

ORIGINAL ARTICLE

Opioid stewardship program implementation in rural and critical access hospitals in Arizona

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ABSTRACT

Objective: The objective of this study is to examine rural hospitals' status in implementing opioid stewardship program (OSP) elements and assess differences in implementation in emergency department (ED) and acute inpatient departments.

Design: Health administrator survey to identify the number and type of OSP elements that each hospital has implemented.

Setting: Arizona critical access hospitals (CAHs).

Participants: ED and acute inpatient department heads at 17 Arizona CAHs (total of 34 assessments).

Main outcome measures: Implementation of 11 OSP elements, by department (ED vs inpatient) and prevention orientation (primary vs tertiary).

Results: The percentage of implemented elements ranged from 35 to 94 percent in EDs and 24 to 88 percent in acute care departments. Reviewing the prescription drug monitoring program database and offering alternatives to opioids were the most frequently implemented. Assessing opioid use disorder (OUD) and prescribing naloxone were among the least. The number of implemented elements tended to be uniform across departments. We found that CAHs implemented, on average, 67 percent of elements that prevent unnecessary opioid use and 54 percent of elements that treat OUD.

Conclusions: Some OSP elements were in place in nearly every Arizona CAH, while others were present in only a quarter or a third of hospitals. To improve, more attention is needed to define and standardize OSPs. Equal priority should be given to preventing unnecessary opioid initiation and treating opioid misuse or OUD, as well as quality control strategies that provide an opportunity for continuous improvement.

INTRODUCTION

In 2017, the United States (US) declared the opioid crisis a public health emergency. Since then, the crisis has worsened, and the number of opioid-related overdose deaths has grown. The crisis evolved from prescription medication overprescribing and misuse to involve heroin and fentanyl.¹ In 2020, 62 percent of all drug-related deaths involved synthetic opioids like fentanyl.² These shifts in the types and potency of opioids are linked to reductions in opioid prescribing

and the advent of synthetic analogs that have permeated the illicit drug supply. Between 2020 and 2021, the rate of synthetic opioid-related overdose deaths increased 22 percent, while it declined 32 percent for deaths involving heroin.³ As more potent versions of opioids have become dominant in the illicit supply, the demand for opioids has also increased. Opioid demand is associated with the psychological effects of social exclusion, isolation, trauma, and suffering,^{4,5} with the coronavirus disease 2019 (COVID-19) pandemic amplifying the risk factors.

As the opioid crisis has expanded, it has reached virtually every community in the US, disproportionately impacting under-resourced and underserved communities. Social disparities persist among individuals living in rural, low income, and socially marginalized communities.^{6,7} These groups are more likely to experience opioid-related overdose⁸ and have lower access to protective resources that reduce harm associated with substance misuse⁹ and treat substance use disorder.^{10,11} To reduce structural disparities, numerous opioid prescribing and opioid treatment interventions have been proposed that span the prevention spectrum. Primary prevention efforts include a focus on avoiding unnecessary use and misuse. Examples include adopting guidelines that limit the duration and dose of opioid prescriptions, tracking prescriptions in a drug monitoring database, and prescribing alternatives to opioids (ALTO). Tertiary prevention strategies focus on limiting or reducing harm among individuals who are already using opioids. These include screening for opioid use disorder (OUD), prescribing naloxone to individuals using opioids, and referring to or initiating medication for opioid use disorder (MOUD).

Independently, these strategies have been recommended as evidence-based practices.^{12,13} However, as the causes of opioid misuse and overdose are complex and multifaceted, responding to the opioid crisis requires a comprehensive, coordinated effort with collaborative problem solving. Effectively reducing opioid harm requires implementing these strategies as a collective set of services. Healthcare organizations are encouraged to adopt them as part of a stewardship approach to opioid harm prevention.¹⁴ A stewardship approach represents a broad, systematic, and standardized approach to implementing policies and practices within and across healthcare institutions.¹⁵ Stewardship involves an understanding that certain outcomes require interdisciplinary and multifaceted interventions, with leadership to coordinate and hold care teams responsible to outcomes.¹⁶

Stewardship programs originally emerged in response to antibiotic overuse and the emergence of antibiotic resistance. Antimicrobial stewardship advanced the idea that if providers are not aware or intentional in how they use antibiotics, overuse will result in antibiotics becoming less effective, leading to higher rates of infection and mortality. Today, the US and international health authorities recommend antibiotic stewardship practices,^{17,18} and the Joint

