

# Developing and Implementing EHR-based Quality Improvement Opioid Measures

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No conflicts of interest to report.

Disclaimer: Please note that the findings and conclusions in this presentation are those of the presenters and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

# Topics

- Background—CDC Prescribing Guideline
- Development of QI Measures
- Implementation Guide
- Opioid QI Collaborative
- Preliminary Implementation Results
- Lessons Learned
- Resources



## CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016

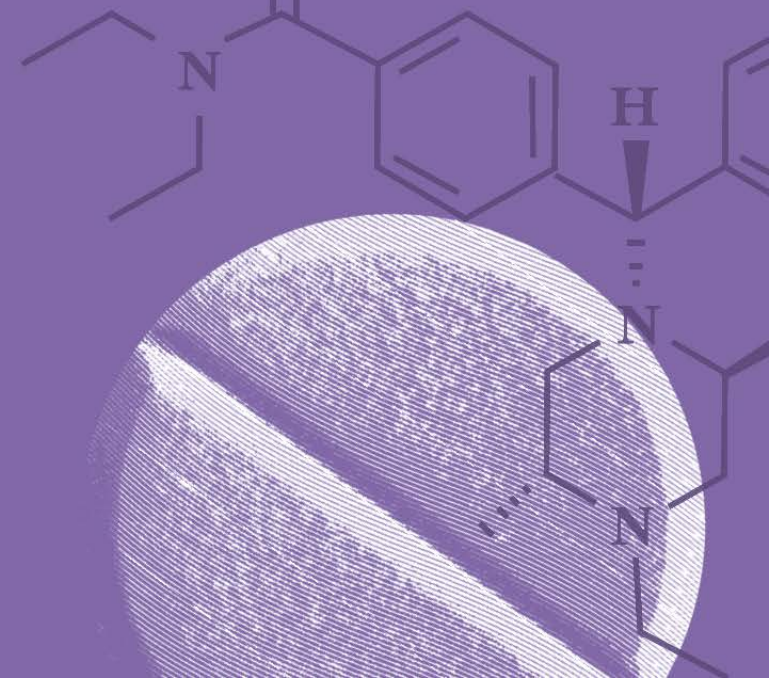


Continuing Education Examination available at <http://www.cdc.gov/mmwr/cme/conted.html>.



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

- Patients 18 years or older with chronic pain
- Outpatient settings
- Outside of active cancer, palliative, and end of life care
- Primary care providers



# Organization of Guideline Recommendations

**12 recommendations grouped into 3  
conceptual areas:**

**Determining when to  
initiate or continue  
opioids for chronic pain**



**Opioid selection, dosage,  
duration, follow-up, and  
discontinuation**



**Assessing risk and  
addressing harms of  
opioid use**



# Dissemination & Implementation of the CDC Prescribing Guideline

Translation &  
Communication

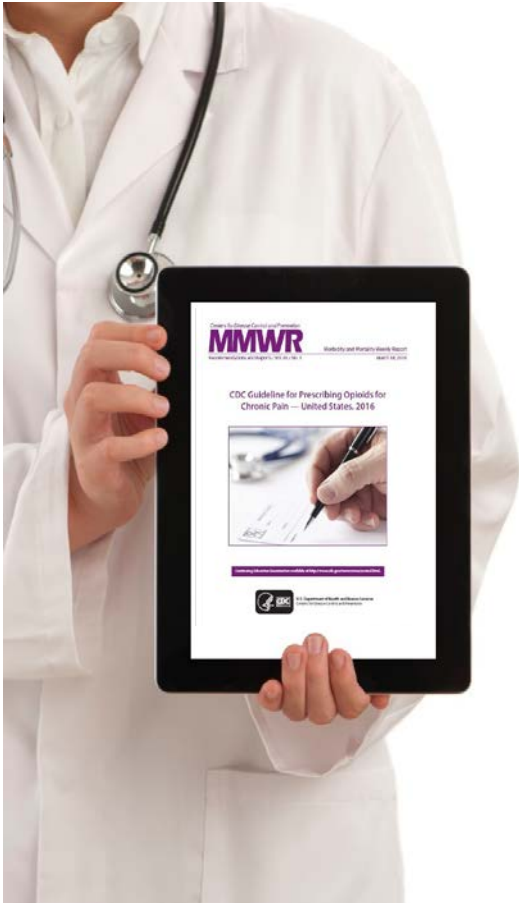
Education &  
Training



Health System  
Interventions

Insurer  
Interventions

# Quality Improvement Process



Aim: To support implementation of the ***CDC Guideline for Prescribing Opioids for Chronic Pain*** into health care systems and support practice improvement monitoring

