March 2020

The Care Redesign Series:
Tracking Maturity in Chronic Pain Management

TheAcademy

Introduction

The Academy's previous report, **Chronic Pain Management at America's Leading Health Systems**, examined health systems' priorities, strategies, and challenges around chronic pain management (CPM) and identified that most health systems have achieved intermediate maturity in their CPM strategy.[1] However, in response to the opioid crisis and an elevated focus on population health, Leading Health Systems (LHS) are increasingly prioritizing building out a robust CPM strategy, and are particularly focused on developing the organizational structures and clinical processes needed to drive CPM care delivery.

In October-November 2019, The Academy conducted a quantitative survey of senior health system executives to assess health systems' maturity around CPM. This study integrates findings from The Academy's research conducted in 2011 and 2018 to assess the rate of change among health systems' CPM programs.

The Academy's 2019 tracking survey aims to identify how health systems have evolved in their approach to CPM care delivery over time. In particular, The Academy is tracking health system maturity metrics including priority level, implementation of guidelines & protocols, use of data & analytics, leadership structure, care coordination, and education.

Key Characteristics of a Mature Chronic Pain Program

Priority Level: CPM is identified as a top priority among the health system C-suite

Guidelines & Protocols: CPM protocols are implemented across conditions and care settings with robust integration into the EHR

Data & Analytics: Data and analytics and meaningful chronic pain performance metrics are leveraged to assess effectiveness of programs

Leadership Structure: Presence of dedicated pain management leadership and resources at a health system level

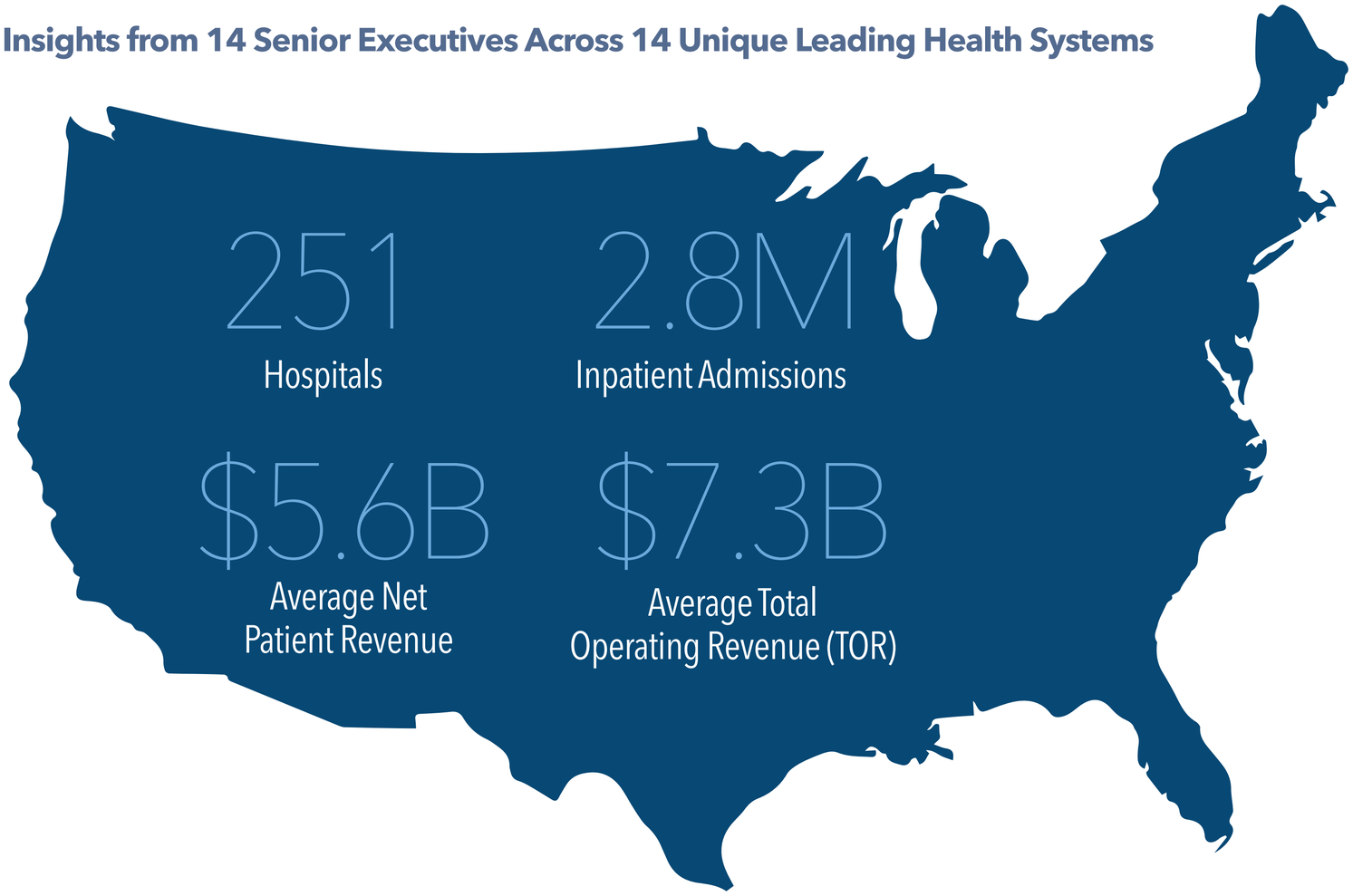
Care Coordination: Comprehensive care coordination and discharge planning programs for chronic pain patients across care settings

Education: Robust provider, patient, and family educational programs focused on expectation setting and adherence to clinical protocols

[1] Chronic Pain Management at America's Leading Health Systems. The Academy. 2019.