Commission now requires that hospitals and outpatient facilities practice antibiotic stewardship as a condition of accreditation.¹⁹ A stewardship approach emphasizes shared understanding and coordinated action to accomplish broad, population-level health objectives. Antibiotic stewardship programs can reduce antibiotic use,²⁰ improve patient care, and reduce length of hospitalization.²¹

Although some opioid reduction and harm reduction prevention strategies have been implemented in various healthcare settings, doing so as part of an intentional, opioid stewardship effort is relatively new. In one of the largest assessments to date, a healthcare organization with two hospitals, 160 ambulatory clinics, and 15 primary care practices found that after 4 years, their opioid stewardship program (OSP) resulted in a 31 percent decline in patients receiving an opioid prescription and a 29 percent decrease in opioid prescriptions. The number of providers available to prescribe MOUD and number of patients receiving MOUD prescriptions also increased.²² A systematic review of other OSPs found varied success in changing opioid prescriptions and consumption, naloxone dispensing, and improving pain management and patient knowledge. Ninety-two percent of the studies reported improvement in at least one measured outcome.²³

In hospital settings, opioid stewardship remains uncommon. In two studies, between 23 and 41 percent of hospital pharmacies reported having OSPs.^{24,25} These programs were primarily located in large and urban healthcare facilities. Larger institutions presumably have more resources and capacity to implement stewardship elements. To understand what aspects of opioid stewardship have been implemented in smaller, rural hospitals, this study explored opioid stewardship implementation in critical access hospitals (CAHs) in Arizona, USA. We assessed CAHs' status in implementing 11 opioid stewardship elements to identify differences in the number and type of elements implemented.

METHODS

Study setting

This study included 17 Arizona hospitals. Fifteen were CAHs and two were transitioning to become critical access institutions. For the purposes of this study, we will refer to all 17 as CAHs. A CAH has 25 or fewer beds, is located more than 35 miles from

another hospital, and provides 24/7 emergency care services, among other requirements. These are smaller institutions located in rural and underserved communities. Their critical access status provides enhanced Medicare and Medicaid reimbursement, as well as other supports to reduce hospitals' financial vulnerability, making it possible to expand geographic access to care.²⁶ In Arizona, these hospitals are in 10 of the state's 15 counties.

Data collection

To assess Arizona CAH status in implementing 11 opioid stewardship elements, we prospectively surveyed emergency and acute inpatient departments at each facility. Surveys were completed by the head of each department. Prior to contacting department heads, an informational letter and copy of the instrument were emailed to the hospital's chief executive officer (CEO). The letter explained that the assessment was the first step in a larger quality improvement and technical assistance effort, led by a quality improvement organization. To coordinate with CAHs, the Arizona Center for Rural Health (AzCRH) assisted in contacting hospital CEOs. AzCRH had established professional relationships with each CEO through prior collaborations. After CEOs expressed interest in participating, surveys were sent to the department heads and study data were collected and managed using REDCap (Research Electronic Data Capture) tools hosted at The University of Arizona. REDCap is a secure, web-based software platform.²⁷ Communication began with up to three emails, followed by up to three phone calls. After confirming willingness to participate, in a few cases, additional phone calls were required with department heads to coordinate schedules and identify a time to discuss the survey. CAH leaders were informed that participation was voluntary and was not tied to funding or accreditation requirements. The University of Arizona Institutional Review Board reviewed and determined that this project was not human subject research.

Four hospitals were selected to pilot outreach, communication, and survey administration. These hospitals were contacted and completed surveys in fall 2020. As COVID-19 cases spiked in Arizona between December 2020 and February 2021, CAHs were inundated, and we paused administering surveys. The pilot confirmed that it was feasible to administer the assessment as designed, and we

contacted and surveyed the remaining 13 hospitals between April and August 2021. Hospital departments that did not complete the survey online were contacted and the survey was completed by phone. Phone surveys involved a team member reading questions and recording participants' responses in the REDCap form.

Measures

Two survey tools were developed by the quality improvement organization. The tools were developed through literature review and subject matter expert consultation to identify key elements of a comprehensive stewardship effort (Table 1). The surveys were tailored to include elements unique to emergency and inpatient departments and were designed to support quality improvement efforts by assessing the implementation of each element along a spectrum of five stages: (1) not implemented/no plan to implement, (2) plan to implement/no start date, (3) plan to implement/start date, (4) implemented/less than six months, and (5) implemented/more than 6 months. The assessment did not determine if hospitals had an OSP (yes/no); it assessed departments' status in adopting elements deemed relevant to a comprehensive stewardship effort. The technical assistance that followed (results not reported in this study) was designed to emphasize the connection between the elements, promote an ideological commitment among hospital leaders to adopt a stewardship approach to their opioid-related services, and set goals for implementing additional opioid stewardship elements.

