https://www.samhsa.gov/data/sites/default/files/DR006/DR006/nonmedical-pain-reliever-use-2013.htm. Last accessed February 2018.

17 Jones CM. Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers—United States, 2002-2004 and 2008-2010. *Drug Alcohol Depend*. 2013;132(1-2):95–100.

18 Cicero TJ, Ellis MS, Kasper ZA. Increased use of heroin as an initiating opioid of abuse. *Addict Behav*. 2017;74:63-66.

19 Murthy VH. Ending the opioid epidemic—a call to action. *New Eng J Med*. 2016;375(25):2413-2415.

20 Murthy VH. Ending the opioid epidemic—a call to action. *New Eng J Med*. 2016;375(25):2413-2415.

21 Smith J, Levine RL, Murphy K. Letter regarding Clinical Pathways tool. Harrisburg, PA; Pennsylvania Department of Drug and Alcohol Programs, Department of Health; 2016. Available at http://www.health.pa.gov/My%20Health/Diseases%20and%20Conditions/M-P/opioids/Documents/Warm%20Handoff%20Explanation%20Letter.pdf. Last accessed February 2018.

22 Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain—United States, 2016. *MMWR Morb Mortal Wkly Rep.* 2016;65(1):1-49. Available at https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm. Last accessed February 2018.

23 University of New Mexico School of Medicine About ECHO model website. https://echo.unm.edu/about-echo/model/. Last accessed February 2018.

24 Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain—United States, 2016. *MMWR Morb Mortal Wkly Rep.* 2016;65(1):1-49. Available at https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm. Last accessed February 2018.

25 Shah A, Hayes CJ, Martin BC. Characteristics of initial prescription episodes and likelihood of long-term opioid use—United States, 2006-2015. *MMWR Morb Mortal Wkly Rep*. 2017;66(10):265-269. Available at https://www.cdc.gov/mmwr/volumes/66/wr/mm6610a1.htm. Last accessed February 2018.

26 CDC. Opioid overdose treat opioid use disorder website. https://www.cdc.gov/drugoverdose/prevention/treatment.html. Last accessed February 2018.

27 Mezel L, Murinson BB, Johns Hopkins Pain Curriculum Development Team. Pain education in North American medical schools. *J Pain*. 2011;12(12):1199-1208.

28 Tauben DJ, Loeser JD. Pain education at the University of Washington School of Medicine. *J Pain*. 2013;14(5):431-437.

29 Loeser JD, Schatman ME. Chronic pain management in medical education: a disastrous omission. *J Postgrad Med*. 2017;129(3):332-335.

30 Barth KS, Guille C, McCauley J, et al. Targeting practitioners: a review of guidelines, training, and policy in pain management. *Drug Alcohol Depend*. 2017;173(Suppl 1):S22-S30. Available at https://doi.org/10.1016/j.drugalcdep.2016.08.641. Last accessed February 2018.

31 Council of Medical Specialty Societies (CMSS). Convened groups website. https://cmss.org/component-groups/convened-groups/. Last accessed February 2018.

32 CDC. Opioid overdose understanding the epidemic website. https://www.cdc.gov/drugoverdose/epidemic/index.html. Last accessed February 2018.

33 Substance Abuse and Mental Health Services Administration (SAMHSA). Buprenorphine waiver management website. https://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/training-materials-resources/buprenorphine-waiver. Last accessed February 2018.

34 Substance Abuse and Mental Health Services Administration (SAMHSA). Qualify for nurse practitioners (NPs) and physician assistants (PAs) waiver. https://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/training-materials-resources/qualify-np-pa-waivers. Last accessed February 2018.

35 The Pew Charitable Trusts. *Medication-Assisted Treatment Improves Outcomes for Patients with Opioid Use Disorder*. Washington, DC: Pew Charitable Trusts; 2016. Available at http://www.pewtrusts.org/~/media/assets/2016/11/medicationassistedtreatment_v3.pdf. Last accessed February 2018.

36 CDC. Opioid overdose what states need to know about PDMPs website. https://www.cdc.gov/drugoverdose/pdmp/states.html. Last accessed February 2018.