- Develop clinical quality improvement (QI) opioid measures
- Develop an implementation guide for the recommendations and measures to be used by health systems/practices
- Support an Opioid QI Collaborative of large health care systems

# Background: QI Measures

- Support safe and effective opioid prescribing and pain management and treatment
- For use by health systems or practices
- Electronic health record (EHR) data, chart review or other practice-based data
- For QI and monitoring implementation of the CDC Prescribing Guideline
- For QI purposes, not performance measurement
- Voluntary



# Approach to Measure Development

## Initial Development

- Starter set of measures from CDC
- Searched literature
- Twenty-three (23) Initial QI Measures to address the 12 guideline recommendations

## Input from Experts/Stakeholders (n=9)

- Identified from the literature, previous interviews, and guideline recommendations
- Expertise in opioid prescribing, use of QI measures, IT and EHRs, research, patient perspective
- Provided individual input



Specific Steps in Process  
(next slide)

# Stakeholder Input: Developing QI Measures

## Step 1: Measure Rating Survey

- 5-point Likert agreement scale for each measure criterion
- Criteria: importance, acceptable, face validity, timeliness, feasibility, usability, & overall
- Open-ended questions on challenges, better measure, other feedback
- Ranking of measures by 'need' and then of those 'easiest to produce'



## Step 2: Stakeholder Interviews

- Conducted semi-structured interview with each key stakeholder
- Reviewed survey ratings and feedback
- Learned about their opioid, QI, and measure experiences

## Step 3: Stakeholder Group Call

- Discussed individual stakeholder input on QI measures
- Discussed potential new measures

# Developing Clinical Quality Improvement Measures Aligned With the CDC Guideline for Prescribing Opioids for Chronic Pain: An Important Strategy to Support Safer Prescribing in Primary Care

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# QI Measures

16 QI measures mapped to the 12 Guideline recommendation statements

Can be tailored to individual practice policies on opioid prescribing and pain management, or reflect state laws or regulations

Two categories:

- New opioid prescription measures
- Long-term opioid therapy (LTOT) measures

# New Opioid Prescription

QI MEASURE DESCRIPTION	CDC REC. NUMBER
1. The percentage of patients with a new opioid prescription for an immediate-release opioid.	4
2. The percentage of patients with a new opioid prescription for chronic pain with documentation that a PDMP was checked prior to prescribing.	9
3. The percentage of patients with a new opioid prescription for chronic pain with documentation that a urine drug test was performed prior to prescribing.	10
4. The percentage of patients with a follow-up visit within 4 weeks of starting an opioid for chronic pain.	7
5. The percentage of patients with a new opioid prescription for acute pain for a three days' supply or less	6

# Long-Term Opioid Therapy

QI MEASURE DESCRIPTION	CDC REC. NUMBER
6. The percentage of patients on long-term opioid therapy who are taking 50 MMEs or more per day.	5
7. The percentage of patients on long-term opioid therapy who are taking 90 MMEs or more per day.	5
8. The percentage of patients on long-term opioid therapy who received a prescription for a benzodiazepine.	11
9. The percentage of patients on long-term opioid therapy who had a follow-up visit at least quarterly.	7
10. The percentage of patients on long-term opioid therapy who had at least quarterly pain and functional assessments.	2
11. The percentage of patients on long-term opioid therapy who had documentation that a PDMP was checked at least quarterly.	9
12. The percentage of patients on long-term opioid therapy the clinician counseled on the risks and benefits of opioids at least annually.	3
13. The percentage of patients on long-term opioid therapy with documentation that a urine drug test was performed at least annually.	10
14. The percentage of patients with chronic pain who had at least one referral or visit to nonpharmacologic therapy as a treatment for pain.	1
15. The percentage of patients on long-term opioid therapy who were counseled on the purpose and use of naloxone, and either prescribed or referred to obtain naloxone.	8
16. The percentage of patients with an opioid use disorder (OUD) who were referred to or prescribed medication assisted treatment.	12

# Quality Improvement Process

Develop clinical QI opioid measures



Develop an implementation guide for the recommendations and measures to be used by health systems/practices

Support an Opioid QI Collaborative of large health care systems

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WITH  
CONFIDENCE.**

GUIDELINE FOR PRESCRIBING  
OPIOIDS FOR CHRONIC PAIN

[www.cdc.gov](http://www.cdc.gov)



Quality Improvement  
and Care Coordination:

# Implementing the CDC Guideline for Prescribing Opioids for Chronic Pain



Centers for Disease  
Control and Prevention  
National Center for Injury  
Prevention and Control

