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Getting Connected:

The Outlook for Electronic Prescribing in California

Introduction

Over the past three years, electronic prescribing (e-prescribing) has gained considerable attention from policymakers at both the state and national level. Successful pilot projects in Florida, Massachusetts, southeast Michigan, and elsewhere have demonstrated the technology's value to providers, health plans, pharmacies, and patients in improving patient safety, producing efficiency, and reducing out-of-pocket expenses. However, despite the considerable benefits of e-prescribing, it has yet to be widely adopted. Persistent barriers remain, including the costs involved in implementing the technology at provider practices, clinics, and pharmacies; legal restrictions that prevent electronic prescribing of controlled substances; and fees associated with using e-prescribing networks.

This year, Congress passed the Medicare Improvements for Patients and Providers Act (MIPPA), a package that mandates e-prescribing incentive payments starting in 2009 and imposes penalties for those who do not adopt e-prescribing by 2012. The introduction of such federal incentives (which often prompt private payers to follow suit) has sharpened the focus on e-prescribing. This issue brief examines the technology's progress in California and describes how greater alignment of health care stakeholders can stimulate adoption.

Accelerating e-prescribing adoption in California will require a coordinated effort from all stakeholders. This could include advocacy to model state policy after federal legislation and education to describe benefits that generate support for e-prescribing programs. Collaboration among payers to align incentives (and penalties) to support e-prescribing by contracted providers and similar programs for pharmacies should be considered. Finally, providers and pharmacies may need tools and technical assistance to support e-prescribing.

Background

Paper-based prescribing processes are inefficient; relying on phone calls and faxes between pharmacies and physician offices can account for up to 25 percent of pharmacists' time and 20 percent of the workload for the staff in physician offices.¹ In California, the administrative cost associated with dispensing drugs for a Medicaid beneficiary is \$13.18 per prescription—the highest in the nation.²

Paper-based prescribing is also unsafe. The Institute of Medicine estimates that, nationwide, as many as 7,000 people die each year from medication errors. Most of these deaths could be avoided if providers had access to accurate and

Definition of E-Prescribing

E-prescribing is the transmission, using electronic media, of prescription or prescription-related information between a prescriber, dispenser, pharmacy benefit manager, or health plan, either directly or through an intermediary, including an e-prescribing network. E-prescribing includes, but is not limited to, two-way transmissions between the point of care and the dispenser.

Centers for Medicare and Medicaid Services. 42 C.F.R. Part 423.

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complete information about their patients and could avoid writing their prescription orders by hand.³

Americans increasingly rely on prescription medicines to manage their health. Fifty-one percent of children and adults in the United States are taking one or more prescription drugs for a chronic condition, and one in four seniors are taking five or more medicines regularly.⁴ Given the increased administrative burden imposed by the growing demand for drug therapies, e-prescribing has the potential to help reduce costs while improving patient safety and the quality of care.

The State of E-Prescribing in California

In 2007, California's retail pharmacies filled more than 268 million prescriptions. Of these transactions, an estimated 2.4 million were sent electronically between physician practices and pharmacies.⁵ While this is a significant improvement from the 311,097 recorded in 2005, it represents only 1.2 percent of the total prescriptions written in California each year.⁶ (These figures do not include closed systems such as Kaiser Permanente or the Veterans Administration; prescriptions generated electronically and printed at the point of care; or those sent to pharmacies via fax.)

Physicians who want to switch to e-prescribing face a myriad of barriers, including technology costs, productivity and workflow disruption, and lack of technical support. Successful initiatives are characterized by providers who:

- Have realistic expectations for and understanding of e-prescribing;
- Effectively integrate e-prescribing technology into their clinical workflow; and
- Receive sufficient technical support, either from on-site staff or a helpdesk.⁷

Connecting Providers and Payers

E-prescribing is most valuable to providers when it gives them complete information about their patients. The majority of such information, including pharmacy history, insurance eligibility, and formulary information is delivered to providers through RxHub, a network of three major pharmacy benefit managers who formed a joint venture in 2001 to enable electronic data exchange. Through this network, providers can retrieve a patient's eligibility, medication history, and formulary information from health plans that make it available. According to one national survey, such transparency may account for as much as 70 percent of the value and patient safety benefits attributable to e-prescribing.⁸ In California, however, it is estimated that less than 30 percent of payers are making this information available through RxHub.⁹