37 CDC. Opioid overdose state successes website. https://www.cdc.gov/drugoverdose/policy/successes.html. Last accessed February 2018.

38 CDC. Opioid overdose what states need to know about PDMPs website. https://www.cdc.gov/drugoverdose/pdmp/states.html. Last accessed February 2018.

39 CDC. Opioid overdose understanding the epidemic website. https://www.cdc.gov/drugoverdose/epidemic/index.html. Last accessed February 2018.

APPENDIX A:
Quick Reference Guide to the Fundamental Actions of Opioid Stewardship

Leadership Commitment and Culture	Strong leadership drives the effectiveness of a healthcare organization's efforts to implement pain management and opioid stewardship. Successful programs benefit from clear direction and support from organizational leadership at all levels, including the board of directors, chief executives (C-suite), and departmental and team leaders. Leadership must elevate awareness of the scope of the opioid problem, while instilling confidence and expectations that actions taken will help combat the opioid epidemic while also sustaining high-quality pain care. Organizational leadership should provide support and resources for opioid stewardship and for the development of comprehensive, evidence-based pain management programs. Leadership must promote a culture of appropriate and best-practice opioid prescribing, and also discourage the stigma of opioid use disorder (OUD).
Organizational Policies	Organizational policies are a powerful tool for integrating opioid stewardship into a healthcare organization's culture. Policies should support the implementation and hardwiring of approaches to multimodal pain management that are based on the best available evidence. To enable optimal clinical practice, healthcare organizations should ensure that organizational policies support the use of tools that help patients and clinicians with safe and effective pain relief, such as organization-wide use of prescription drug monitoring programs (PDMPs), appropriate risk assessment strategies and tools, patient and family caregiver education, and clinician education and training programs. Healthcare organizations should also create policies that support access to needed care, including substance abuse treatment.
Clinical Knowledge, Expertise, and Practice	An understanding of the science of pain, comprehensive pain assessment and management, and opioid prescribing guidelines for acute and chronic pain serves as the backbone for appropriate opioid prescribing. Healthcare leaders and clinical experts should develop and promote core competencies in evidence-based pain management, including knowledge of nonpharmacologic and nonopioid strategies, and clinicians should be well-versed in patient communication techniques. Clinicians can use standardized risk assessment tools and approaches, while understanding their limits in predictive accuracy, to help identify patients at risk of opioid-related adverse events and OUD. Additionally, an understanding of the referral needs for individuals with OUD and the mechanisms for referral is essential. Clinicians also must be trained and aware of populations for whom opioids may have a beneficial role as part of a multimodal approach, such as patients undergoing active cancer treatment, and those receiving palliative and end-of-life care.
Patient and Family Caregiver Education and Engagement	Healthcare organizations must engage patients and family caregivers in discussions about the risks and benefits of pain management options, including the use of nonpharmacologic and pharmacologic therapies. Patients and family caregivers should receive real-time education at the time of initial prescription, prescription fulfillment, and on an ongoing basis. Patients and family caregivers also should be engaged in setting realistic pain management goals based on expectations for safe and effective pain relief and functional outcomes. Patients should know how to use opioids safely once they have left the healthcare setting, and thus the healthcare team must teach techniques for safe drug use, storage, and disposal, as well as signs of drug overdose, diversion, and OUD. Patient and Family Advisory Councils (PFAC) can also help drive best practices for patient and family caregiver engagement.

