March 28, 2018

The Honorable John Martin
Assistant Administrator
Diversion Control Division
U.S. Drug Enforcement Administration
8701 Morrissette Drive
Springfield, VA 22152

Dear Assistant Administrator Martin:

On behalf of the physician and medical student members of the American Medical Association (AMA), I am writing to urge the Drug Enforcement Administration (DEA) to modify certain elements of its regulations governing electronic prescribing of controlled substances (EPCS) in order to increase the number of DEA registrant physicians utilizing EPCS. By significantly reducing fraudulent prescriptions for opioid analgesics, the increased adoption of EPCS could help to combat the epidemic of opioid overdose deaths that is ravaging our country. Revising the EPCS regulations as we recommend would also be consistent with the President’s Executive Order 13777 seeking to identify regulatory actions that are outdated or ineffective. DEA’s regulations have not kept up with technology and the much needed revisions would reduce regulatory burden.

This issue was also highlighted by the President’s Commission on Combating Drug Addiction and the Opioid Crisis. Its final report recommends that the DEA increase electronic prescribing to prevent diversion and forgery, and that the DEA should revise the regulations regarding EPCS.

Background

In 2010, the DEA issued an interim final rule setting forth the requirements that EPCS systems must meet in order to be utilized by DEA registrants. In a 2014 meeting with the AMA, then-DEA Administrator Leonhart stated that the 2010 regulations were intentionally left “interim” to allow flexibility for the agency as EPCS technology evolved. One year later, officials in the DEA Regulatory Section met with several stakeholder organizations, including the AMA, to seek advice about needed changes in the EPCS regulations (see August 2015 AMA letter to DEA). Although DEA officials indicated that a new notice of proposed rulemaking or a final rule would be developed reflecting the recommendations received, several years later the 2010 interim final rule is still in place. More recently, in August 2017, the DEA convened meetings with stakeholder organizations, including the AMA, to discuss the President’s Executive Order 13777, “Enforcing the Regulatory Reform Agenda.” AMA attendees again urged that the EPCS regulations be revised and provided a copy of the 2015 letter.

Why the EPCS Regulations Need to Be Updated

EPCS is important to support high-quality patient care and to reduce fraud, tampering, and diversion of prescriptions for controlled substances. To date, however, whereas more than 70 percent of physicians
e-prescribe non-controlled drugs, only 20 percent use EPCS. The DEA regulations are a major reason for the low rate of adoption of EPCS compared to other e-prescribing. In fact, adoption of e-prescribing is one of the few examples of technological changes promoted for physician practices that works well and is seamlessly integrated into medical practice workflows. Most physicians want to adopt EPCS and they are frustrated that they can e-prescribe other drugs. However, they do not have the capability to adopt EPCS systems that will be integrated with their other e-prescribing and practice workflows, and they are concerned that EPCS adoption would require them to absorb significant additional costs.

**Biometrics**

A particular concern is the DEA standards for the biometric component of multifactor authentication. The AMA agrees that requiring multifactor authentication increases EPCS security, but the rigid and burdensome requirements for biometrics included in the 2010 regulations preclude physicians from deploying user-friendly devices already found in their practices to satisfy these requirements. Instead of using laptop computers and smartphones with fingerprint scanners, they must utilize separate biometric technology that has been reviewed by the DEA or a DEA-approved certifying organization for specific compliance with EPCS requirements. These requirements state, for example, that the “biometric subsystem must operate at a false match rate of 0.001 or lower.” Yet even though Apple products, for example, have a biometric error rate of less than one in 50,000 and are validated for compliance with U.S. Federal Information Processing Standards (FIPS) 140-2 Level 1, Apple products have not been certified to meet the DEA requirements and cannot be used for EPCS. The biometric fingerprint scanners found on the consumer devices commonly found in medical practices 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 regulations further require that the biometric device either be co-located with or built into the computer that is being used for EPCS. This rule has led to the development of a niche market for EPCS products, such as Imprivata’s Confirm ID, which have been certified to comply with DEA regulations for EPCS. The fingerprint reader on a smartphone could not be used by a physician for EPCS because, even if it had been reviewed by the DEA, the smartphone would be separate from and work independently of the e-prescribing software and hardware being used in the practice. The existence of this niche market allows health information technology (health IT) vendors to charge high prices to physician practices to add the technology they need for EPCS, and even after assuming these costs, EPCS technology is still likely to disrupt workflows because it is not integrated with physicians’ other systems.