Perspectives Represent Significant Share of US Healthcare Market

Insights from 14 Senior Executives Across 14 Unique Leading Health Systems



Health System Size (TOR)

Small	Medium	Large
<$2B – **29%**	$2–5B – **21%**	>$5B – **50%**

Respondent Roles

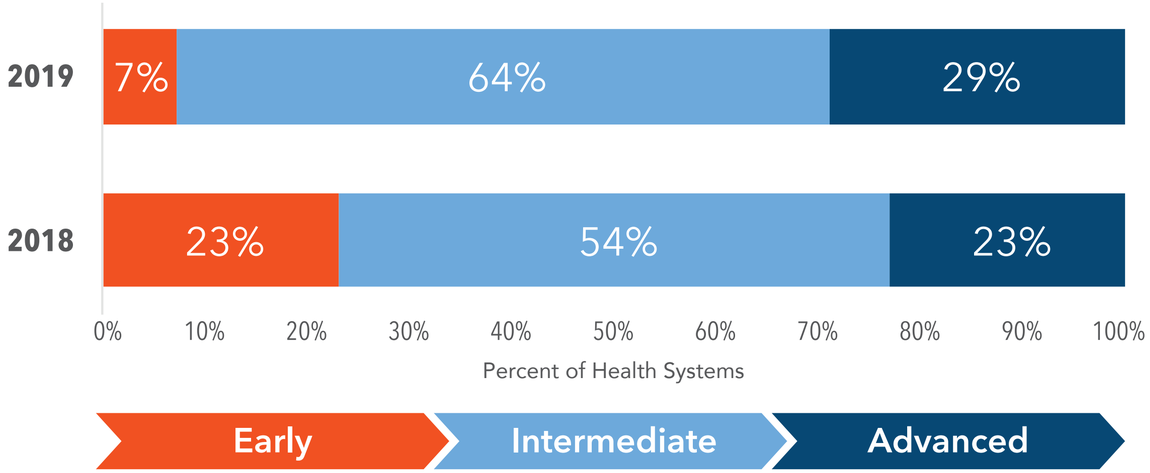
- Chief Medical Officer
- Chief Executive Officer, Medical Group
- Chief Medical Officer, Medical Group
- Chief Physician Executive
- Chief Nurse Executive
- Executive Vice President
- Senior Medical Director, Pain Management Services

Note: All data and findings included in this report are reflective of survey responses from executives at Leading Health Systems. The sample size remains consistent throughout the report, in which quantitative survey data (N=14, 2019; N=24, 2018; N=51, 2011) is used to provide health system perspective on chronic pain. For additional methodology details, see page 15 at the end of this report.

Key Findings

LHS Make Progress in Advancing CPM Maturity

Overall Health System CPM Maturity, 2018 and 2019



1 CPM Maturity Improving Among LHS

Health systems have made progress in advancing their maturity level in CPM. In 2019, 29% of LHS achieved an advanced CPM maturity level, 64% achieved an intermediate maturity, and only 7% remain in early stage maturity. This stands in contrast to 2018, when 23% were at advanced maturity, 54% intermediate maturity, and 23% systems remained in early stage maturity.

2 Maturity Varies Within Key Characteristics of CPM Programs

Within the various components of CPM maturity, LHS are most advanced in the prioritization and education around CPM, and weakest within data & analytics and care coordination. The most advanced health systems were generally mature across all six key CPM characteristics.

CPM Characteristic	Maturity Score *(On a scale of 1 – 5, with 5 being most mature)*
Priority Level	3.7
Education	3.6
Leadership Structure	3.5
Guidelines & Protocols	3.1
Care Coordination	3.0
Data & Analytics	2.2

Note: Maturity calculations are based on health systems' responses to survey questions corresponding to each CPM characteristic. Responses were coded, averaged, and normalized to a 1-5 scale.

Chronic Pain Priority Level Continues to Increase among C-Suite

The priority level of CPM among C-suite executives has increased considerably since 2011, when only 4% of executives ranked CPM in the top 10% of all priorities. In 2019, 14% of executives ranked CPM in the top 10% of priorities.

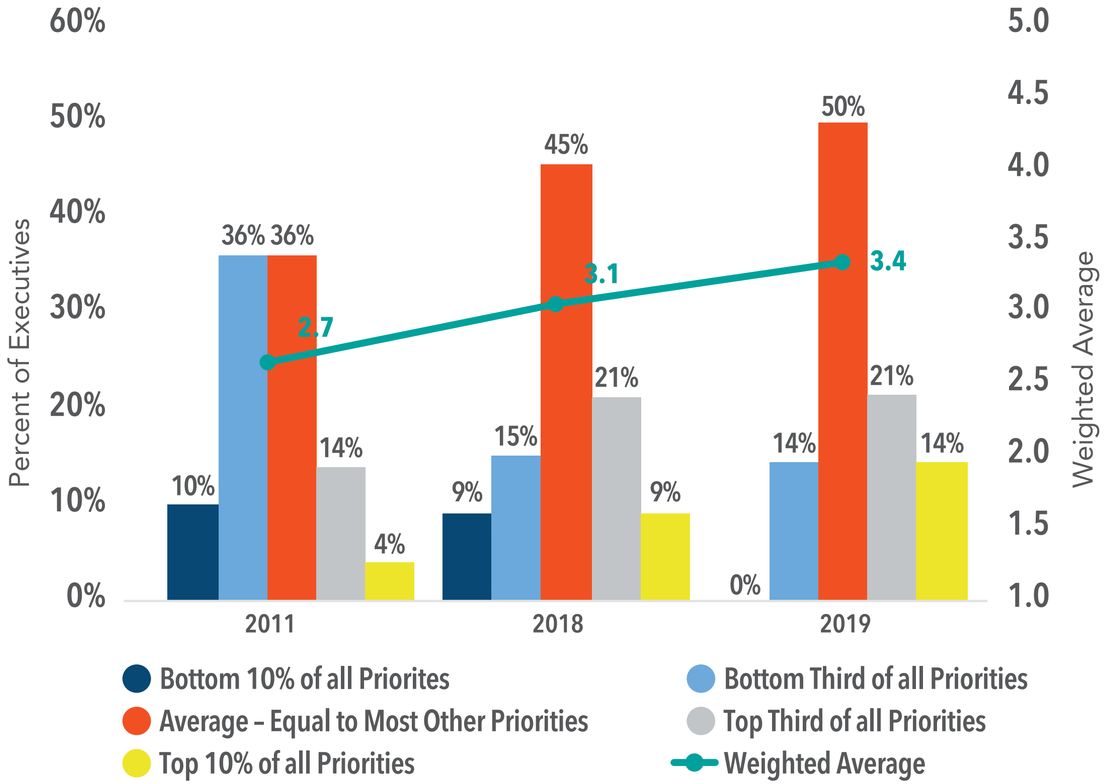
Notably, the proportion of health systems that rank CPM in the bottom third of their priorities or lower dropped 32 percentage points, from 46% in 2011 to 14% in 2019.