Tracking, Monitoring, and Reporting	Regular tracking and monitoring of key quality metrics are critical to identify opportunities for improvement and to assess the impact of opioid stewardship efforts. The ongoing, systematic collection of opioid prescribing data, patient-reported outcomes, adverse events and the use of PDMPs allow a healthcare organization to assess, monitor, and improve pain management and opioid prescribing practices. Standardized data collection and regular sharing of performance data with organizational leadership, clinicians, patients, and the public help strengthen these efforts and promote transparency. Data collection and interpretation should add value and not unnecessarily burden healthcare teams.
Accountability	To establish accountability, the board of directors, C-suite, and department and team leaders must set measureable goals for promoting, establishing, and maintaining a culture of opioid stewardship. Accountability should exist at the board, executive, leadership, team, and clinician level, with clearly articulated performance expectations and incentives to promote opioid stewardship.
Community Collaboration	An effective opioid stewardship program must include collaboration and coordination with community leaders and stakeholders to achieve maximum impact. Healthcare organizations should work toward developing open communication and shared accountability with community partners to promote appropriate opioid use, as well as the safe storage and disposal of opioids. Important partners include other healthcare entities, such as home-based care, pharmacies, rehabilitation providers, dental clinics, veterinary clinics, emergency departments, and first responders, as well as law enforcement, injury prevention centers, schools, faith communities, health insurers, and local, state, and federal government agencies or task forces.

APPENDIX B:
URL Links to Resources

Fundamental 1: Leadership Commitment and Culture

Resource	Address
The Joint Commission R3 Report on Pain Assessment and Management Standards for Hospitals	https://www.jointcommission.org/r3_issue_11/
The Joint Commission Sentinel Event Alert on Safe Use of Opioids in Hospitals	http://www.jointcommission.org/assets/1/18/SEA_49_opioids_8_2_12_final.pdf
CDC Guideline for Prescribing Opioids for Chronic Pain	https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
Pain Management and The Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use	http://nationalacademies.org/hmd/reports/2017/pain-management-and-the-opioid-epidemic.aspx
Trends in Opioid-Related Hospitalizations	https://www.ahrq.gov/news/opioid-hospitalization-map.html
Healthcare Cost and Utilization Project (HCUP) Fast Stats on Opioid-Related Hospital Use	https://www.hcup-us.ahrq.gov/faststats/OpioidUseServlet
CDC Annual Surveillance Report of Drug-Related Risks and Outcomes	https://www.cdc.gov/drugoverdose/pdf/pubs/2017-cdc-drug-surveillance-report.pdf
The Economic Burden of Prescription Opioid Overdose, Abuse, and Dependence in the United States	https://journals.lww.com/lww-medicalcare/Abstract/2016/10000/The_Economic_Burden_of_Prescription_Opioid.2.aspx
CDC Foundation Business Pulse on the Opioid Overdose Epidemic	https://www.cdcfoundation.org/businesspulse/opioid-overdose-epidemic-infographic
Pennsylvania Hospital Engagement Network: Organization Assessment of Safe Opioid Practices	http://patientsafety.pa.gov/pst/Documents/Opioids/organization.pdf
Stem the Tide: Addressing the Opioid Epidemic	http://www.aha.org/content/17/opioid-toolkit.pdf
Reducing Adverse Drug Events Related to Opioids (RADEO) Implementation Guide	http://www.hospitalmedicine.org/Web/Quality_Innovation/Implementation_Toolkits/RADEO/Web/Quality___Innovation/Implementation_Toolkit/Radeo/radeo_home.aspx?hkey=3bf810a4-d86c-499d-a8a1-282770cdc58e
First, Do No Harm: Marshaling Clinician Leadership to Counter the Opioid Epidemic	https://nam.edu/first-no-harm-nam-special-publication/
The Opioid Epidemic, From Evidence to Impact	https://www.jhsph.edu/events/2017/americas-opioid-epidemic/report/2017-JohnsHopkins-Opioid-digital.pdf

Fundamental 2: Organizational Policies

Resource	Address
FDA Blueprint for Prescriber Education for Extended-Release and Long-Acting Opioid Analgesics	https://www.fda.gov/downloads/Drugs/DrugSafety/InformationbyDrugClass/UCM515636.pdf
Veterans Health Administration Opioid Safety Initiative (OSI)	https://www.va.gov/PAINMANAGEMENT/Opioid_Safety_Initiative_OSI.asp
Turn the Tide Pledge	https://turnthetiderx.org/join