Connecting Providers and Pharmacies

Retail pharmacies and physicians transmit prescription information electronically using the SureScripts network. SureScripts was founded in 2001 by the National Association of Chain Drug Stores (NACDS) and the National Community Pharmacists Association (NCPA). In 2008, SureScripts reported that 70 percent of California's 6,557 retail pharmacies were able to connect with the Pharmacy Health Information Exchange (PHIE) network, yet only 53 percent use it regularly. On the provider side of the transaction, the inability to connect to a particular pharmacy through the PHIE means physicians must revert to using handwritten, printed, or faxed prescriptions. The interdependency between providers and pharmacies highlights the importance of the local pharmacy participation and the need to promote pharmacy readiness alongside provider adoption. Encouraging e-prescribing will require that both pharmacies and providers receive adequate technical assistance and support.

E-Prescribing Tools and Standards

Technology vendors offer both stand-alone applications and e-prescribing tools embedded in electronic health

record systems. Over 130 technology vendors are able to route prescriptions to retail pharmacies using the PHIE and over 50 vendors have access via RxHub.¹⁰

E-prescribing also requires the use of standards to exchange data. A successful 2006 Centers for Medicare and Medicaid Services (CMS) pilot project resulted in a final CMS rule requiring Medicare providers to follow the approved standards beginning in April 2009. The rule details key components of the e-prescribing standard, including:

- Formulary and drug benefit plan information;
- Medication history;
- Fill-status notification; and
- Required use of the National Provider Identifier system mandated under the Health Insurance Portability and Accountability Act of 1996.

Other medication standards, terminology, and real-time prior-authorization standards are being refined.

Polycymaking and E-Prescribing

California

Citing the overwhelming number of patient deaths and costs due to medical errors and adverse drug interactions, Governor Arnold Schwarzenegger proposed universal e-prescribing by 2010 as a key component to achieving affordable, safe, and accessible health care for all Californians.¹¹

California's legislative leadership has also highlighted the need to support greater adoption of e-prescribing. In California, the Medication Errors Panel, authorized through a resolution introduced by Senator Jackie Speier, recommended that the state improve prescription transcription and transmission processes by supporting the adoption of e-prescribing.^{12,13}

Federal Support

A number of federal agencies, most notably CMS and the Drug Enforcement Administration (DEA), are taking steps to support e-prescribing, either through modifications to existing programs or regulations.

Medicare Package

In July 2008, Congress passed the Medicare Improvements for Patients and Providers Act, which includes e-prescribing incentives and penalties that combine to impose a carrot-and-stick approach to promoting broader adoption. The law provides a reimbursement bonus of 2 percent for providers who have switched to e-prescribing by 2009, an amount that shrinks to 1 percent in 2011 and 0.5 percent in 2013. Providers who fail to make use of the technology will begin to see their payments reduced by 1 percent in 2012, 1.5 percent in 2013, and 2 percent in 2014 and beyond.

The CMS planning efforts around the rule's implementation include regional telephone briefings and a national conference to explain the new e-prescribing incentives for Medicare and address potential obstacles.

Medicare Part D

The most immediate change likely to spur e-prescribing adoption is the Medicare Part D requirement that prescription drug plans accept such transactions. The federal mandate applies to patients and prescriptions covered under Medicare Part D and will become effective in April 2009. The data sharing that must be supported between providers and pharmacies include:

- Patients' medication histories;
- Health plan formularies and benefits information, including the availability of generic drugs; and
- Prescription fill-status notification, enabling pharmacies to alert providers when patients' prescriptions are dispensed.¹⁴

In anticipation of these requirements, payers are upgrading their systems to accept and support electronic transactions before the April 2009 deadline. Because payers' reimbursement structures tend to follow CMS's lead, it is expected that those participating in Medicare Part D will likely extend their electronic prescribing capabilities to other lines of business.