- ✓ Encourage careful and selective use of opioid therapy and to facilitate implementation of the *CDC Guideline for Prescribing Opioids for Chronic Pain*
- ✓ Help health systems and primary care providers integrate quality improvement (QI) measures into their clinical practice
- ✓ Practice-level strategies to improve the management and coordination of long-term opioid therapy
- ✓ Contains examples of existing materials, tools, and resources



# Operationalize QI Measures (Appendix B)

- Measure description
- Numerator
- Denominator
- Measurement period
- Patient exclusions
- Data source
- Guidance for producing the measure
- Potential challenges

# QI Effort in a Health System or Practice

**Step 1** Obtain Leadership Support and Identify a Champion(s)

**Step 2** Assess Current Approach to Opioids and Identify Areas for Improvement

**Step 3** Select and Prioritize Guideline Recommendations to Implement

**Step 4** Define System Goals

**Step 5** Develop a Plan, Implement, and Monitor Progress

# Practice-Level Strategies for Care Coordination

- ✓ Use an interdisciplinary team-based approach
- ✓ Establish approaches/policies to promote long-term opioid therapy management and coordination
- ✓ Use EHR data to develop patient registries and track QI measures



# Quality Improvement Process

Develop clinical QI opioid measures

Develop an implementation guide for the recommendations and measures to be used by health systems/practices