Resource	Address
Pledge on Using Non-Stigmatizing Language	https://www.bmc.org/sites/default/files/Patient_Care/Specialty_Care/Addiction-Medicine/LANDING/files/Words-Matter-Pledge.pdf
ASHP Guidelines on Preventing Diversion of Controlled Substances	http://www.ajhp.org/content/early/2016/12/22/ajhp160919?sso-checked=true
Disposal of Unused Medicines: What You Should Know	https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm
Vermont Hub-and-Spoke Model of Care for Opioid Use Disorder: Development, Implementation, and Impact	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5537005/
Project ECHO Opioid Addiction Treatment	https://echo.unm.edu/nm-teleecho-clinics/opioid/
Safer and More Appropriate Opioid Prescribing: A Large Healthcare System's Comprehensive Approach	http://onlinelibrary.wiley.com/doi/10.1111/jep.12756/full
Multifaceted Program Featuring Guideline, Training, and Incentives Reduces Prescribing of High-Dose Opioid Therapy in Patients With Chronic Pain	https://innovations.ahrq.gov/profiles/multifaceted-program-featuring-guideline-training-and-incentives-reduces-prescribing-high
Impact of an Opioid Prescribing Guideline in the Acute Care Setting	http://www.jem-journal.com/article/S0736-4679(15)00621-6/pdf
Opioid Dose Reduction in a VA Health Care System—Implementation of a Primary Care Population-Level Initiative	http://onlinelibrary.wiley.com/doi/10.1111/pme.12699/abstract

Fundamental 3: Clinical Knowledge, Expertise, and Practice

Resource	Address
CDC Guideline for Prescribing Opioids for Chronic Pain	https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
CDC Checklist for Prescribing Opioids for Chronic Pain	https://www.cdc.gov/drugoverdose/pdf/pdo_checklist-a.pdf
National Pain Strategy	https://iprcc.nih.gov/
American Dental Association Statement on the Use of Opioids in the Treatment of Dental Pain	http://www.ada.org/en/about-the-ada/ada-positions-policies-and-statements/statement-on-opioids-dental-pain
Pain: Assessment, Non-Opioid Treatment Approaches, and Opioid Management	https://www.icsi.org/guidelines__more/catalog_guidelines_and_more/catalog_guidelines/catalog_neurological_guidelines/pain/
Management of Postoperative Pain: A Clinical Practice Guideline from the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council	https://www.ncbi.nlm.nih.gov/pubmed/26827847
The American Dental Association (ADA) Practical Guide to Substance Use Disorders and Safe Prescribing	http://ebusiness.ada.org/productcatalog/product.aspx?ID=8349
Pain Relief Toolkit	https://www.aaos.org/Quality/PainReliefToolkit/?ssopc=1

Resource	Address
Opioid Prescribing Recommendations for Opioid-naïve Patients	https://static1.squarespace.com/static/598c503737c58117428e7cc9/t/59ee43d29f8dce6223ef2af6/1508787154802/Opioid+Prescribing+Recommendations+for+Opioids+Web+20171002b.pdf
Clinical Policy: Critical Issues in the Prescribing of Opioids for Adult Patients in the Emergency Department	http://www.annemergmed.com/article/S0196-0644(12)00637-3/pdf
CDC Guideline for Prescribing Opioids for Chronic Pain Resources	https://www.cdc.gov/drugoverdose/prescribing/resources.html
Federation of State Medical Boards Guidelines for the Chronic Use of Opioid Analgesics	http://www.fsmb.org/globalassets/advocacy/policies/opioid_guidelines_as_adopted_april-2017_final.pdf
A Treatment Improvement Protocol (TIP): Managing Chronic Pain in Adults With or in Recovery From Substance Use Disorder	https://store.samhsa.gov/shin/content/SMA13-4671/SMA13-4671.pdf
National Comprehensive Cancer Network® Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Adult Cancer Pain	https://www.nccn.org/professionals/physician_gls/default.aspx#pain
Virginia Association for Hospices and Palliative Care (VAHPC) Risk Evaluation & Mitigation Tool-Kit: Strategies to Promote the Safe Use of Opioids	https://c.ymcdn.com/sites/vah.site-ym.com/resource/resmgr/REM_Folder/Final_REM_Tool_Kit_for_elect.pdf
Psychotherapeutic Approaches in the Treatment of Pain	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3000182/
Applying CDC's Guideline for Prescribing Opioids: An Online Training Series for Healthcare Providers	https://www.cdc.gov/drugoverdose/training/online-training.html
CDC Guideline for Prescribing Opioids for Chronic Pain Webinar Series	https://www.cdc.gov/drugoverdose/training/webinars.html
Continuing Education Activity Search	https://search.er-la-opioidrems.com/Guest/GuestPageExternal.aspx
Centers of Excellence In Pain Education (CoEPEs) Interactive Modules	https://painconsortium.nih.gov/Funding_Research/CoEPEs
Buprenorphine Training for Physicians	https://www.samhsa.gov/medication-assisted-treatment/training-resources/buprenorphine-physician-training
The National Quality Partners Playbook™: Shared Decision Making	http://www.qualityforum.org/nqf_store.aspx
Core Competencies for Pain Management: Results of an Interprofessional Consensus Summit	https://www.ncbi.nlm.nih.gov/pubmed/23577878
Core Competencies for Interprofessional Collaborative Practice	https://aamc-meded.global.ssl.fastly.net/production/media/filer_public/70/9f/709fedd7-3c53-492c-b9f0-b13715d11cb6/core_competencies_for_collaborative_practice.pdf
Chart of Evidence-Based Screening Tools for Adults and Adolescents	https://www.drugabuse.gov/nidamed-medical-health-professionals/tool-resources-your-practice/screening-assessment-drug-testing-resources/chart-evidence-based-screening-tools-adults
CDC's Calculating Total Daily Dose of Opioids for Safer Dosage	https://www.cdc.gov/drugoverdose/pdf/calculating_total_daily_dose-a.pdf