As health systems mature in their pain management strategies, more executives are acknowledging the importance of prioritizing a CPM program. This shift in C-suite priority level has significant implications for health systems' ability to resource (e.g., through leadership, funding, appropriate staffing levels) and make progress on chronic pain initiatives.

"The opioid task force is a system-level C-suite initiative. All of our activities are supported and overseen by our C-suite and CEO. The C-suite is expecting us to come up with the strategies to address these issues."

– Director of Chronic Pain Management

Priority Level of CPM Among LHS C-Suite Executives



Note: Weighted average calculated by coding "Bottom 10% of all priorities" to "Top 10% of priorities", on a 1–5 scale, 1 being the lowest priority and 5 being the highest priority and calculating the average of all responses across each year.

Investment in CPM Aligned with Executive Priority Level

C-Suite Priority Drives Level of Investment

Health systems whose C-suite executives ranked CPM in the top third of all priorities saw their CPM investment increase somewhat (67%) or significantly (33%) in the last year. Alternatively, 100% of health systems whose C-suite executives ranked CPM in the bottom third of all priorities saw their CPM investment stay about the same.

The correlation in priority level and level of investment underscores the importance of having C-suite buy-in to health systems' CPM initiatives, particularly as systems strive to advance maturity.

Pain Management Leaders Increasingly C-Suite or Executive Level

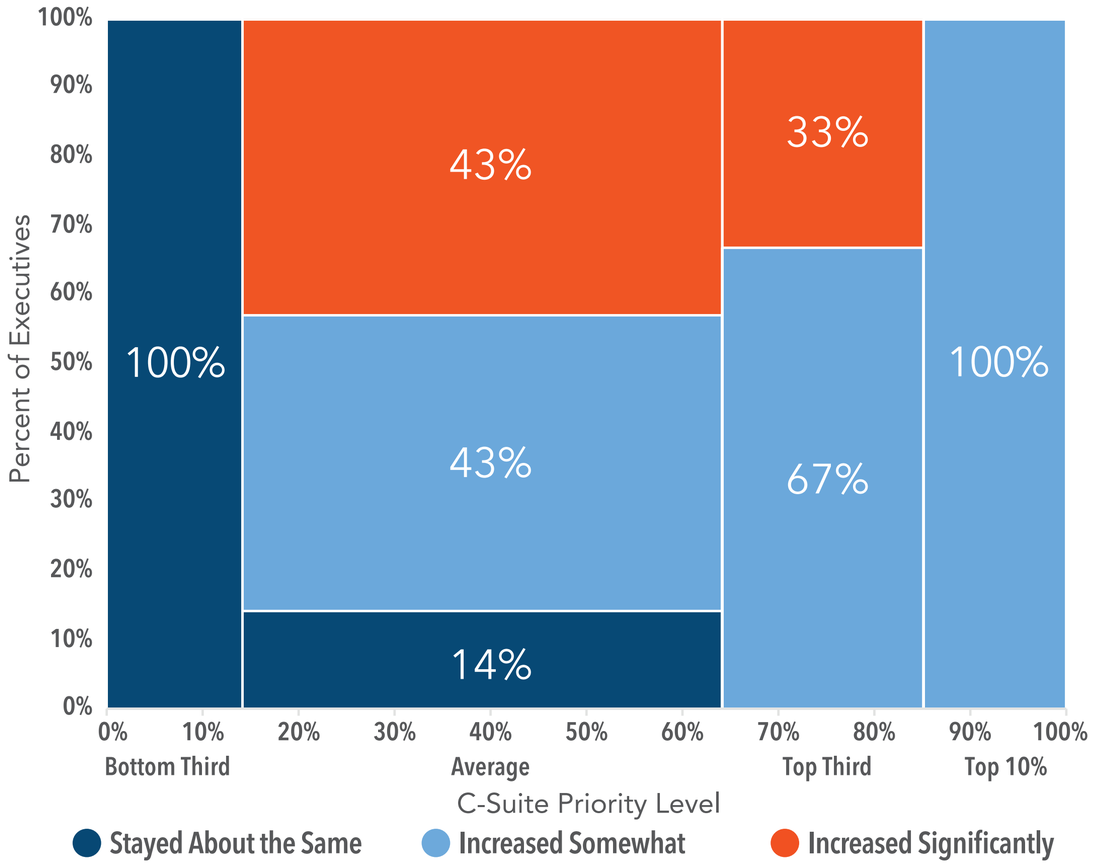
Historically, many health systems have struggled to allocate resources to develop a robust leadership structure for pain management.[1] Commonly, pain management was owned at a local level, and integrated into specific sites or service lines rather than organized at a system-level.

However, reflective of increasing priority level and investment, LHS are dedicating senior system-level executives to pain management more frequently. Almost half (43%) have a C-suite or executive level pain leader, while fewer have a director (29%), or service line leader. Only 14% of health systems have no defined leadership for pain management.

Small Systems More Likely to Have C-Suite Pain Leader

Half (50%) of small systems (<$2B TOR) have a C-suite pain leader, whereas none of the large (>$5B TOR) or medium ($2-5B TOR) systems surveyed have a C-suite leader. Small systems tend to have a smaller scale, allowing C-suite executives to play a larger role in pain management activities. Likewise, large and medium health systems may appoint C-suite leaders to pain functions as they continue to build out their leadership teams.