Support an Opioid QI Collaborative of large health care systems

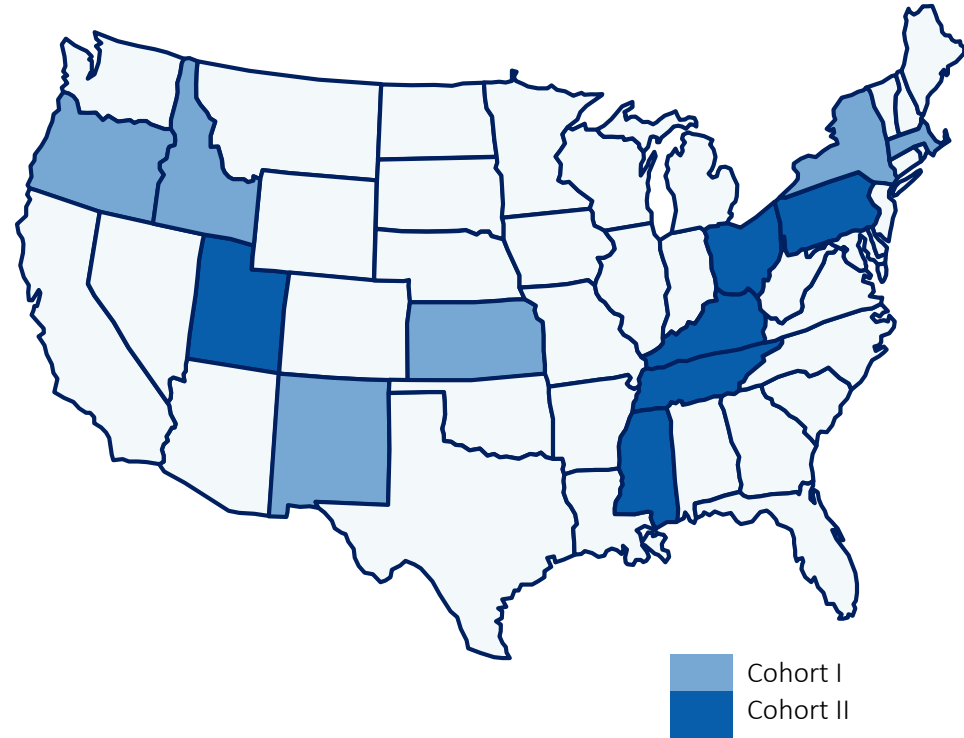
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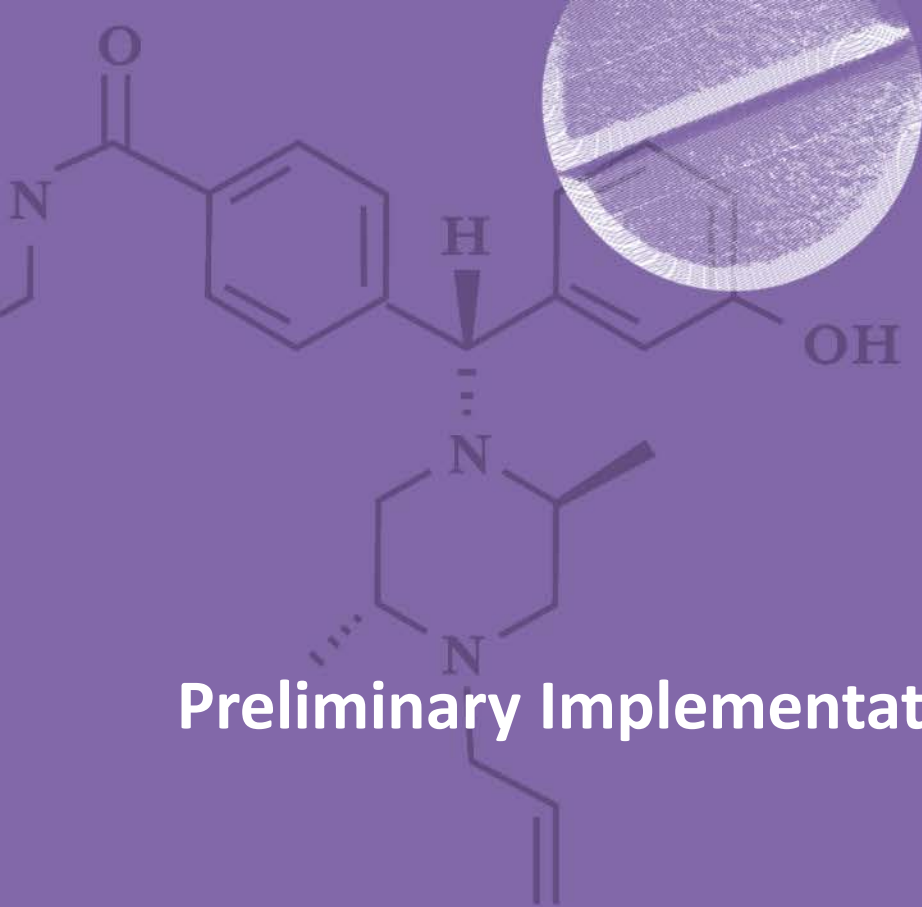
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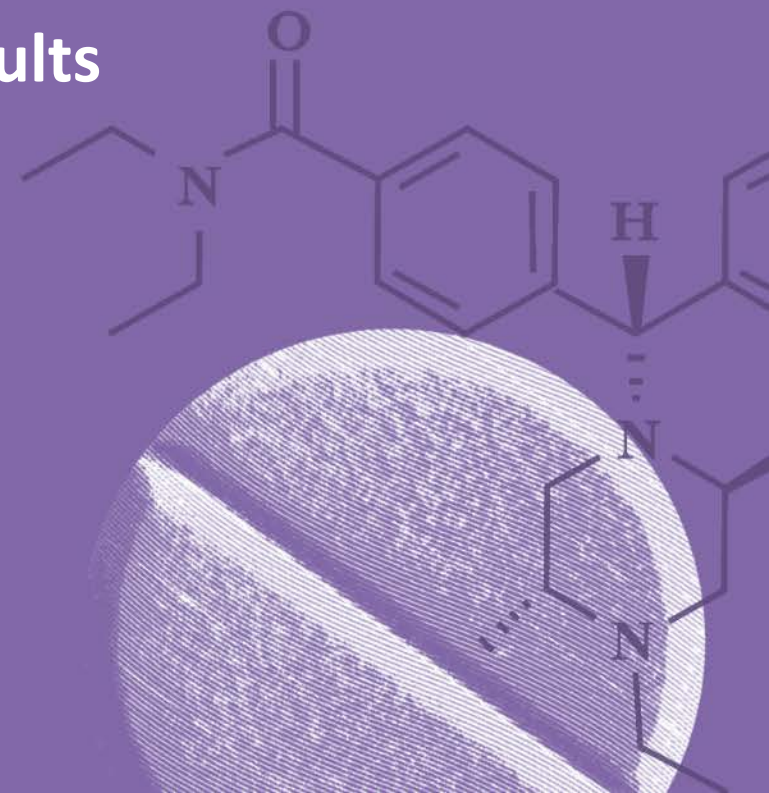
# CDC Opioid QI Collaborative

- Two cohorts:
  - Cohort 1: 2018-2020 (5 systems)
  - Cohort 2: 2019-2020 (6 systems)
- Across cohorts:
  - 12 states
  - Over 120 primary care practices
  - Includes urban, rural and frontier; tribal; private practices and academically-affiliated practices
- Aim
  - Implement QI effort for self-selected CDC Prescribing Guideline recs
  - Operationalize  $\geq 5$  QI measures; report baseline and quarterly (from data available in EHR)
  - Participate in Collaborative





