Subject: Advocacy for Seamless Interface between Physician Electronic Health Records (EHRs), Pharmacies and Prescription Drug Monitoring Programs (PDMPs) (Resolution 212-A-17)

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Referred to: Reference Committee B (R. Dale Blasier, MD, Chair)

INTRODUCTION

At the 2017 Annual Meeting, the American Medical Association (AMA) House of Delegates (HOD) referred Resolution 212-A-17, “Advocacy For Seamless Interface Between Physician Electronic Health Records, Pharmacies And Prescription Drug Monitoring Programs To Be Created And Financed By The Commercial EHR and Dispensing Program Providers,” which was sponsored by the American College of Legal Medicine, and which directed the AMA to:

Join the American College of Legal Medicine to advocate federally-mandated interfaces between provider/dispenser electronic health record systems in the clinical, hospital and pharmacy environments and state prescription drug databases and/or prescription drug management plans;

Advocate that the cost of generating these interfaces be borne by the commercial EHR and dispensing program providers;

Advocate that the interface should include automatic query of any opioid prescription, from a provider against the state prescription drug database/prescription drug management plan (PDMP) to determine whether such a patient has received such a medication, or another Schedule II drug from any provider in the preceding ninety (90) days;

Advocate that the prescriber and the patient’s EHR-listed dispensing pharmacy should then be notified of the existence of the referenced patient in the relevant PDMP database, the substance of the previous prescription(s) (including the medication name, number dispensed and prescriber’s directions for use) in real time and prior to the patient receiving such medication;

Advocate that the electronic record management program at the pharmacy filling the relevant prescription, contemporaneously as it enters the filling of the prescription by the pharmacist, likewise be required to automatically query the state PDMP as a secondary mechanism to prevent inappropriate prescribing, forgery, duplication and/or too great a frequency of use of the involved controlled medication;

Work with ACLM and other concerned societies to urge Congress to timely enact and implement such a statutory scheme supported by a workable and concise regulatory framework, chiefly concentrating on the interfacing of all applicable electronic health record systems.
and pharmaceutical dispensing systems with every individual state’s PDMP, thereafter
designating a timeframe wherein all treating providers and dispensing pharmacists would be
required to perform such queries, in concert with the routine ordering of and filling of a
controlled substance to be used in the treatment of patients;

Advocate that oversight of the appropriate prescribing of and filling of prescriptions for
controlled substances remain with the involved individual federal and state criminal law
enforcement agencies, the involved state departments of health, or similar entities and the
involved relevant state provider and/or pharmacy licensure authorities; and

Advocate that statistics be maintained and reviewed on a periodic basis by state PDMP
personnel and relayed to state departments of health or agencies similarly situated so as to
identify and possibly treat those patients identified through this screening mechanism as
potential drug abusers and/or at risk of addiction.

This report summarizes the work the AMA has done in support of ensuring accurate, reliable
Prescription Drug Monitoring Programs (PDMPs) that support physicians and their patients. It also
addresses many of the complexities raised in the original resolution, including PDMP evolution,
integration with electronic health records (EHRs) and electronic prescribing of controlled
substances (EPCS). The report also provides relevant AMA policy and presents policy
recommendations.

DISCUSSION

Integrating electronic systems that support efforts to end the opioid epidemic continues to be a
major goal of AMA advocacy. To effectively support physician efforts to end the epidemic of
opioid overdose deaths, electronic systems need to be interoperable and integrated into normal
medical practice workflows. There has been progress, but effective integration remains extremely
rare.

Too often, information exchanged with EHRs is not well incorporated into the physician’s
workflow. Important information, including PDMP data, often requires multiple “clicks,” opening
multiple windows, and requiring separate logins even before the physician finds what he or she is
looking for—and that situation must be repeated for each patient and every prescription for a
controlled substance. Effective PDMP and EHR integration means that the workflow must achieve
“functional interoperability,” or the ability for systems to exchange, incorporate and display data in
a meaningful and contextual manner.

Many consider the ideal practice to be a “one-click” solution with PDMP data and EPCS integrated
into physicians’ EHR systems. However, EHR vendors currently are pulled in too many directions
to focus on this need. Federal regulations require vendors to spend considerable time developing
EHRs that meet administrative requirements. To achieve the ideal, more must be done to reduce the
regulatory pressure on health IT development, allowing vendors flexibility to respond to physician
and patient needs, rather than spending the bulk of their time complying with administrative
demands.