Resource	Address
Web-based Opioid Dose Calculator	http://www.agencymeddirectors.wa.gov/Calculator/DoseCalculator.htm
Prescribing Policies: States Confront Opioid Overdose Epidemic	http://www.ncsl.org/Portals/1/Documents/Health/prescribingOpioids_final01-web.pdf
Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use—United States, 2006-2015.	https://www.cdc.gov/mmwr/volumes/66/wr/mm6610a1.htm
Substance Abuse and Mental Health Services Administration (SAMHSA) Opioid Overdose Prevention Toolkit	https://store.samhsa.gov/shin/content/SMA16-4742/SMA16-4742.pdf
Facing Addiction in America, The Surgeon General's Report on Alcohol, Drugs, and Health	https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf
The Role of Recovery Support Services in Recovery-Oriented Systems of Care	https://store.samhsa.gov/shin/content/SMA08-4315/SMA08-4315.pdf
The Unnecessary Stigma, Guilt, and Shame of Addiction	https://www.drugrehab.com/addiction/stigma/

Fundamental 4: Patient and Family Caregiver Education and Engagement

Resource	Address
CDC Helpful Materials for Patients	https://www.cdc.gov/drugoverdose/patients/materials.html
The American Academy of Pain Medicine's Patient Education and Resources	http://www.painmed.org/patientcenter/patient-education/
CDC Rx Awareness Campaign	https://www.cdc.gov/rxawareness/
Advocates for Opioid Recovery	https://www.opioidrecovery.org/
Sample Patient Agreement Forms	https://www.drugabuse.gov/sites/default/files/files/SamplePatientAgreementForms.pdf
Patient Counseling Document on Extended-Release/Long-Acting Opioid Analgesics	http://www.er-la-opioidrems.com/IwgUI/rems/pdf/patient_counseling_document.pdf
Opioid Use, Satisfaction, and Pain Intensity After Orthopedic Surgery	https://www.ncbi.nlm.nih.gov/pubmed/25624183
Disposal of Unused Medicines: What You Should Know	https://www.fda.gov/drugs/resourcesforyou/consumers/buyingusingmedicinesafely/ensuringsafeuseofmedicine/safedisposalofmedicines/ucm186187.htm
Controlled Substance Public Disposal Locations	https://apps.deadiversion.usdoj.gov/pubdispsearch/spring/main?execution=e1s1
Lock Your Meds® Pledge	http://www.lockyourmeds.org/spread-the-word/take-the-pledge-lock-your-meds/
Substance Abuse and Mental Health Services Administration (SAMHSA) Opioid Overdose Prevention Toolkit	https://store.samhsa.gov/shin/content/SMA16-4742/SMA16-4742.pdf
Opioid Addiction Treatment: A Guide for Patients, Families, and Friends	http://eguideline.guidelinecentral.com/i/706017-asam-opioid-patient-piece/0?