## Preliminary Implementation Results

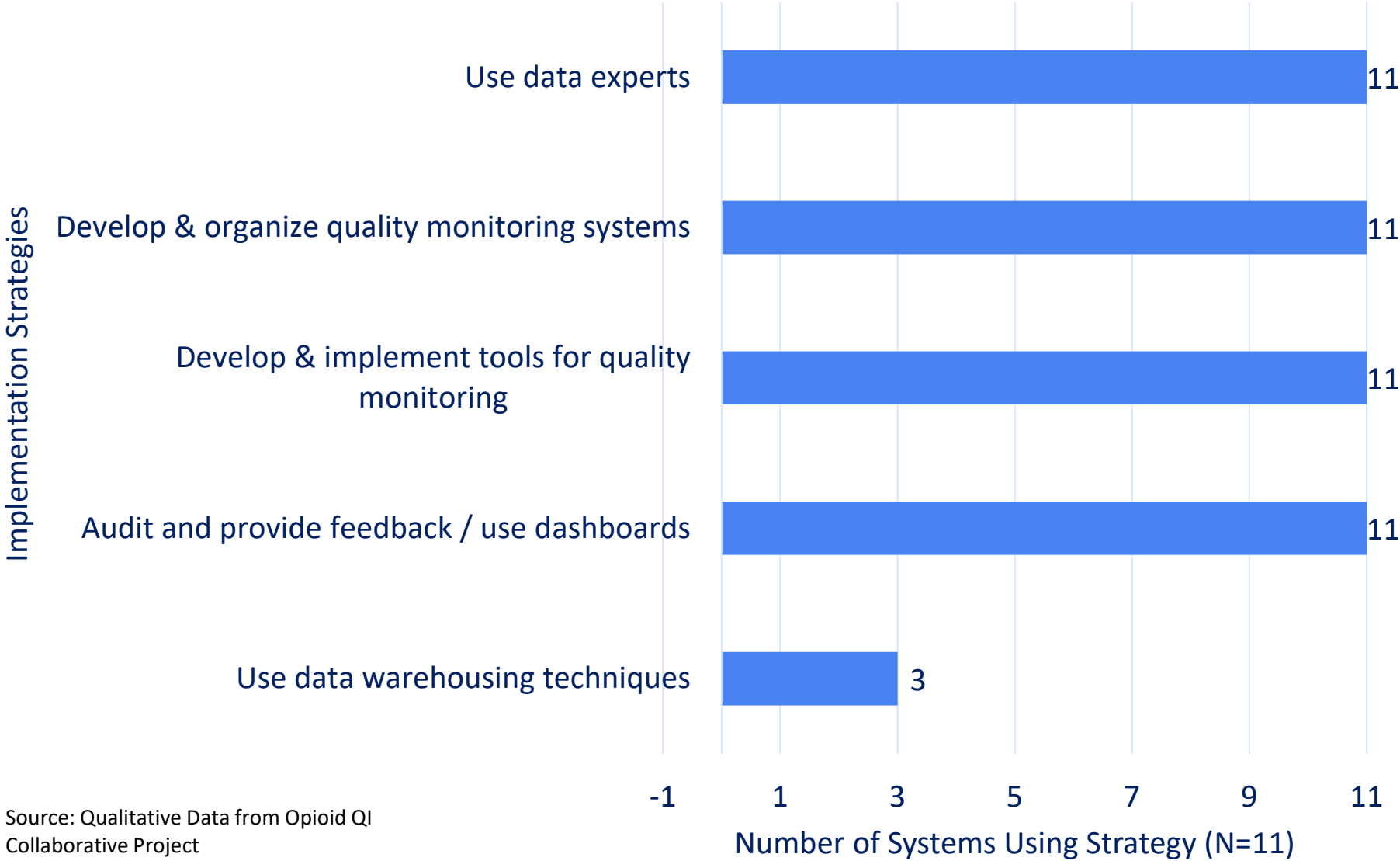


# Establish QI team, goals, and plan; engage clinician and stakeholders