One area where there has been significant progress is interoperability between the various state
PDMPs. According to the National Association of Boards of Pharmacy, 44 states now can securely
share PDMP information across state lines.¹ PDMP use among physicians and other health care
professionals has significantly increased in recent years, with more than 136 million queries taking
place in 2016,² the most recent year for which data are available.
Progress has been considerably slower in achieving EPCS uptake, however, largely due to outdated regulations from the Drug Enforcement Administration (DEA). The combination of personal identification numbers (PINs), passwords, and biometrics required to meet DEA standards for “two-factor authentication” increase EPCS security but add to workflow disruptions and increase costs. DEA EPCS requirements include onerous limits on use of biometric devices, which must comply with federal standards that set an unnecessarily high bar and prevent use of user-friendly consumer electronics already found in physicians’ offices for two-factor authentication. The biometric fingerprint scanners found on these consumer devices, i.e., smart phones, tablets, and laptop computers, are used for secure access to other sensitive information, like banking and medical records, but typically do not comport with rigid rules for EPCS.

The AMA views EPCS as important to support high-quality patient care. Physicians commonly report that they are frustrated that they can e-prescribe non-controlled substance medications but must still use written prescriptions for controlled substances. More than 70 percent of physicians are e-prescribing non-controlled drugs but only 20 percent use EPCS. One reason for this is due to the fact that not all EHR vendors understand or can satisfy EPCS requirements—state EPCS mandates have increased uptake, but implementation has been delayed due to questions about system certification, cost to providers, and patient concerns, i.e., transferring prescriptions between pharmacies. Moreover, EHR vendor processes for EPCS do not always align well with normal e-prescribing workflows—often physicians must start new computer programs and windows each time they use EPCS. Cumbersome workflows and applications that do not take physician needs into account impede EPCS uptake. Finally, although EPCS reduces prescription fraud and diversion, it is less clear how it affects valid prescriptions for opioid analgesics. For example, does the prescriber using EPCS put in a dose and duration or are numbers suggested by the EPCS system and, if so, how are these amounts derived? These are among the questions the AMA has been asking from vendors and physicians.

To help resolve other barriers, the AMA and the President’s Commission on Combating Drug Addiction and the Opioid Crisis have recommended the DEA modify EPCS regulations in order to reduce barriers to EPCS adoption. The AMA asked DEA to reexamine the scope of technology that is compliant with EPCS requirements and allow use of lower-cost, high-performing biometric devices in two-factor authentication. The AMA also believes that there must be further study to evaluate the variations in how EPCS systems handle initial dosing, i.e., are opioid doses or durations auto-populated in EPCS systems and, if so, are the amounts appropriate.

A final point is that the AMA has made clear to the DEA that its requirements for biometric devices limit user-friendly consumer electronics already found in physicians’ offices, such as fingerprint readers on laptop computers and mobile phones, from being utilized for two-factor authentication in EPCS. This and other rules contribute to cumbersome workflows and applications which are an impediment to physician EPCS uptake. Encouraging EPCS uptake and interoperability of PDMP databases and electronic health records would improve the integration of controlled substance use data into practice workflows and clinical decision-making.

The AMA also continues its efforts in support of making PDMPs better clinical tools. The use of PDMPs continues to increase in states with and without mandates—tied mainly to quality of the PDMP as a decision-support tool. Important policies that have led to improved PDMP workflow and data reliability include delegate access, data input by pharmacists within 24 hours, and sharing of PDMP information by 44 states. PDMP usability continues to improve, but access in rural and other areas may be affected by lack of access to broadband and other technologies. Consistent, long-term funding of state PDMPs is also a concern—most states depend on federal grants for ongoing maintenance and improvements. The AMA also continues to try and identify best
practices in designing PDMPs to identify risk including: distinguishing between uncoordinated
care, misuse, and “doctor shopping,” identifying opportunities for referrals to specialized care;
providing reports to prescribers to better inform prescribing decisions; and conducting public
health surveillance.4

One best practice is PDMP and EHR integration, but that remains largely elusive. It is not clear, for
example, how many PDMPs are integrated into EHRs, which makes identification of best practices
challenging given the variety of EHR systems in the market. Each state PDMP may require a
slightly different interface to connect to an EHR. With over 600 different EHRs on the market, the
number of custom EHR/PDMP interfaces can reach into the thousands. Custom software
development is time-consuming and expensive—with costs being passed down onto the physician.
Without PDMP and EHR integration, physicians must use multiple usernames and passwords to
shuttle between different systems, often having to re-enter login information if one system times
out while they are using the other one. This results in increased time to enter information,
decreased satisfaction with the technology, and potentially less use of the systems.