DEA-Proposed Rule Change

The Drug Enforcement Administration prohibits controlled substances (Schedule II-V drugs) from being prescribed electronically. This presents a significant hurdle for e-prescribing providers who are forced to maintain parallel workflows—an electronic one for non-controlled substances and a paper process for controlled drugs. A proposed rule from the DEA would impose tight controls for e-prescribing of controlled substances with several restrictions. In anticipation of the DEA's rule change, the California Legislature has enacted a statute stating that electronic prescriptions need not be replicated on paper.¹⁵ However, until the DEA modifies its Schedule II-V standards, California pharmacies must continue to create paper copies of these prescriptions.

Regional Pilot Programs

While state and national leaders are focused on developing policies and financial incentives to encourage adoption of e-prescribing, privately funded initiatives are fostering their own efforts that may provide insights into best practices, as well as useful lessons. Together, these programs have the potential to demonstrate e-prescribing's value to providers throughout the spectrum of care settings, including rural and safety-net clinics and private practices.

L.A. Care Health Plan

The L.A. Care Health Plan is the largest public health plan in America, with 10,000 physicians serving 780,000 members from low-income and vulnerable populations. L.A. Care is providing a stand-alone e-prescribing system and training to 150 high-volume prescribers. The pilot

project includes an incentive program, as well as baseline and follow-up surveys to measure physician satisfaction. Benefits identified to date include time savings to providers and staff from electronic renewals and the elimination of illegible handwriting; fewer adverse drug interactions; and greater use of generic medications.

Regional Successes Across the Country

Florida: *ePrescribe Florida* is a collaborative effort driven by Florida health plans. To date, the collaborative has released a registered vendor list tied to the state's existing pay-for-performance program and developed a Web "clearinghouse" designed to foster the adoption of e-prescribing throughout the state. The clearinghouse can be found at www.fhin.net/eprescribe/Index.shtml.

Massachusetts: *Massachusetts Health Data Consortium* (a.k.a. MA-SHARE) members initiated a project in 2006 to provide e-prescribing capability to the state's two largest academic medical centers. The resulting RxGateway product is intended to be a springboard for larger clinical data exchange. The participating payers harmonized their incentives to encourage physician adoption.

Michigan: The *Southeast Michigan E-Prescribing Initiative (SEMI)*, initiated by the region's major automotive employers, used direct incentives to encourage physicians to adopt e-prescribing technology. Active in seven counties, SEMI is approaching 3,000 prescribers and generating 4,000 prescriptions per month.

Mississippi: The state Medicaid program has reported over \$14 million in savings following the implementation of an e-prescribing and clinical decision-support system for over 200 providers. Providers are able to access 100-day prescription histories and other tools for Medicaid patients via handhelds and a mobile-phone network.

Northern Sierra Rural Health Network

The Northern Sierra Rural Health Network (NSRHN) is implementing e-prescribing through a stand-alone application, meaning one that is not integrated with an electronic health record system. The pilot program,

funded by the Blue Shield of California Foundation and the California HealthCare Foundation, includes rural hospitals, clinics, providers, and pharmacies, as well as the SureScripts-RxHub network, and the California Department of Health Care Services (DHCS). DHCS is sharing eligibility, formulary information, and medication histories to participating NSRHN pilot sites. The project will bring the data to six clinics and two hospitals over 12 months.

California Health Care Safety Net Institute

The California Health Care Safety Net Institute (SNI) promotes quality improvement and innovation among the members of the California Association of Public Hospitals and Health Systems (CAPH). SNI designed a program to promote safe and efficient e-prescribing practices for the underserved and uninsured in California's public hospital clinics. SNI has engaged four CAPH member organizations, their outpatient pharmacies, and two outpatient clinics per site in a pilot program to extend e-prescribing technology to ambulatory care providers. As the sites go live with their selected e-prescribing tools throughout 2009, CAPH hopes that the program will help pave the way for broader use among their remaining member public hospitals and health systems.