The volume of controlled substance prescriptions for a subset of physician practices makes compliance with two-factor authentication, particularly as a distinct process from e-prescribing of non-controlled substances, onerous and a significant strain on practice workflows. On top of the fact that few health IT vendors support EPCS, and the cost of add-on modules and separate monthly service fees, the methods and processes that vendors utilize for EPCS are often not well-aligned with normal e-prescribing workflows. In most instances, physicians must initiate an entirely new set of computer programs and windows each time they use EPCS. Separate workflows and authentication requirements for electronic health records (EHRs), prescription drug monitoring programs, and EPCS have become a major impediment to greater physician EPCS uptake. These barriers should be addressed by the DEA in concert

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with health IT designers and implementers. Ultimately, the prescribing workflow should combine controlled substances and other medications seamlessly.

Identify Proofing

The identity proofing standards in the EPCS regulations present an additional barrier to adoption, as they require that an authorized third party verify the physician’s identity and then issue the authentication credential to the DEA registrant. The current identity proofing process is complex and must be performed for each location a physician wishes to employ EPCS. The AMA suggests the DEA, as one approach, allow a physician’s hospital credentialing to be used for his or her EPCS identity proofing instead of requiring a separate process for EPCS. We note that in NIST 800-63-R2 a hospital’s credentialing process was recognized as sufficient to meet the electronic proof of identify requirements at Level of Assurance 3. Acknowledging a physician’s hospital privileges as proof of their identity for EPCS is one method to reduce the burden and cost on physicians.

How the EPCS Regulations Should Be Revised

The AMA recommends several modifications to the DEA’s EPCS biometric regulations, which are shown in “tracked changes” in a document attached to this letter. The changes may be summarized as follows:

1. Under §1311.116 Additional requirements for biometrics, EPCS service developers should have several options for complying with the biometric subsystem requirements. One of these options could be the current requirement for testing by a DEA-approved certifying body, but developers should also be able to provide a combination of attestation and supporting documentation that a biometric subsystem’s matching software meets the DEA’s biometric requirements for EPCS. For instance, a developer seeking DEA approval could assert that its EPCS service comports to necessary technical requirements while also providing to the DEA documentation verifying its product’s testing and conformance to said technical requirements. This would lower the barrier to entry for smaller software developers while still providing the DEA oversight and developers accountability for product performance.

2. Also under §1311.116 Additional requirements for biometrics, besides the option of being co-located or built into the device used for issuing electronic prescriptions, the biometric reader should be able to work independently of the physician’s computer or personal digital assistant that is used to issue electronic prescriptions for controlled substances.

Impact of Regulations on Innovation

The AMA has extensive experience with the impact of regulation on health IT design, development, and use. Over-regulation, or regulation that is too prescriptive, contributes to many of the issues physicians identify as detracting from their effective use of health IT to care for patients. A prime example of this imbalance is the unintended consequences resulting from the Centers for Medicare & Medicaid Services (CMS) EHR Incentive Program and the Office of the National Coordinator for Health IT (ONC) health IT certification requirements. While well intentioned, the combination of these two programs has negatively influenced the usability and interoperability of EHRs. Due to regulations that stipulate how EHRs must perform and how physicians must use them, EHR vendors have been driven to create technology focused
on federal reporting requirements rather than the needs of physicians and their patients (see March 2018 Wall Street Journal article).

Only recently, through a mixture of congressional actions and this administration’s focus on regulatory relief, are we starting to see opportunities for user-centered innovation in the EHR space. While much more work remains, the continued relaxation of regulation and flexibility in the use of technology will ultimately provide far more voluntary uptake of health IT, including EPCS, than has occurred over the past 10 years. Furthermore, this approach will enable a more competitive marketplace—allowing health IT vendors to compete for business based on user satisfaction and demand for functionality and workflow integration. The AMA strongly urges the DEA to learn from this historical perspective and to examine methods to reduce regulatory complexity that detracts from health IT innovation.

The AMA appreciates the DEA’s consideration of these recommended updates to the EPCS regulations, which would encourage the development of less expensive and more usable EPCS software and hardware solutions, and strike a more appropriate balance between software/hardware performance assurances and EPCS regulatory flexibility. If you have any questions or want to discuss this issue further, please contact Margaret Garikes, Vice President for Federal Affairs, at margaret.garikes@ama-assn.org or by calling 202-789-7409.