In addition, EHRs are generally not interoperable between different organizations, making
coordination between primary care physicians, pain medicine physicians, addiction medicine
physicians and other providers much more difficult. When PDMP and EHR integration does exist
(e.g., Oregon’s EDIE), the patient, public health and cost utilization benefits are extremely
positive.5 This integration requires time and broad, institutional support. For example, the state of
Washington’s integration project with the state Health Information Exchange (HIE) began in 2012.
As of August 2017, more than 90 percent of emergency departments include PDMP data in the
EHR using data through the HIE.6 The state’s major health systems still are working to accomplish
this integration.

To help resolve some of these issues, the AMA advocates for consistent and sufficient
appropriations to support state efforts to maintain and improve state-based PDMPs, including broad
state-based grants to improve statewide HIEs and the ability to integrate HIE data into the EHR of
statewide emergency departments and other providers. The AMA also would support a U.S.
Government Accountability Office study on best practices for small and large physician practices
on using PDMPs to improve pain care as well as treatment for substance use disorders. This would
include identifying how PDMPs can distinguish uncoordinated care from misuse or “doctor
shopping” as well as help coordinate care for a patient with a substance use disorder or other
condition requiring specialty care. In addition, there is a need to evaluate the variations in state-
based PDMP technology and work with the health IT industry to discuss “common understanding”
of how each PDMP works—providing transparency for EHR vendors to facilitate development of
custom connections between their products and PDMP software. This could include funding for
programs that pilot test low-cost technologies to better integrate EHRs and PDMPs as well as
efforts to identify burdensome federal regulations that prevent EHRs from being designed and
developed to meet physician and patient needs.

The AMA also has been engaged in the SMART project to help EHR systems work better for
physicians and patients. A key component of this effort is the development of a flexible
information infrastructure that allows for free, open development of plug and play applications
(apps) to increase interoperability among health care technologies, including EHRs, in a more cost-
effective way. The infrastructure development specific to PDMPs is part of both ongoing research
as well as work by states working to achieve more comprehensive data integration.7 In addition, the
Office of the National Coordinator for Health Information Technology has compiled multiple
sources and pilot examples for PDMP and EHR integration.8 The pilot examples, not surprisingly,
found that PDMPs were most helpful when they were integrated into physicians’ workflow as well as EHRs.

AMA POLICY

The AMA House of Delegates has provided strong guidance to the AMA that reflects the issues raised by the original resolution that is the subject of this report. Relevant policies include:

H-120.957, “Prescription of Schedule II Medications by Fax and Electronic Data Transmission,” which “encourages the Drug Enforcement Administration to support two factor authentication that is easier to implement than the current DEA and EPCS security requirements; and because sufficient concerns exist about privacy and confidentiality, authenticity, and other security measures, does not support the use of “hard copy” facsimile transmissions as the original written prescription for Schedule II controlled substances, except as currently allowed in Section 1306 of Title 21 of the Code of Federal Regulations.” In addition, H-95.928, “Model State Legislation Promoting the Use of Electronic Tools to Mitigate Risk with Prescription Opioid Prescribing,” provides that the AMA support multiple facets of PDMP development, including interoperability, assisting physicians and pharmacists in identifying “when their patients have received a prescription for controlled substances from multiple prescribers or multiple pharmacies within a short time frame.” In addition, D-478.972, “EHR Interoperability,” calls for the AMA to continue efforts in support of EHR interoperability standards, reducing excessive costs and generally reducing barriers to EHR adoption. Finally, Policy D-478.994, “Health Information Technology,” broadly notes AMA support for “legislation and other appropriate initiatives that provide positive incentives for physicians to acquire health information technology,” which reasonably would include PDMP, EPCS and EHR uptake.

RECOMMENDATIONS

The Board of Trustees recommends that the following recommendations be adopted in lieu of Resolution 212-A-17, and that the remainder of the report be filed:

1. That our American Medical Association (AMA) advocate for a federal study to evaluate the use of PDMPs to improve pain care as well as treatment for substance use disorders. This would include identifying how PDMPs can distinguish team-based care from uncoordinated care, misuse, or “doctor shopping,” as well as help coordinate care for a patient with a substance use disorder or other condition requiring specialty care. (Directive to Take Action)

2. That our AMA urge EHR vendors to increase transparency of custom connections between their products and PDMP software. (Directive to Take Action)

3. That our AMA support state-based pilot studies of best practices to integrate EHRs, EPCS and PDMPs as well as efforts to identify burdensome state and federal regulations that prevent such integration from occurring. (New HOD Policy)

Fiscal Note: Less than $500.
REFERENCES

1 National Association Boards of Pharmacy. Available at https://nabp.pharmacy/initiatives/pmp-interconnect/
8 PDMPConnect. Office the National Coordinator for Health Information Technology. Available at https://www.healthit.gov/pdmp/PDMPConnect