Opioid stewardship element implementation is the primary outcome variable. For this analysis, we dichotomized implementation as yes/no. Elements reported in the survey as (1) not implemented, (2) plan to implement/no date, or (3) plan to implement with a date were coded as "no." Elements reported as (4) implemented less than 6 months, or (5) implemented for more than 6 months were coded as "yes."

Due to an error in the survey instruments, opioid education for patients and providers was measured slightly different for the two departments. In the emergency department (ED) survey, four questions asked about aspects of provider education (pain assessment, pain management, safe opioid use, and expert consultation) and three questions asked about aspects of patient education (risks of opioid

Table 1. Questions assessing opioid stewardship element implementation in emergency department (ED) and acute inpatient department (acute)

Opioid stewardship assessment questions	ED	Acute
Your facility has an opioid stewardship program leadership team in place with representatives from various departments and disciplines		✓
The ED has presence within your organization's opioid stewardship initiatives	✓	
[Your facility/the ED] tracks and trends opioid quality measures on a dashboard that is shared with an interdisciplinary team	✓	✓
Preventing unnecessary opioid use (primary prevention)		
[Your facility/the ED] has a workflow that facilitates required prescription drug monitoring program review for discharging providers prescribing opioids	✓	✓
Your facility utilizes Enhanced Recovery After Surgery protocols		✓
The electronic health record has embedded workflow/safety alerts related to opioid prescribing practices	✓	✓
The ED offers alternatives to opioids (ALTO) for pain management as a first line of treatment for identified diagnoses	✓	
[Your facility/the ED] incorporates, tracks, and trends naloxone discharge prescribing	✓	✓
Your facility offers staff members and providers educational resources and programs to improve pain assessment, pain management, and the safe use of opioid medications based upon need		✓
Your facility provides education to patients/caregivers regarding risks/benefits of opioid therapy and ALTO		✓
The ED provides staff and providers with ongoing education and training to improve: (1) pain assessment, (2) pain management, (3) the safe use of opioids based upon clinical need, (4) use of expert consultation	✓	
The ED provides education to patients/caregivers regarding: (1) risks/benefits of opioid therapy, (2) ALTO, (3) naloxone administration	✓	
Treating opioid use disorder (tertiary prevention)		
[Your facility/the ED] provides treatment for opioid withdrawal	✓	✓
[Your facility/the ED] has an established method to identify patients who may require OUD treatment	✓	✓
[Your facility/the ED] refers for medication-assisted treatment (MAT)/substance use disorder treatment	✓	✓
<i>Notes: 11 elements were assessed in the emergency and acute inpatient departments. The check marks indicate which questions were used in the respective survey for each department. Also, although MOUD has replaced MAT as the preferred nomenclature, we use the term "MAT" to remain consistent with language in the data collection instrument.</i>		

therapy, ALTO, and naloxone administration). In the acute inpatient department survey, these education areas were grouped and assessed in two questions, one for each audience (providers and patients). To facilitate analysis, the seven ED education responses were grouped to match the inpatient education questions. This was done to create one variable for patient education and one variable for staff education to allow comparison between the departments. Staff education was scored as implemented if at least three of four education areas were reported as implemented. Patient education was scored as

implemented if at least two of three education areas were reported as implemented.

For each department, there were 11 stewardship elements. Ten of the 11 elements were the same or very similar between departments. These are described in Table 1. The elements that differed included use of Enhanced Recovery After Surgery (ERAS) protocols in the acute inpatient department and offering ALTO for pain management in the ED. ALTOs were not independently assessed in the acute inpatient department as ERAS protocols include preoperative, interoperative, and post-operative

activities that promote recovery and reduce length of hospital stay, including offering nonopioids for post-operative pain control.²⁸

Finally, we created a variable to assess opioid prevention orientation. Stewardship elements were coded to represent primary prevention (preventing unnecessary opioid use) or tertiary prevention (treating OUD). The two elements that related to leadership involvement and tracking quality measures were excluded, as they did not relate to specific services. The remaining nine elements were sorted into prevention orientation categories, as shown in Table 1. Six elements were categorized as preventing unnecessary opioid use, and three were categorized as treating OUD. Coding was reviewed and agreed upon by the research team as well as by an external subject matter expert, an addiction medicine and ED physician affiliated with a hospital not included in this study.