Source: Qualitative Data from Opioid QI Collaborative Project

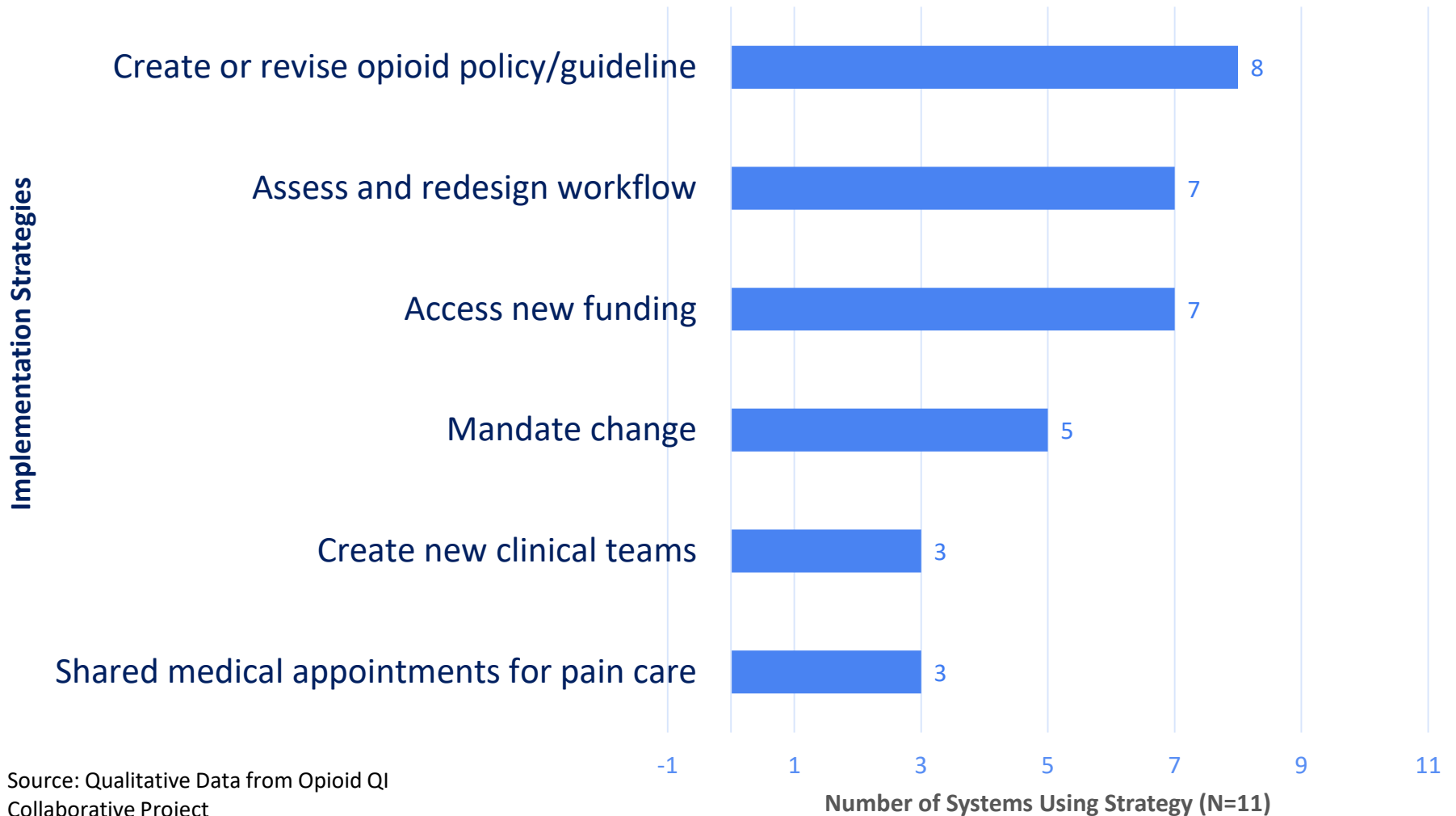
# Build measures and dashboards to support QI