Change in CPM Investment by C-Suite Priority Level



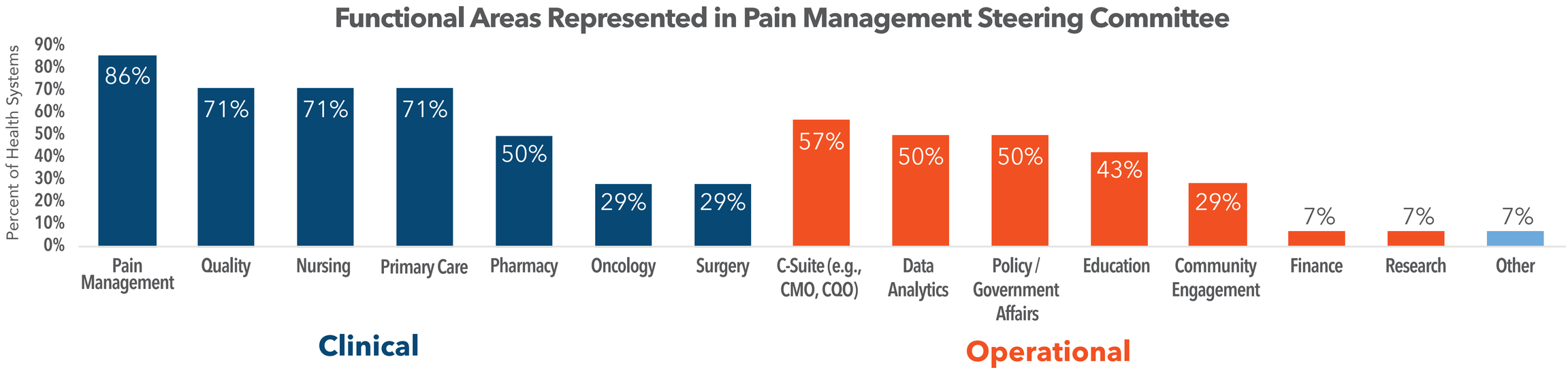
[1] Chronic Pain Management at America's Leading Health Systems. The Academy. 2019.

Numerous Functional Areas Represented on Pain Committees

Clinical Specialties Dominate Pain Work Groups

Among LHS, clinical representation surpasses operational representation on pain committees. Clinical functions most often represented on pain management teams include pain management (86%), quality (71%), nursing (71%), primary care (71%), and pharmacy (50%). Less frequently represented clinical specialties include oncology (29%) and surgery (29%). Some health systems have integrated other clinical areas (e.g., psychiatry, emergency department, behavioral health), and representation often varies by health system.

Despite the heavy clinical focus of pain management teams, operational expertise is important to execute on strategy and maximize the effectiveness of pain committees. Among LHS, operational areas represented most often include C-suite (57%), data analytics (50%), policy/government affairs (50%), and education (43%). Less frequently represented operational specialties include community engagement (29%), finance (7%), and research (7%). As health systems mature and scale initiatives across their organization, operational capabilities and leadership will be critical to implementation success.



Continued Integration of CPM Protocols in EHR

Increasing Integration of Protocols

Overall, EHR integration of CPM protocols has increased among LHS since 2011. Currently, most LHS (71%) report some EHR integration, 21% report being nearly all integrated, and 7% report minimal EHR integration of CPM protocols. No health systems in 2019 report no EHR integration of CPM protocols. This trend is reflective of evolving health system maturity with respect to documenting guidelines and protocols as part of their broader CPM strategy.

Pain Protocol EHR Integration Increasing in Complexity

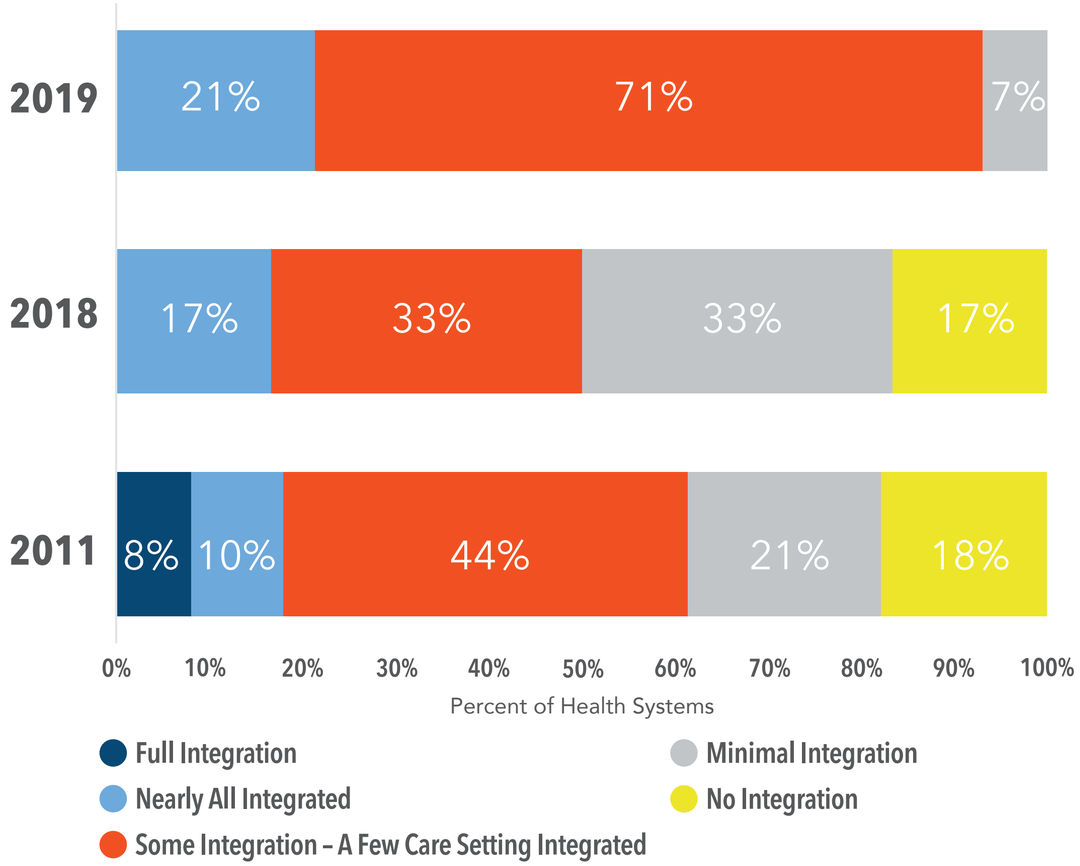
Interestingly, 8% of health systems surveyed in 2011 reported full integration, whereas no health systems reported full integration in 2018 or 2019. Since 2011, health systems have grown in size, commonly through mergers and acquisitions and organic growth. With this growth, LHS' EHR infrastructure has evolved, creating a more complex system in which to integrate clinical protocols.