Analysis

Data were analyzed using descriptive statistics and frequencies. Frequency counts and opioid stewardship element implementation differences are presented by hospital and by department. We also examined implementation consistency by analyzing whether hospitals implemented each element in the ED, acute inpatient department, both, or none. To examine implementation by prevention orientation, we calculated implementation ratios (number implemented divided by the total number possible). The number of implemented elements were averaged for each prevention orientation category and divided by the total number possible to create an implementation ratio.

RESULTS

All departments at the 17 CAHs participated in the survey. We achieved a 100 percent response rate, with 34 completed assessments. Data were missing for 2 percent of individual response items and were coded as not implemented.

Emergency departments

In CAH EDs, prescription drug monitoring program (PDMP) database review was the most often implemented opioid stewardship element (94 percent), followed by offering ALTO (88 percent),

provider education (71 percent), and patient education (71 percent). The least implemented elements in EDs included tracking opioid quality measures (29 percent), prescribing and tracking naloxone (35 percent), and assessing patients for OUD (41 percent) (Table 2).

Acute inpatient departments

In CAH acute inpatient departments, PDMP review was the most often implemented element (88 percent), followed by provider education (82 percent), patient education (82 percent), and referrals to medication-assisted treatment (MAT) services (71 percent). The least implemented elements in acute inpatient departments included using ERAS

Table 2. Opioid stewardship element implementation, by department

Opioid stewardship elements	Emergency		Acute inpatient	
	n	Percent	n	Percent
Leadership present on stewardship team	11	65	10	59
Requires PDMP review	16	94	15	88
Treats opioid withdrawal	10	59	7	41
ERAS protocol*	na	na	4	24
Has/uses EHR alerts	9	53	11	65
Offers ALTOs	15	88	na	na
Assesses OUD	7	41	9	53
Refers to MAT	10	59	12	71
Prescribes and tracks naloxone	6	35	9	53
Tracks quality measures	5	29	9	53
Provider and staff education	12	71	14	82
Patient education	12	71	14	82

PDMP: prescription drug monitoring program; ERAS: enhanced recovery after surgery; EHR: electronic health record; ALTOs: alternatives to opioids; OUD: opioid use disorder; MAT: medication-assisted treatment.
*Not all hospitals surveyed have a surgical unit or perform surgery.

protocols (24 percent), treating opioid withdrawal (41 percent), assessing for OUD (53 percent), and prescribing and tracking naloxone (53 percent) (Table 2).

Implementation consistency

Hospitals varied in the number of implemented opioid stewardship elements. Around a third reported implementing eight or more elements in both departments, with one hospital reporting implementation of all 11. Conversely, nine hospitals reported implementing fewer than half of the elements in at least one department and three hospitals reported under 50 percent implementation in both departments. Implementation ranged from two to 11 elements across CAHs' EDs and one to 11 across acute inpatient departments (Table 3).

Table 3. Hospital status in implementing opioid stewardship elements, by department

Critical access hospital	Emergency department		Acute inpatient department	
	n	Percent	n	Percent
Hospital 1	5	45	4	36
Hospital 2	6	55	6	55
Hospital 3	3	27	4	36
Hospital 4	10	91	5	45
Hospital 5	5	45	6	55
Hospital 6	6	55	3	27
Hospital 7	11	100	11	100
Hospital 8	7	64	8	73
Hospital 9	9	82	10	91
Hospital 10	4	36	4	36
Hospital 11	10	91	9	82
Hospital 12	7	64	7	64
Hospital 13	2	18	11	100
Hospital 14	8	73	10	91
Hospital 15	8	73	11	100
Hospital 16	6	55	1	9
Hospital 17	6	55	4	36

In comparing implementation across departments, most hospitals implemented a similar number of elements. However, substantial variations occurred in a few cases. In four hospitals, one department implemented at least 50 percent more elements than another. The mean number of implemented elements was similar for emergency and acute inpatient departments: 6.6 and 6.7, respectively, out of 11. Hospitals also tended to be consistent in whether they implemented or did not implement the same element. CAHs ranged from 59 percent, prescribing and tracking naloxone prescription in both or neither department, to 82 percent requiring PDMP review, or not, in both departments.