Sincerely,

James L. Madara, MD

Attachment

cc: James A. Arnold, Section Chief, Liaison and Policy Section
    Jorge L. Jimenez, Regulatory Section Chief
    Michael J. Lewis, Section Chief, Regulatory Drafting and Policy Section
§1311.115  Additional requirements for two-factor authentication.

(a) To sign a controlled substance prescription, the electronic prescription application must require the practitioner to authenticate to the application using an authentication protocol that uses two of the following three factors:

(1) Something only the practitioner knows, such as a password or response to a challenge question.

(2) Something the practitioner is, biometric data such as a fingerprint or iris scan.

(3) Something the practitioner has, a device (hard token) separate from the computer to which the practitioner is gaining access.

(b) If one factor is a hard token, it must be separate from the computer to which it is gaining access and must meet at least the criteria of FIPS 140-2 Security Level 1, as incorporated by reference in §1311.08, for cryptographic modules or one-time-password devices.

(c) If one factor is a biometric, the biometric subsystem must comply with the requirements of §1311.116.

§1311.116  Additional requirements for biometrics.

(a) If one of the factors used to authenticate to the electronic prescription application is a biometric as described in §1311.115, it must comply with the following requirements.

(b) The biometric subsystem must operate at a false match rate of 0.001 or lower.

(c) The biometric subsystem must use matching software that has demonstrated performance at the operating point corresponding with the false match rate described in paragraph (b) of this section, or a lower false match rate.

(d) Compliance with the requirements of paragraph (c) of this section may be demonstrated through one of the following methods.

(1) Testing to demonstrate performance must be conducted by the National Institute of Standards and Technology or another DEA-approved government or nongovernment laboratory. Such testing must comply with the requirements of paragraph (i) of this section; or

(2) A combination of attestation and supporting documentation that a biometric subsystem’s matching software meets the requirements of paragraph (c) of this section.

(i) This method must comply with the requirements of paragraph (i)(4)-(5) of this subsection.
(ii) This method may only be utilized if the electronic prescription application will provide to the practitioner, at no cost to the practitioner, an alternative factor in the event that the biometric subsystem fails to comply with the requirements of this section.

(iii) This method must relieve the practitioner of liability in the event that the biometric subsystem does not conform to the requirements of paragraph (c) of this section through no fault of the practitioner.

(iv) The DEA must establish a process for DEA registrants to report potential non-conformities to the DEA, with particular attention to minimizing practitioner burden.

(ge) The biometric subsystem must conform to Personal Identity Verification authentication biometric acquisition specifications, pursuant to NIST SP 800-76-1 as incorporated by reference in §1311.08, if they exist for the biometric modality of choice.

(fe) The biometric subsystem must comply with one of the following: either

(1) be co-located with a computer or PDA that the practitioner uses to issue electronic prescriptions for controlled substances, where the computer or PDA is located in a known, controlled location;

(2) be built directly into the practitioner's computer or PDA that he uses to issue electronic prescriptions for controlled substances; or

(3) work independently of the practitioner’s computer or PDA that he uses to issue electronic prescriptions for controlled substances.

(gf) The biometric subsystem must store device ID data at enrollment (i.e., biometric registration) with the biometric data and verify the device ID at the time of authentication to the electronic prescription application.

(gh) The biometric subsystem must protect the biometric data (raw data or templates), match results, and/or non-match results when authentication is not local. If sent over an open network, biometric data (raw data or templates), match results, and/or non-match results must be:

(1) Cryptographically source authenticated;

(2) Combined with a random challenge, a nonce, or a time stamp to prevent replay;

(3) Cryptographically protected for integrity and confidentiality; and

(4) Sent only to authorized systems.

(hi) The biometric subsystem must have the following characteristics:
(1) The test is conducted by a laboratory that does not have an interest in the outcome (positive or negative) of performance of a submission or biometric.

(2) Test data are sequestered.

(3) Algorithms are provided to the testing laboratory (as opposed to scores or other information).

(4) The operating point(s) corresponding with the false match rate described in paragraph (b) of this section, or a lower false match rate, is tested so that there is at least 95% confidence that the false match and non-match rates are equal to or less than the observed value.

(5) Results of the testing are made publicly available.