Chronic Pain Protocols Span Many Clinical Specialties

From 2011 to 2018, clinical specialties experiencing the most growth in documented pain protocols include palliative care, ED, primary care, and home health. From 2018 to 2019, significant growth areas include outpatient and ICU.

Since care coordination represents an area for development among health systems, growth in pain protocols across these specialties may reflect an effort to expand pain management capabilities to offer patients smoother transitions of care and more comprehensive treatment.

CPM Protocol Integration into EHR

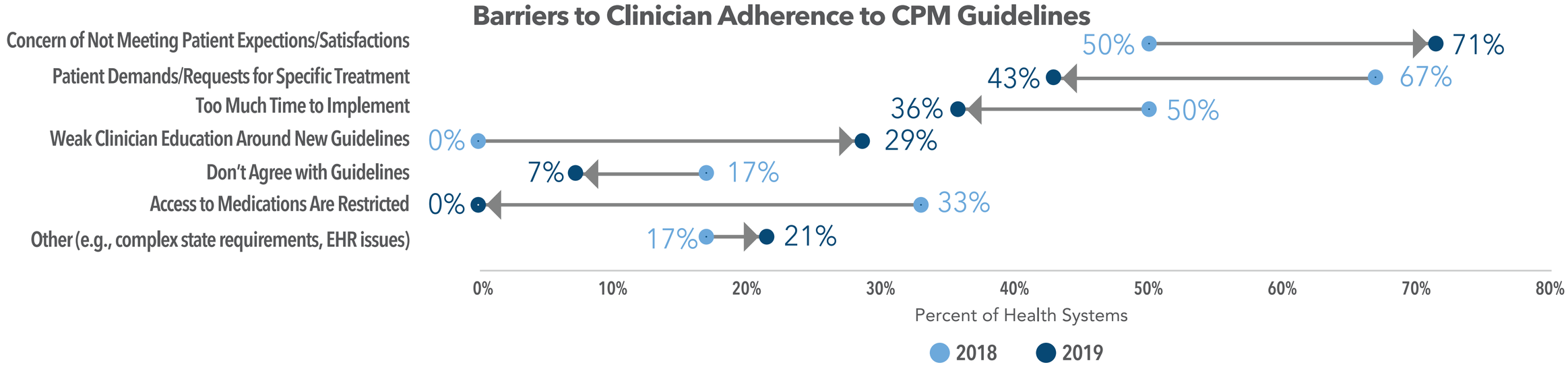


Note: Figures may not add to 100% due to rounding.

Patient Expectations are Largest Barrier to CPM Protocol Adherence

A majority (58%) of executives agree that patients receiving treatment for chronic pain generally expect to be pain free or experience minimal pain.[1] Reflective of this pressure, the top barriers to clinician adherence to CPM guidelines include concern of not meeting patient expectations (71%), and patient demands/requests for specific treatment (43%). While the percentage of executives reporting these barriers has shifted year over year, both remain top challenges among LHS.

Clinician challenges around patient expectations present a two-fold opportunity for education. First, to help patients set realistic pain management goals; and second, to empower clinicians to have an open dialogue with their patients about reasonable expectations for their treatment. Since education is a particular strength of health systems' pain management programs, CPM protocol adherence may increase as chronic pain programs mature.



[1] Chronic Pain Management at America's Leading Health Systems. The Academy. 2019.