A Framework for E-Prescribing Adoption in California

The California HealthCare Foundation recently conducted a California market assessment in which more than 30 health care industry leaders were interviewed about their respective roles in advancing e-prescribing. Stakeholders discussed strategies for overcoming barriers, suggested tactics to accelerate adoption, and identified several key objectives to support a statewide program:

- 1. Increase payer participation.** The majority of California payers are not connected to RxHub, limiting the value of e-prescribing to most providers. The April 2009 Medicare Part D requirement is a critical incentive that can be used to expand payers' ability to provide information about a patient's insurance eligibility, formulary, and medication history as part of electronic transactions.
- 2. Increase pharmacy participation.** Thirty percent of California's retail pharmacies cannot electronically receive or transmit prescriptions. Most connected pharmacies are members of or affiliated with large chains, while smaller and independent pharmacies are less likely to be connected and are thus impeding providers' abilities to route electronic prescriptions to their patients' pharmacies of choice.
- 3. Increase provider adoption.** Most of the providers who now use e-prescribing are affiliated with large closed systems. While California's physicians are distributed across urban and rural regions and among various practice sizes and settings, the majority provide patient care in solo and small group practices. Targeted efforts and investments should be made to overcome barriers to adoption in solo and small group practices, including cost and lack of technical support.
- 4. Raise awareness and demand among purchasers and consumers.** Communications targeted to the health plans, employers, and consumers outlining the benefits of e-prescribing are limited to a few national initiatives and resources. As more purchasers and consumers understand how e-prescribing can improve convenience, communication, and patient care, they will direct business toward health systems that use electronic methods.

Recommended Approaches for Adoption

Accelerating e-prescribing adoption in California will require a coordinated, multi-stakeholder effort. The approach could focus on three categories: (1) strategies for improving e-prescribing awareness that address privacy issues and education for consumers, providers, and pharmacies; (2) collaboration to ensure alignment of incentives and a shared common vision and objectives; and (3) support for providers and pharmacies to help them implement e-prescribing technology.

Advocacy and Education

To gain traction, e-prescribing initiatives should increase visibility and define the technology's benefits and progress to decisionmakers. In addition, stakeholders could encourage the state to consider modeling a policy on the recent successful federal Medicare legislation, following through on the governor's recommended legislative language outlining specific e-prescribing activities and acting on the recommendations of the Medication Errors Panel.

Stakeholders should create a forum for developing models that describe the benefits of e-prescribing to their constituencies, and guide executive-level understanding and support for e-prescribing programs. A statewide education campaign could help promote understanding of e-prescribing among consumers and purchasers.

Collaboration

Preparing for the broad adoption of e-prescribing will require that providers, payers, and pharmacy organizations find ways to coordinate their efforts and bring their incentives into alignment. Many successful e-prescribing initiatives across the country rely on varying levels of collaboration, ranging from loose affiliations to public-private partnerships with formal governance structures convened under executive mandate.¹⁶ Exploring the spectrum of collaborative models will help determine the appropriate level of public and private stakeholder engagement and investment necessary to develop a statewide e-prescribing program for California.

Program Support

Greater adoption of e-prescribing is predicated upon the development and distribution of technical, implementation, and operational tools for providers and pharmacies. By enabling them to optimize and manage the technology, as well as supporting their willingness to use it, those who have not yet made the switch to e-prescribing may become more open to its possibilities.

Conclusion

California policymakers face a difficult task in spearheading the promotion of e-prescribing and will need to develop a comprehensive strategy to support providers, pharmacies, and patients. While the sheer size and diversity of California's population and health care infrastructure is daunting, coordination of public and private sector initiatives, actions, and programs is necessary.

For their part, California stakeholders must also come together to develop and agree upon a statewide plan that sets forth goals and principles to support e-prescribing and ensure accountability. Such a plan cannot be led by any one stakeholder alone—it is dependent upon all to align their efforts and achieve success.

ABOUT THE AUTHOR

Timathie Leslie, managing director, Manatt Health Solutions
Libby Sagara, manager, Manatt Health Solutions
Kier Wallis, analyst, Manatt Health Solutions

ABOUT THE FOUNDATION

The California HealthCare Foundation is an independent philanthropy committed to improving the way health care is delivered and financed in California. By promoting innovations in care and broader access to information, our goal is to ensure that all Californians can get the care they need, when they need it, at a price they can afford. For more information, visit www.chcf.org.

ENDNOTES

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