Fundamental 5: Tracking, Monitoring, and Reporting

Resource	Address
To Address the Opioid Crisis, Build a Comprehensive National Framework	https://www.healthaffairs.org/do/10.1377/hblog20171215.681297/full/
Addressing the Opioid Epidemic Through Measurement and Transparency	http://blog.ncqa.org/addressing-the-opioid-epidemic-through-measurement-and-transparency/
Quality Improvement Initiative to Decrease Variability of Emergency Physician Opioid Analgesic Prescribing	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4899055/
Maine Quality Counts Chronic Pain Collaborative: Suggested Metrics for Chronic Pain and Opioid Management	http://mainequalitycounts.org/wp-content/uploads/2018/01/Suggested-Metrics-for-Chronic-Pain-and-Opioid-Management.pdf
Dr. Robert BREE Collaborative Opioid Prescribing Metrics	http://www.breecollaborative.org/wp-content/uploads/Bree-Opioid-Prescribing-Metrics-Final-2017.pdf
Patient-Reported Outcomes Measurement Information System (PROMIS)® tools	http://www.healthmeasures.net/index.php?option=com_content&view=category&layout=blog&id=147&Itemid=806
Health IT Playbook, Section 4: Opioid Epidemic and Health IT	https://www.healthit.gov/playbook/opioid-epidemic-and-health-it/
Prescription Drug Monitoring Program Training and Technical Assistance Center Notes from the Field. Enabling and Requiring Pharmacist Use of PDMP Data: Kroger's Access in Workflow Solution	http://www.pdmpassist.org/pdf/Resources/NFF_Kroger_20161208.pdf

Fundamental 6: Accountability

Resource	Address
The Joint Commission R3 Report on Pain Assessment and Management Standards for Hospitals	https://www.jointcommission.org/r3_issue_11/
CDC Guideline for Prescribing Opioids for Chronic Pain	https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
Shared Accountability	https://intermountainhealthcare.org/~/media/Files/Trustee Resource Center/Topical Information PDFs/sa-overview.pdf
Safer and More Appropriate Opioid Prescribing: A Large Healthcare System's Comprehensive Approach	http://onlinelibrary.wiley.com/doi/10.1111/jep.12756/full
A Multifaceted Program Featuring Guideline, Training, and Incentives Reduces Prescribing of High-Dose Opioid Therapy in Patients With Chronic Pain	https://innovations.ahrq.gov/profiles/multifaceted-program-featuring-guideline-training-and-incentives-reduces-prescribing-high
Addressing the Opioid Epidemic Through Measurement and Transparency	http://blog.ncqa.org/addressing-the-opioid-epidemic-through-measurement-and-transparency/
Fighting Opioid Addiction With Data	http://www.oliverwyman.com/our-expertise/insights/2017/nov/health-innovation-journal/the-new-healthcare-enterprise/fighting-opioid-addiction-with-data.html
ASHP Guidelines on Preventing Diversion of Control Substances	http://www.ajhp.org/content/early/2016/12/22/ajhp160919?sso-checked=true
Disposal of Unused Medicines: What You Should Know	https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm

Fundamental 7: Community Collaboration

Resource	Address
Emergency Department Warm Handoff: For Opioid Use Disorder	http://www.health.pa.gov/My Health/Diseases and Conditions/M-P/opioids/Documents/WarmHandoff Schematic revised 8-17-2017 red 2.pdf
Only One in Twenty Justice-Referred Adults in Specialty Treatment for Opioid Use Receive Methadone or Buprenorphine	https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.0890?journalCode=hlthaff
Project Lazarus	https://www.projectlazarus.org/home
Families Against Narcotics	http://www.familiesagainstnarcotics.org/our-story
CDC Rx Awareness Campaign	https://www.cdc.gov/rxawareness/
What's Up With Opioids	http://whatsupwithopioids.org/
The Steve Rummler HOPE Network	http://steverummlerhopenetwork.org/
Substance Abuse and Mental Health Services Administration (SAMHSA) Opioid Overdose Prevention Toolkit	https://store.samhsa.gov/shin/content/SMA16-4742/SMA16-4742.pdf
Opioid Treatment Program Directory	http://dpt2.samhsa.gov/treatment/directory.aspx
NARCAN Now Mobile Phone Application	https://itunes.apple.com/us/app/narcan-now/id1076163137?ls=1&mt=8%29
MATx by SAMHSA Mobile Phone Application	https://itunes.apple.com/us/app/matx-by-samhsa/id1162219879?mt=8&WT.ac=PEPAdiTunes20161018Branded

Additional Resources

Resource	Address
Academic detailing	https://www.ahrq.gov/professionals/prevention-chronic-care/improve/system/pfhandbook/mod10.html
NQF's Quality Positioning System	https://www.qualityforum.org/QPS/
National Quality Measures Clearinghouse	https://www.qualitymeasures.ahrq.gov/
U.S Department of Health and Human Services Measures Inventory	https://www.qualitymeasures.ahrq.gov/hhs/index.aspx
Accredited Addiction Medicine Fellowships	https://www.addictionmedicinefoundation.org/wp-content/uploads/2017/09/Directory-of-TAMF-Accredited-Fellowships-2017-18-9-18-17.pdf
Conjoint Committee on Continuing Education (CCCE)	https://cmss.org/component-groups/convened-groups/

NQF STAFF

Kathleen Giblin, Senior Vice President

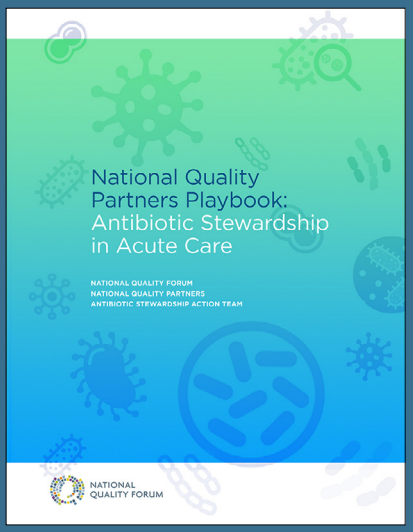
Wendy Prins, Senior Advisor

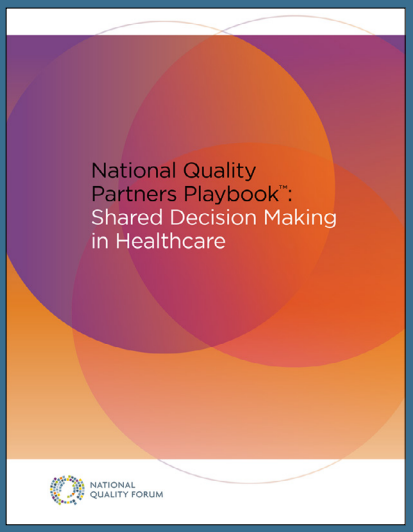
Meredith Gerland, Project Manager

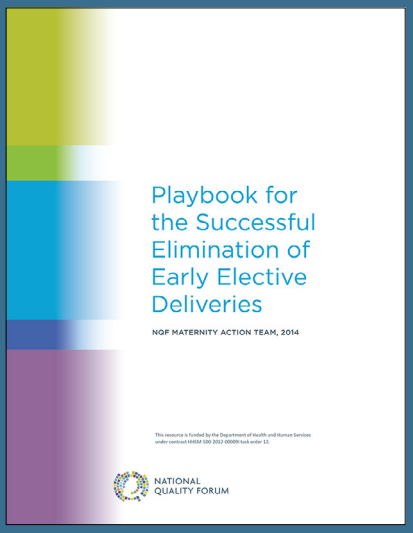
Danitza Valdivia, Administrative Manager

