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### Prescribing Controlled Substances Goes Electronic

Alberto Coustasse

Craig Kimble

Ken Maxik

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# PHARMACY TIMES

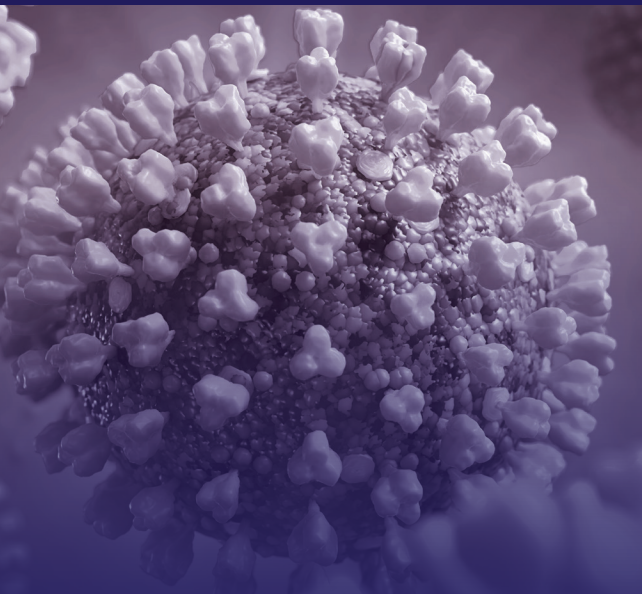
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# HEALTH-SYSTEM™

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# Prescribing Controlled Substances Goes Electronic

## Eliminating Paper Prescriptions Allows for Greater Legibility, Security, Trackability for Pharmacists, Providers

BY ALBERTO COUSTASSE, DRPH, MD, MBA, MPH; KEN MAXIK, MBA, BSPHARM; AND CRAIG KIMBLE, PHARM D, MBA, MS, BCACP



ALBERTO COUSTASSE, DRPH, MD, MBA, MPH



KEN MAXIK, MBA, BSPHARM



CRAIG KIMBLE, PHARM D, MBA, MS, BCACP

**W**ITH THE AFFORDABLE CARE ACT in 2010 came interoperability and meaningful use requirements. Part of these requirements included the implementation of electronic medical records (EMRs), which was a crucial part of achieving these standards.<sup>1</sup> With EMRs, prescribers began sending electronic prescriptions.<sup>2</sup> EMRs can provide advanced decision support when writing prescriptions, and they include features such as auto populating the quantity prescribed, formulary information, therapeutic duplications, warnings about interactions, or other potential clinical or regulatory issues. This system results in enhanced patient care and a more streamlined dispensing process. In addition, electronic prescriptions for controlled substances (EPCS) has become more widely used as a tool to combat the opioid epidemic.<sup>3</sup>

Some critical goals of EPCS have been to eliminate paper prescriptions by allowing providers to prescribe electronically, making them digital, legible, more secure, and trackable for both pharmacists and providers.<sup>4</sup> This also has made prescriptions more readily retrievable in electronic archives for audits or drug utilization reviews, which makes the handling of controlled substance prescriptions more efficient.

With EPCS, states began implementing prescription drug monitoring programs (PDMPs), which are electronic databases that track controlled substance prescriptions. Now PDMPs can support authorities' and providers' timely information about patient and prescribing behaviors that contribute to opioid abuse and facilitate a directed and resourceful response. PDMPs have allowed providers to review the patient's history prior to authorizing a prescription. PDMPs have grown from 35 states in April 2011 to 49 states, the

District of Columbia, and Guam in 2022.<sup>5,6</sup> In addition, the Centers for Medicare & Medicaid Services implemented a mandate for electronic prescribing that started on January 1, 2022. This mandate required all controlled drugs covered by Medicare Part D to be dispensed through EPCS.<sup>7</sup> Many local and state laws have been implemented to better track controlled substance prescriptions using e-prescribing technology and PDMPs.<sup>8</sup> The National Association of Boards of Pharmacy system has facilitated the transfer of the PDMPs across state lines, and many states now have working interfaces to make multistate data retrieval easier.