In examining implementation differences by prevention category, we found that elements that prevent unnecessary opioid use were proportionally implemented more often than elements that supported OUD treatment. CAHs implemented an average of 67 percent of elements that prevent unnecessary opioid use and an average of 54 percent of elements that treat OUD. These averages were similar when assessed for each department individually (Table 4).

DISCUSSION

All CAHs reported implementing at least one OSP element in their ED and acute inpatient departments. However, hospitals varied in the level of implementation and consistency across departments, and prioritization of primary and tertiary prevention efforts. The number of elements implemented ranged from one to 11 (9-100 percent). The elements most implemented related to opioid prescribing—PDMP review and offering ALTO—and patient and provider education. By comparison, assessing OUD, treating withdrawal, or referring to MOUD treatment, were not as common. The elements related to preventing unnecessary opioid use were implemented more than those related to treating OUD. This emphasis is in line with regulations passed in Arizona and other states that mandate PDMP review, authorize naloxone availability, and limit opioid prescription days' supply.²⁹ These were positive regulatory changes. To complement them, more attention is needed to identify and introduce MOUD and harm reducing stewardship elements into emergency and inpatient care protocols. Recommendations include administering and prescribing MOUD before discharge, using bridge

Table 4. Opioid stewardship program implementation, by prevention orientation

Opioid prevention orientation*	All departments		Emergency		Acute inpatient	
	Mean	Percent	Mean	Percent	Mean	Percent
Preventing unnecessary opioid use (index range 0-6)	4.01	67	4.12	67	3.94	66
Treating OUD (index range 0-3)	1.62	54	1.59	53	1.65	55

*Higher index scores signify that more OSP elements were implemented, indicating a greater prevention or treatment effort.

programs to connect to a home for ongoing treatment, and use of peer support to decrease stigma and activate patient engagement.^{30,31}

To promote a comprehensive approach to opioid stewardship that is consistent across departments and institutions, it is important to standardize key stewardship elements. In our study, we assessed implementation of 11 elements that were supported by the literature, reviewed by subject matter experts, and aligned with National Quality Forum recommendations.³² Other studies differ in the number and type of recommended OSP elements, based on differences in professional scopes and practices. The number of recommended stewardship elements ranges from eight²³ to 27.³³ Studies also diverge in their understanding of stewardship and conflate OSPs with other opioid interventions. Interventions that focus on reducing opioid exposure within specific populations like pediatric appendectomy patients³⁴ or pediatric patients with perioperative pain³⁵ are important, but they are too limited in scope to be labeled as OSP programs. Lack of standardization can impede OSP development and lead to an incomplete or overly narrow focus.

Efforts to standardize OSPs need to be expansive enough to include primary and tertiary prevention. Like other organizations that assess OUD and offer MOUD services, Arizona CAHs were found to perform these tertiary prevention activities at lower rates compared to primary prevention.²⁵ This imbalance in focus is also apparent in examples of opioid stewardship definitions,²⁴ proposed quality indicators,³⁶ and participant assessments³⁷ that omit a focus on tertiary prevention. A truly comprehensive OSP needs to focus on avoiding unnecessary opioid use when possible, monitoring and ensuring safe use when indicated, and providing compassionate care for patients with OUD.²² This comprehensive approach is well represented in the Department of Veterans Affairs' approach.³⁸

Stewardship programs expand our prevention focus. This broadening should prioritize preventing the initiation of harm (primary prevention) and tertiary prevention strategies that reduce harm from misuse and increase treatment for OUD.¹⁴ Like antibiotic prescribing, opioids represent an area in healthcare where an overused and misapplied therapy in one area of medicine (pain management) has produced enormous collateral damage in another (substance use disorder). A stewardship approach connects pain with substance use disorder and emphasizes that we should not prioritize one over the other. Restricting access to opioids for primary prevention without offering resources for those who are at risk or already opioid dependent can result in unfortunate consequences, like increased heroin deaths and transmission of hepatitis B and C.³⁹

The results of this study reveal next-step opportunities for continuous quality improvement. For example, most EDs and acute inpatient settings reported having OSP leadership, required the use of PDMP, incorporated electronic health record (EHR) workflow alerts, referred to MAT, and offered provider, staff, and patient education. Yet, the level of implementation among facilities and settings varied. By determining the level of implementation, continuous quality improvement methods can be used to strengthen established processes in addition to identifying opportunities for new strategies.⁴⁰ Facilities such as the CAHs in this study can respond to site-specific assessment results and prioritize OSP processes based on identified gaps. To do this, considerations should be made to identify opportunities for improvement and resources that can be utilized to support sustainability. Hospitals in this study implemented quality measure tracking less often than many of the other elements. Quality tracking is needed for hospitals to improve their OSP efforts and represents an area where technical assistance might be tailored to offer setting-specific

strategies for measuring and identifying OSP progress. Once improvement opportunities are identified, leadership should assess the feasibility and impact of potential changes to expand the focus of their opioid stewardship to prevent unnecessary opioid starts, misuse, overdoses, and overall opioid-associated harm for all patients.