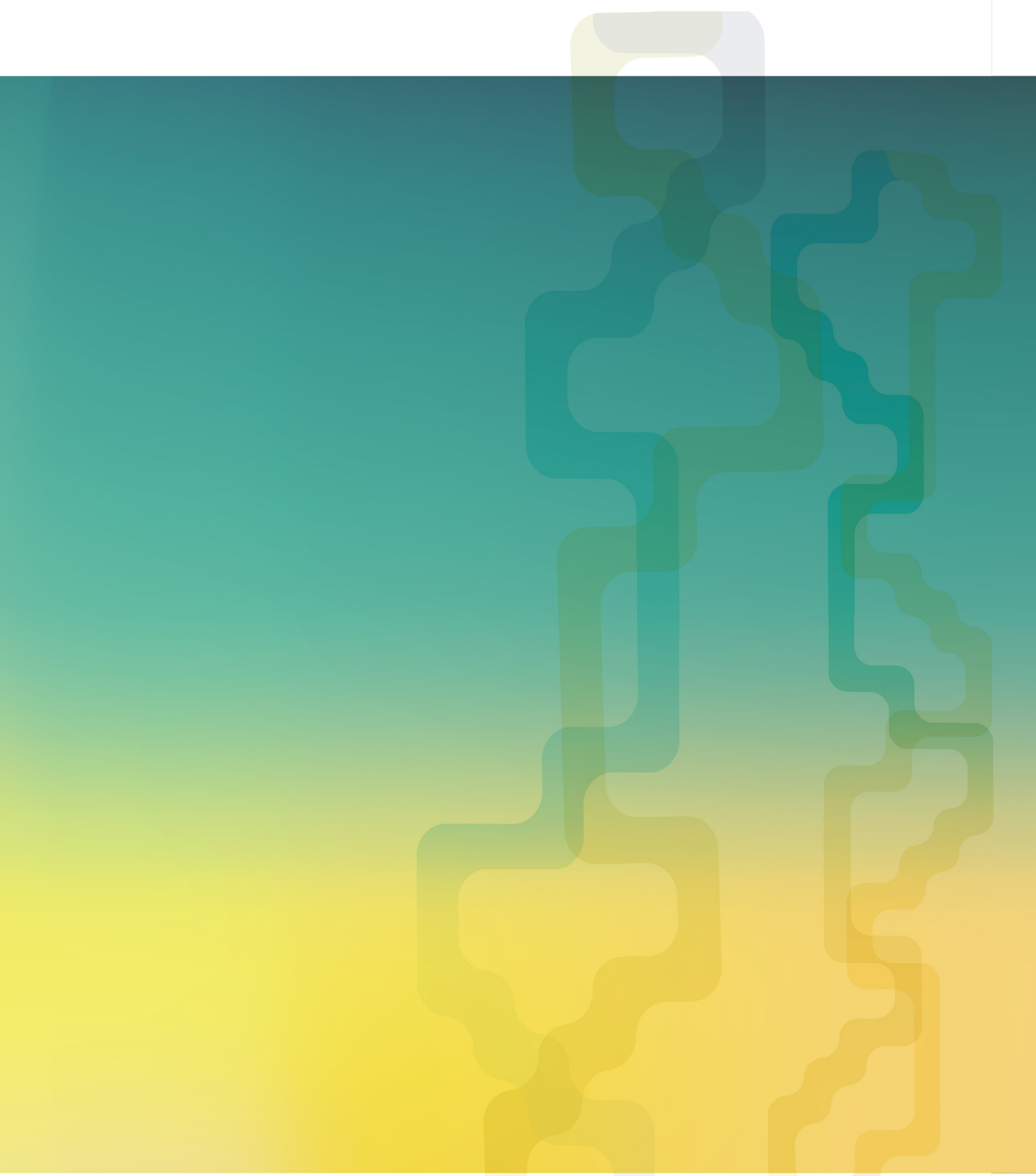
ISBN 978-1-68248-079-3

Other Available NQP Playbooks™









NATIONAL QUALITY FORUM
1030 15TH STREET, NW, SUITE 800
WASHINGTON, DC 20005
www.qualityforum.org