Source: Qualitative Data from Opioid QI Collaborative Project

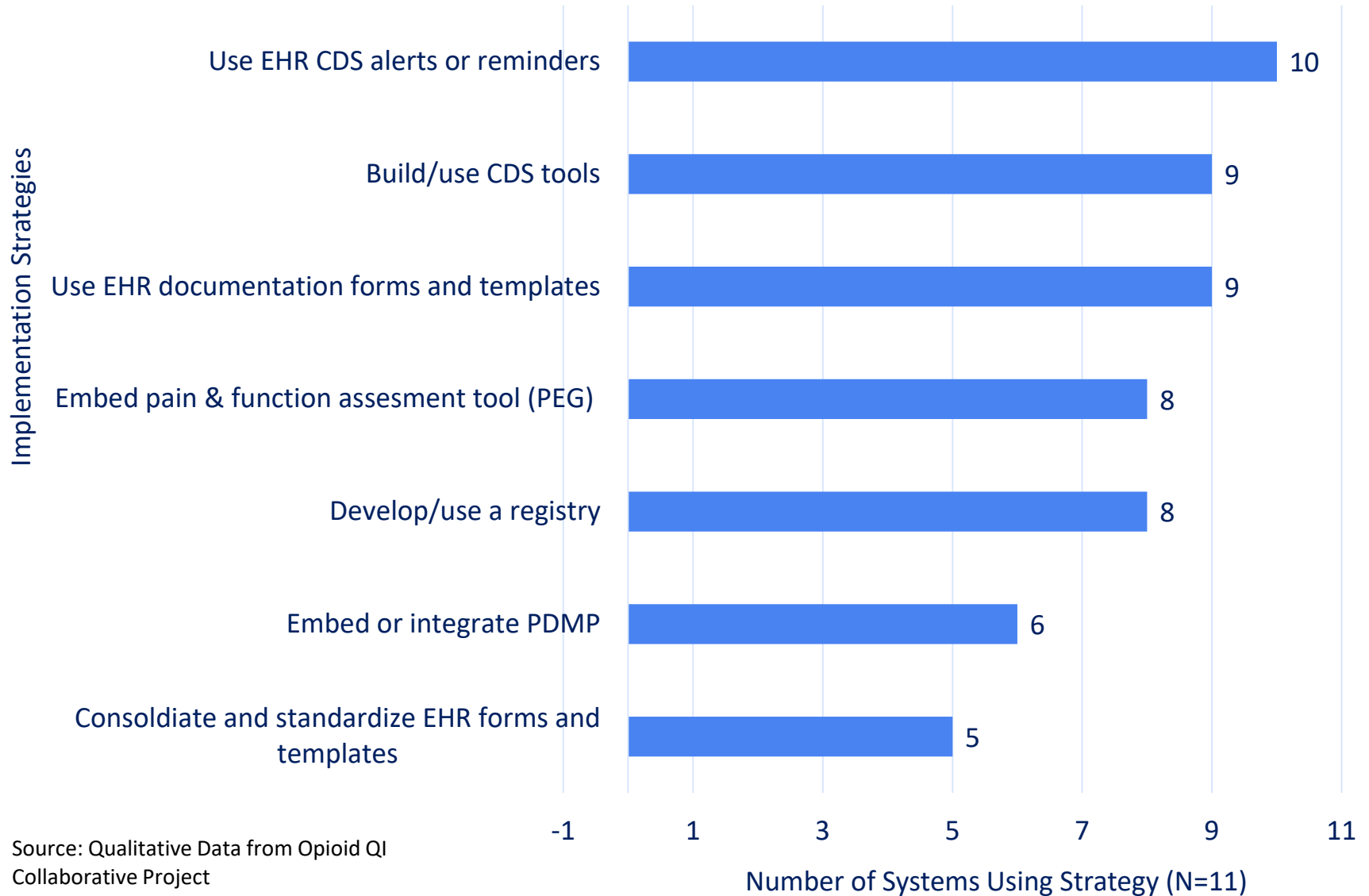


# Make System-Level Changes

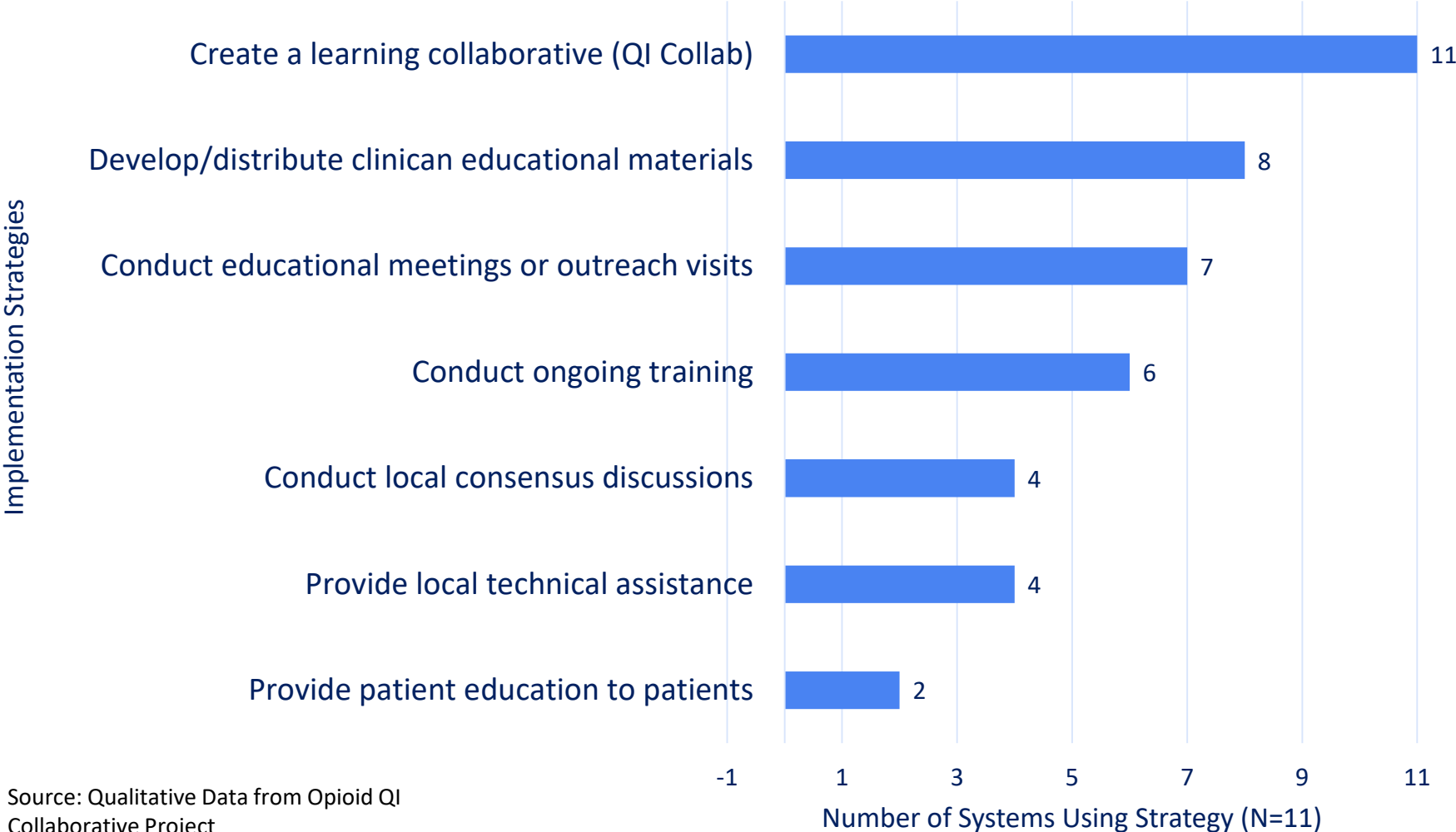


Source: Qualitative Data from Opioid QI Collaborative Project

# Leverage EHRs to Support Care and Decision-Making



# Train, educate and support clinicians, patients and other stakeholders



Source: Qualitative Data from Opioid QI Collaborative Project

# Lessons Learned from the Field

## Laying the foundation and groundwork

- If system already has QI program, emphasize building upon those efforts
- Buy in from leadership
- Commitment from IT
- Address concerns and develop solutions

## Data Challenges

- Not captured as structured fields
- Processes of care, found in notes
- Integrated in EHRs but may not be easily captured for analysis

## Support

- Share results, create dashboard
- Engage entire practice team
- Meets unique needs of system/organization
- Training and TA should be consistent, ongoing, nimble, and evolving

# CDC Resources

CDC Guideline for Prescribing Opioids for Chronic Pain, March 2016

[www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm](http://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm)