Engaging with leadership teams is essential to OSP efforts.³² In Arizona CAHs, 65 percent of EDs and 59 percent of inpatient departments reported that their department leaders participated in the institution's OSP leadership team. Strong leadership, monitoring, and feedback, among other organizational features, are instrumental in implementing evidence-based practices.⁴¹ The same would be true for establishing or improving a stewardship program. Respected leaders who develop collegial relationships and establish successful stewardship track records maintain credibility and prevent resistance within their institution.⁴² OSP directors are important, but senior leadership must legitimize the work.²² Leadership buy-in will also increase expectations for staff to learn about opioid stewardship elements and increase the likelihood of creating an environment that supports OSP initiatives. Educating staff on protocols and policies surrounding opioid stewardship is essential to increase engagement with other OSP elements, like reducing unnecessary opioid prescribing and monitoring clinicians' prescribing patterns.⁴³ Leaders who use collaborative and inclusive strategies can build successful implementation and quality improvement programs.

Limitations and clarifications

This study included several limitations. The sample was restricted to current and soon-to-become CAHs. Given the sample size and institutional focus, the findings will not generalize to other healthcare settings or hospitals. The assessment period was also completed during the first wave of the COVID-19 pandemic, with a large pause between the pilot and data collection periods. It is unlikely, but this delay may have affected the results. Furthermore, participants selected to complete the survey included chief nursing officers, department heads, or managers of the hospital emergency room or acute inpatient setting. Their responses were not verified or cross-checked with other individuals or sources. It is possible that respondents reported higher-than-actual implementation to avoid embarrassment. However,

we expect social desirability bias in administrators' responses to be low. Data collection was tied to a larger quality improvement project. Recruitment materials explained that responses were not tied to performance reports or penalties. Instead, low implementation would signal opportunities to access free technical assistance and implementation resources. Future research in this area can include perspectives from providers and other on-the-ground staff to add to administrators' perspectives and inform implementation practices.

The survey did not explore why certain OSP elements were not implemented or if specific barriers prevented more comprehensive implementations. The analysis was limited to describing implementation patterns. Future work in this area can examine associations and predictors of specific implementation elements, especially those related to tertiary prevention. This is one of the first studies to examine OSP implementation in rural settings. Strengths of the study include capturing a census sample of all Arizona CAHs and novel analyses around implementation consistency and implementation by prevention orientation.

Finally, we leave two points of clarification. In the CAH assessment survey, the focus on referring at-risk patients to MOUD outpatient care instead of directly delivering MAT/MOUD services was meant to reflect the conditions of MOUD treatment in a hospital setting. MOUD treatment can be initiated in a hospital, but we viewed referral to long-term outpatient services to be a more important indicator of effective OUD care. Finally, naloxone was discussed in relation to its prescription and administration. This was intentional. Prescribing relates to providers making naloxone available to individuals who use opioids (licitly and illicitly), and administration relates to education given to providers and patients on how to administer naloxone when a person is believed to be experiencing an overdose.

CONCLUSION

OSPs represent an intentional and comprehensive effort to implement evidence-based, opioid prevention and treatment initiatives within healthcare organizations.³² When implemented, OSPs have been shown to decrease opioid prescriptions and increase treatment for those with an OUD.²² In this study, 17 CAHs reported varying degrees of OSP element implementation. PDMP review and offering

ALTOs were the most frequently implemented elements; OUD assessment and naloxone prescribing were the least. However, once implemented, the same elements were often practiced in the emergency and the acute inpatient departments in each hospital. The overall number of implemented elements also tended to be uniform across these departments; the number of implemented elements was the same or similar in 10 of 17 hospitals, and the same OSP elements were implemented in both or neither department in 59-82 percent of hospitals. Elements focused on preventing harm from opioid use were more common than those focused on treating patients with OUD. More effort is needed to define and promote a standard and more comprehensive approach to OSP across and within hospitals. Doing so will increase opioid safety and improve population health.

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