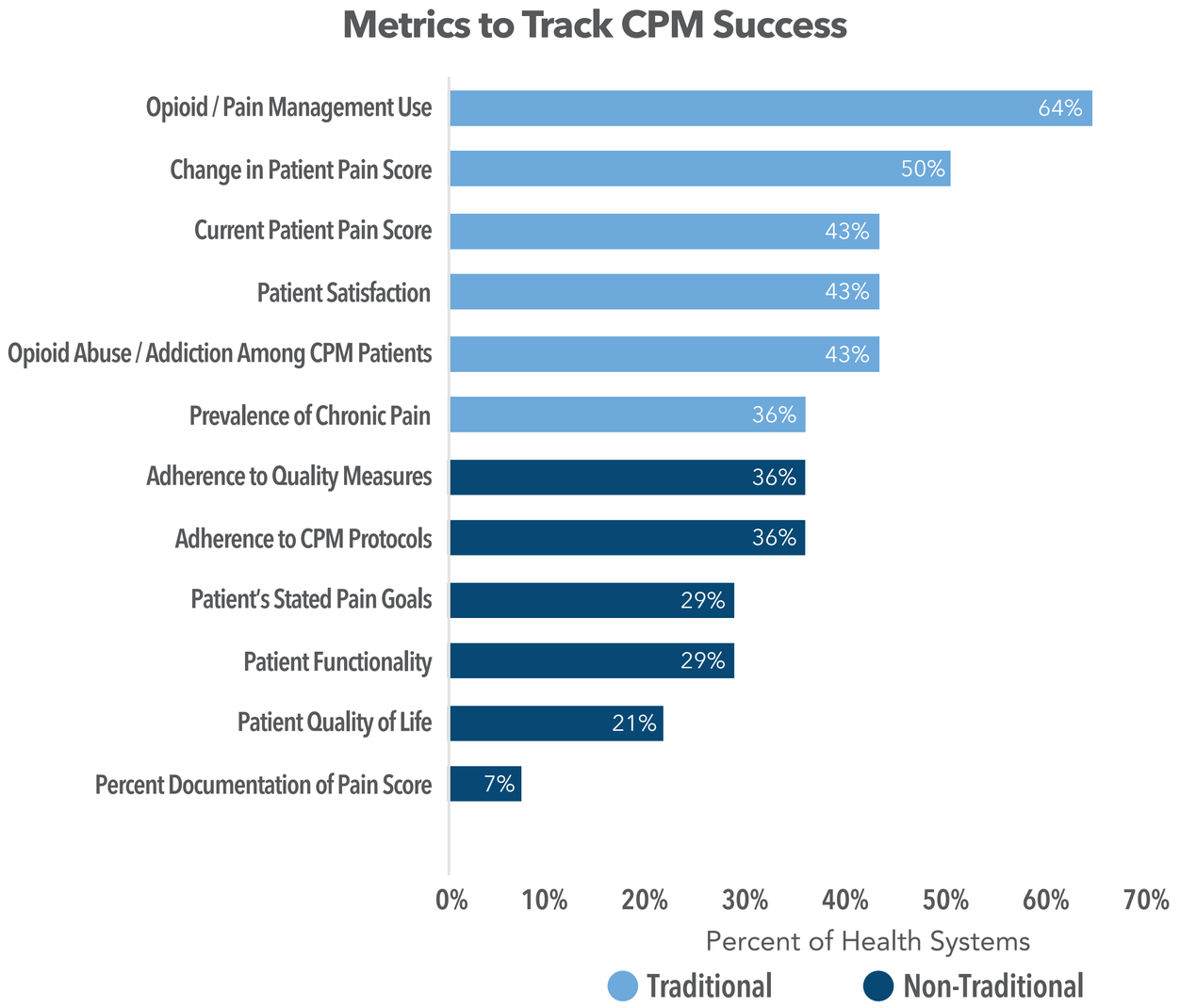
Early Stages of Integrating Non-Traditional CPM Metrics

Data and analytics represents a weak point for health systems' CPM strategies, reflected in both the reliance on traditional pain metrics and continued emphasis opioid-focused metrics.

While health systems are beginning to develop and track non-traditional chronic pain metrics, the use of traditional metrics is still more prevalent. The average usage of traditional chronic pain metrics among LHS was 42%, while average utilization of non-traditional metrics was only 21%.

Opioid use, at 64%, was the most prevalent chronic pain metric tracked. This finding is not surprising in the wake of the opioid epidemic that greatly impacted LHS' approach to pain management. About half of health systems also track traditional metrics such as current pain score (50%) and patient satisfaction (43%). While these metrics are useful, they may fall short of ascertaining the full scope of a patient's pain, especially when it comes to chronic pain.

While non-traditional metrics are not nearly as prevalent as traditional metrics, coming years will give a clearer picture of their adoption speed. The most common non-traditional metrics are adherence to quality metrics and adherence to CPM protocols, both at 36%. As health systems develop new strategies and protocols to manage chronic pain, it will be important to develop the appropriate metrics to measure success.



Health Systems Aim to Improve Adherence with Education

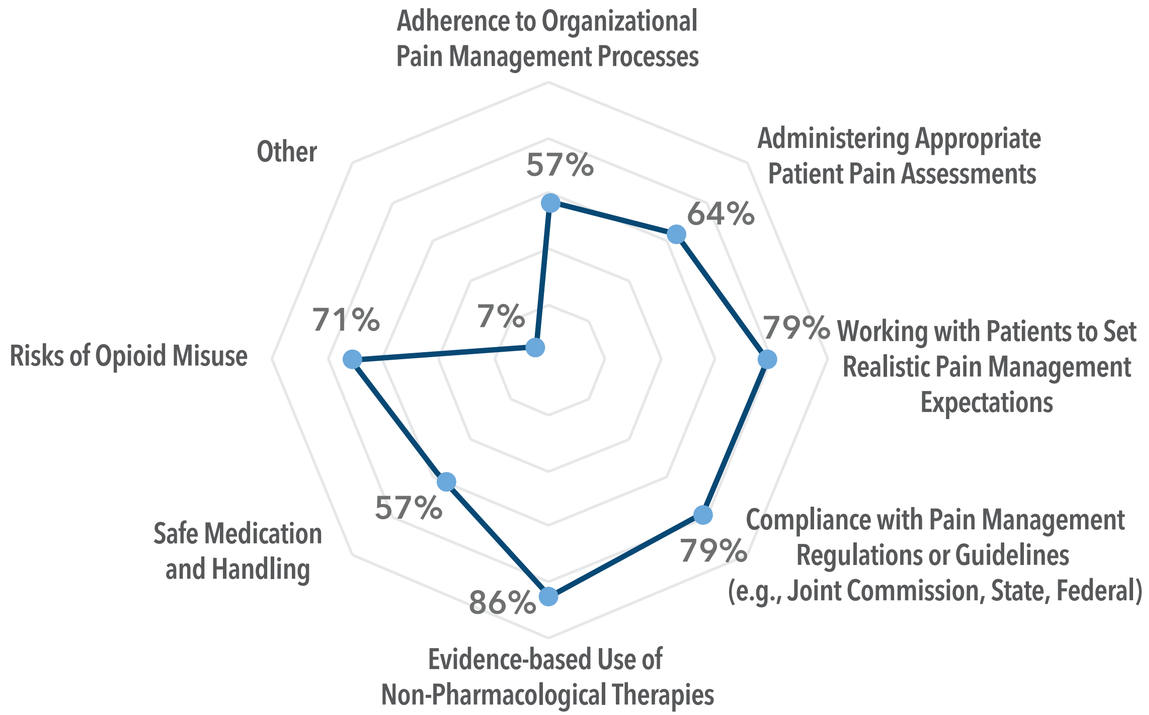
Nearly half (46%) of executives agree that their organization provides strong educational programs for clinicians and employees, compared to 31% for patient educational programs.[1]

Clinician education programs focus primarily on adherence to chronic pain protocols, such as evidence-based use of non-pharmacological therapies (86%). Given executives' reported challenges with patient expectations and requests for specific treatment, health systems are also heavily focused on clinician education around working with patients to set realistic pain management expectations (79%) and compliance with pain management regulations (79%). Additional focus areas include risks of opioid misuse (71%) and administering appropriate patient pain assessments (64%).