CDC Opioid Overdose Prevention Website

[www.cdc.gov/drugoverdose/prescribing/guideline.html](http://www.cdc.gov/drugoverdose/prescribing/guideline.html)

Clinical Online Training Series for Healthcare Providers

[www.cdc.gov/drugoverdose/training/index.html](http://www.cdc.gov/drugoverdose/training/index.html)

Clinical Outreach and Communication Activity (COCA) Calls

[emergency.cdc.gov/coca/calls/2016/index.asp](http://emergency.cdc.gov/coca/calls/2016/index.asp)

FHIR clinical decision support tools for EHRs

<http://build.fhir.org/ig/cqframework/opioid-cds/>

QI Resources

[www.cdc.gov/drugoverdose/prescribing/qi-cc.html](http://www.cdc.gov/drugoverdose/prescribing/qi-cc.html)

Resources for patients

[www.cdc.gov/drugoverdose/patients/index.html](http://www.cdc.gov/drugoverdose/patients/index.html)

Resources for providers

[www.cdc.gov/drugoverdose/providers/index.html](http://www.cdc.gov/drugoverdose/providers/index.html)

Rx Awareness Campaign

<https://www.cdc.gov/rxawareness/index.html>

**GUIDELINE FOR  
PRESCRIBING  
OPIOIDS FOR  
CHRONIC PAIN**

[www.cdc.gov](http://www.cdc.gov)

# Project Team

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