To limit the likelihood of drug abuse and diversion, the Drug Enforcement Administration (DEA) has acknowledged the importance of ensuring that the rules regulating electronic prescriptions do not unintentionally enable abuse and diversion.<sup>9</sup> As a result, the DEA's Interim Final Rule on EPCS went into effect in June 2010, allowing for e-prescribing and laying out the rules for its use in the United States.<sup>10</sup> Pharmacies, pharmacy system vendors, prescription system application vendors, and providers were all subject to the rules.

### Results

EPCS aimed to reduce prescription opioid addiction, abuse, diversion, and death.<sup>10</sup> Additionally, EPCS can improve efficacy, quality, and safety and ultimately help reduce workload in the dispensing phase.<sup>11</sup> EPCS can also improve efficiency, quality, and safety. EPCS has enhanced patient management and reduced prescription fraud associated with paper prescriptions.<sup>12</sup> EPCS has gained popularity because of its ability to detect and prevent opioid diversion by removing paper prescriptions and allowing cross-referencing of PDMP databases.<sup>13</sup>



With up to 9% of opioid paper prescriptions suspected of being forged or fraudulent, the widespread use of EPCS has substantially influenced opioid prescribing.<sup>14</sup>

EPCS has reduced stealing prescription pads or printing them and writing illegitimate paper prescriptions, altering a legitimate prescription to obtain a higher dose or more dosage units (eg, changing a 10 to a 40), and altering a prescription record at the pharmacy to hide diversion from a pharmacy stock, according to the DEA.<sup>14</sup>

The results of a case study conducted at Yale New Haven Health System between February 2017 and August 2017 showed that the median number of opioid pills prescribed per surgery was reduced from approximately 30 pills before the prescription default modification to approximately 20 pills following the change in the prescription default.<sup>3</sup> Prescriptions issued for 30 pills were reduced from 39.7% before the EPCS to 12.9% after the EPCS adoption, whereas prescriptions written for 12 pills rose from 2.1% before EPCS to 24.6% after EPCS. The number of prescriptions written for 20 tablets increased significantly from 12.2% before EPCS to 19.6% after EPCS. After acquiring EPCS, the total opioid prescription was reduced by 34.41 morphine milligram equivalents.<sup>3</sup>

In another study done at a dental facility in New York, over 3 months before the required PDMP and between December 1, 2013, and February 28, 2014, after PDMP implementation, the most prescribed opioid analgesics were codeine, hydrocodone, and oxycodone.<sup>15</sup> Following the mandated PDMP's introduction, there was a general trend toward fewer opioid prescriptions and more nonopioid analgesic prescriptions by the end of the trial, with the total number of opioid analgesics prescribed over 3 months dropping from 5096 to 1120 pills, a 78% decrease in absolute numbers.<sup>15</sup>

## Conclusion

EMRs, EPCS, and PDMPs have become essential tools in health care. They have curbed prescription errors, facilitated monitoring prescribed controlled substances, increased safety, and reduced possible abuses. In addition, EMRs and EPCS have

provided a complete record of controlled substance prescriptions, monitoring both patients and physicians. These have been essential tools for law enforcement initiatives, public health agencies, and pharmacists to combat the opioid epidemic that has affected millions of Americans. ■

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## ABOUT THE AUTHORS

**ALBERTO COUSTASSE, DRPH, MD, MBA, MPH,** is a professor of healthcare management and administration at Marshall University Lewis College of Business in Charleston, West Virginia.

**KEN MAXIK, MBA, BSPHARM,** is vice president of pharmacy operations at HealthTrust Supply Chain in Largo, Florida.

**CRAIG KIMBLE, PHARM, D, MS, BCACP,** is an associate professor of pharmacy practice, administration, and research, director of experiential learning, and manager of clinical support services at Marshall University School of Pharmacy in Huntington, West Virginia.



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