In aggregate, these target education areas reflect a desire to enhance patients' experience by providing them appropriate, personalized care while also ensuring regulatory and organizational compliance. As clinicians continue to receive comprehensive education, they will be better equipped to engage with and treat chronic pain patients. Future education efforts may shift in focus to target patient and family education.

Education represents a consistent strength of health systems' CPM programs; however, executives note the necessity of ongoing and targeted education efforts in order to strengthen CPM.

Focus Areas for Clinician Education on Chronic Pain Protocols



[1] Chronic Pain Management at America's Leading Health Systems. The Academy. 2019.

CPM Case Management Challenges Health Systems

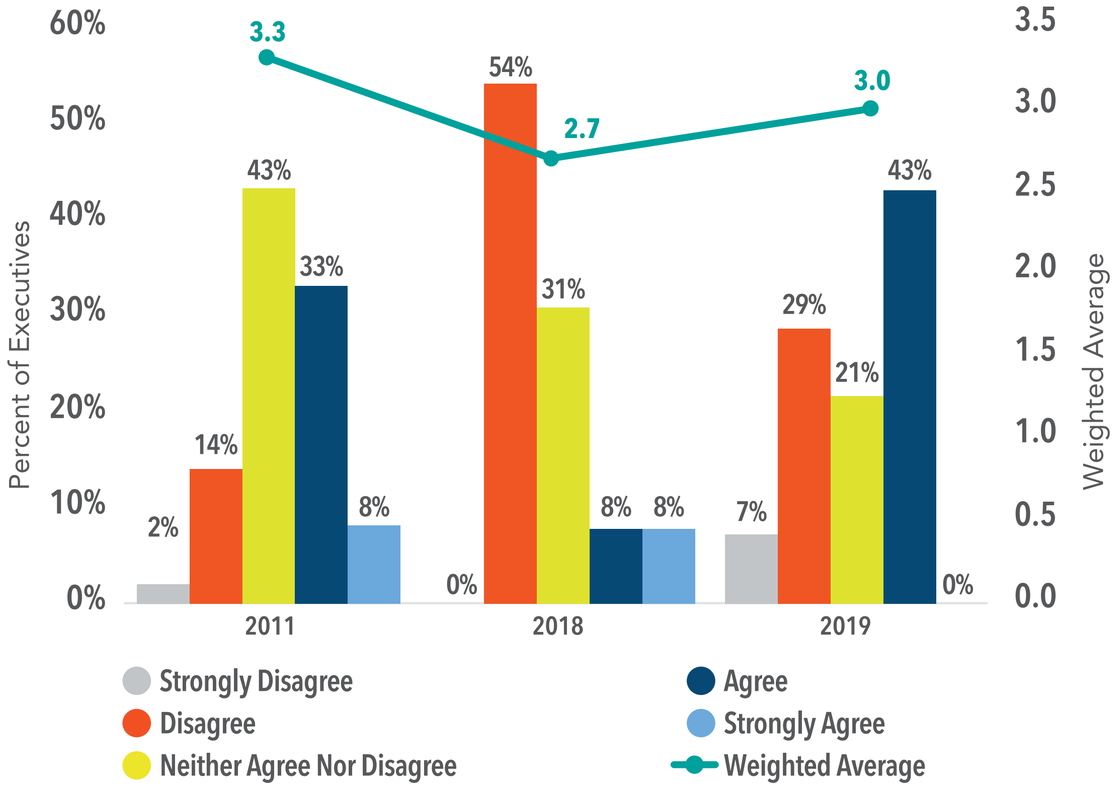
Strength of Case Management Remains Relatively Consistent

Care coordination represents an area of opportunity for health systems, and most LHS note challenges in transitions of care given the complexity of managing chronic pain across an enterprise with finite resources.[1]

Accordingly, 43% of health systems agree with the statement "*We provide strong case management and discharge planning that foster coordinated care for chronic pain patients across the care continuum.*" While health systems exhibit slight progress in their strength of case management and discharge planning, the pace of change has remained slow.

As health systems continue to grow in size and complexity, case management is increasingly challenging – with clinicians having to direct and manage patients across a more complex system.

Provide Strong Case Management and Discharge Plans



[1] Structures for Chronic Pain Management. The Academy. 2019.

Reimbursement and Performance Measures Are Top Pain Challenges

Most Chronic Pain Challenges Decrease from 2018

Health systems note a decrease in most (83%) challenges to CPM progress since 2018. Notably, lack of chronic pain training for physicians (57%) and patient adherence to treatment regimens (36%) decreased as stated challenges by 21 percentage points and 36 percentage points, respectively. LHS' increase in comprehensive clinician education programs may have played a role in alleviating these challenges.

Additionally, only 36% of executives report struggling with lack of chronic pain treatment options – a decrease of 20 percentage points from 56% of executives reporting this challenge in 2018. This may be due to the rise of non-pharmacological treatment options which expand the realm of available pain therapies.

Some Challenges Intensify in 2019

However, two challenges increased notably in reported frequency in 2019: payer reimbursement (64% reporting, up from 39% in 2018) and lack of performance measures and benchmarks (57% reporting, up from 39% in 2018).

The uptick in reimbursement challenges may be attributed to the rise of non-pharmacological therapies, for which many payers have not established billing practices.

Additionally, challenges around performance measures and benchmarks may reflect health systems' shift from traditional metrics (e.g., pain severity) to newer, patient-centered metrics (e.g., patient functionality). This is likely to be a continued focus as health systems seek to improve their data & analytics maturity.

Change in Reported Challenges to CPM Progress Since 2018		
Payer reimbursement for chronic pain	64%	↑
Lack of performance measures and benchmarks	57%	↑
Physician engagement and adoption of protocols	57%	↑
Lack of chronic pain training for physicians	57%	↓
Patient adherence to treatment regimens	36%	↓
Lack of available treatment options	36%	↓
Efficacy of treatment modalities	29%	↓
Lack of functional outcomes to guide care	21%	↓
Lack of diagnostic tools	14%	↓
Translating research into practice development	14%	↓
Lack of pain measurement scale for chronic pain	7%	↓

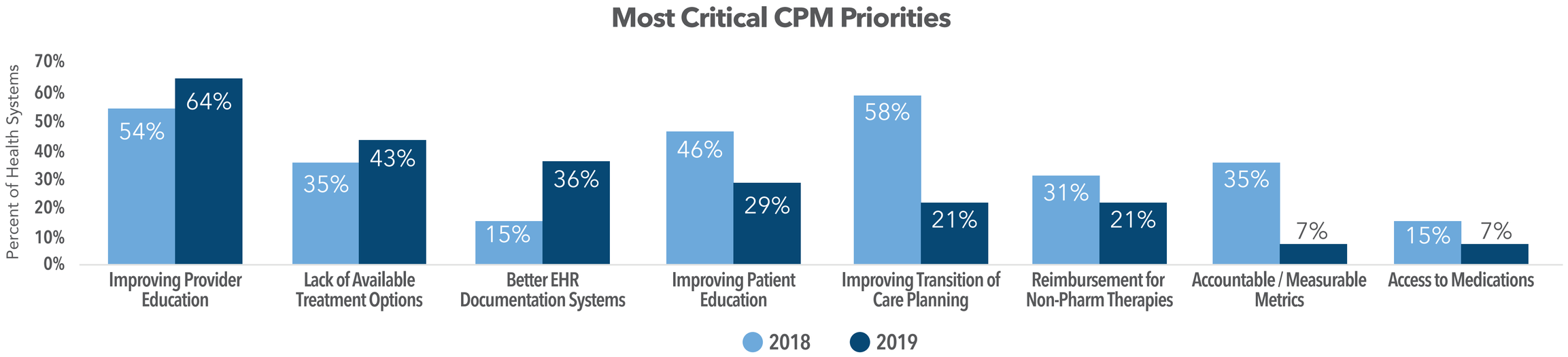
Looking Ahead, LHS are Prioritizing Provider Education

Provider Education and EHR Documentation Increase in Priority

Improving provider education is a top priority for most health systems in 2019 (64%), up 10 percentage points from 2018. This increase in priority is likely due to reported challenges from lack of chronic pain training for physicians, as well as low physician engagement and adoption of protocols. EHR documentation has also increased in priority level, up from 15% in 2018 to 36% in 2019, reflective of health systems' efforts to integrate newer pain metrics and protocols which can be tracked and documented through EHR.

Significant Decrease in Priority Level of Care Coordination

Notably, improving transitions of care planning has decreased as a top priority from 2018 to 2019 by 37 percentage points. While health systems commonly note care planning is a significant gap in their CPM strategies, LHS are primarily focused on more foundational aspects of their approach (e.g., education, EHR documentation) that they can leverage to improve care coordination. Additionally, some health systems may have implemented transitions of care improvements in the last year, and do not consider this an ongoing priority.



Methodology

In October and November 2019, The Health Management Academy conducted a quantitative tracking assessment with senior Leading Health System executives regarding chronic pain management. The 14 total respondents represent 14 unique health systems. Respondent roles included Chief Medical Officer, Chief Executive Officer, Medical Group, Chief Medical Officer, Medical Group, Chief Physician Executive, Chief Nurse Executive, Executive Vice President, and Senior Director, Pain Management Services. The responding health systems have an average Total Operating Revenue of $7.3 billion and own or operate a total of 251 hospitals.

To calculate total health system maturity, each of the six CPM characteristics accounted for one sixth of a health system's total maturity score. The scores were summed for each system and maturity was determined by splitting the 1-6 scale into thirds, such that <2.67 represented early maturity, 2.67-4.33 represented intermediate maturity, and >4.33 represented advanced maturity.

Disclaimer: The information and opinions in this report were prepared by The Academy. The Academy extends its appreciation to Pfizer for its financial support for the Tracking CPM Maturity assessment. The information herein is believed to be reliable and has been obtained from public and proprietary sources believed to be reliable. All survey data and responses are collected in good faith from sources with established expertise and are believed to be reliable. Opinions, estimates, and projections in this report constitute the current judgement of the authors as of the date of this report. They do not necessarily reflect the opinions of The Academy or Pfizer and are subject to change without notice. Any products referenced within this report have not been independently evaluated. Neither The Academy nor Pfizer recommends or endorses any of the products identified by survey respondents. All registered names or brands referenced in this document remain the property of their respective owners and are included for identification purposes only. This report is provided for informational purposes only. Any reproduction by any person for any purpose without The Academy's written consent is prohibited.

Academy Project Team

Sanjula Jain, PhD, Executive Director, Research & Advisory

Study Authors

- **Melissa Stahl,** Associate Director, Research & Advisory
- **Victoria Stelfox,** Senior Analyst, Research & Advisory
- **James Cheung,** Associate, Research & Advisory

Research Support

- **Anita Wang,** Data Analyst, Research & Advisory

Production

- **Anthony Casini,** Senior Graphic Designer
- **Ali Joseph,** Coordinator, Research & Advisory

The Academy

The Health Management Academy (The Academy) brings together health system leaders and innovators to collectively address the industry's biggest challenges and opportunities. By assisting member executives to cultivate their peer networks, understand key trends, develop next-generation leaders, and partner to self-disrupt, they are better positioned to transform healthcare.

100 Health Systems

500+ C-suite Executives

2,000+ Health System Leaders

66% Inpatient Admissions

62% Outpatient Visits

67% Total Physicians

62% Total Operating Revenue

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[1] https//:www.pfizer.com/about/leadership-and-structure/company-fact-sheet