

**A Plan to Improve Adoption and Use of E-prescribing in Oregon**

**Office of Health Information Technology**

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## I. Executive summary

Improving the adoption and functionality of e-prescribing is a priority for the Office of the National Coordinator for Health Information Technology (ONC) and Oregon's Health Information Technology Oversight Council (HITOC). HITOC strongly believes in stakeholder and community engagement to improve the use of health information technology (HIT) and health information exchange (HIE). HITOC's commitment to stakeholder and community engagement in order to facilitate adoption of health information technology (HIT) and health information exchange (HIE) was reflected in the development of a 2010 stakeholder advisory group dedicated to improving e-prescribing in Oregon. The stakeholders chose to survey the three major pharmacy groups in Oregon: chain, independent and hospital pharmacies to identify barriers. The background section of this plan details the findings and challenges the pharmacy community continues to experience with e-prescribing. The Office of Health Information Technology (OHIT) provides the staff support and resources to execute this plan.

The goal of this plan is to increase adoption and ongoing usage of e-prescribing in order to improve patient safety and prescribing efficiency.

From the environmental scan and other activities, Oregon has identified the following priorities for the plan:

1. Increase e-prescribing adoption rates among prescribers and independent pharmacies
2. Improve the reliability of e-prescriptions sent by prescribers
3. Encourage the use of electronic refill requests and other advanced features
4. Support eligible providers in achieving Stage 1 Meaningful Use
5. Enhance the healthcare community's understanding of e-prescribing
6. Encourage the use of e-prescribing for discharge and out-patient medications in Oregon hospitals

The plan is broken up into three timeframes, Phase 1, Phase 2, and ongoing. Phase 1 tactics address immediate needs in 2011 such as educational materials and encouraging e-prescription accuracy improvements. At the end of 2011, the stakeholder group will reassess the environment and the needs for phase 2. Possible phase 2 tactics include developing materials for other audiences (long-term care, hospitals) and supporting hospitals' ability to meet the Meaningful Use criteria in Stage 2.

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## III. Background

### Environmental Scan

In 2011, OHIT conducted an environmental scan of the pharmacy community. Outreach activities focused on three pharmacy segments: chain, independent and hospital pharmacies. The OHIT e-prescribing stakeholder group decided to target each group after conducting an online survey in February 2011 that returned a low response rate. The independent and chain pharmacies received phone calls to ask them about their experience with e-prescribing. The hospital pharmacies responded through a second online survey tool. Outreach and survey results are presented in Appendix II. Along with the responses, the environmental scan included an analysis of the current data available on e-prescribing adoption among pharmacies and prescribers. The Office of the National Coordinator for Health IT (ONC) provided the data and OHIT staff conducted the analysis.

### Chain Pharmacy Outreach

The chain pharmacies in Oregon have an e-prescribing adoption rate of 96.5%<sup>1</sup>. Due to this high adoption rate, the stakeholder group decided a survey was not required for this group and instead conducted informal calls to chain contacts. A stakeholder member contacted individual chain contacts and asked them about their experience with e-prescribing and what challenges they have encountered.

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<sup>1</sup> Refer to the e-prescribing activity data provided in the appendices.

The data showed that the majority of chain pharmacies in Oregon had adopted electronic “new prescription” functionality; however, the outreach found that many continue to use electronic faxing to request prescription refills. Electronic faxing is less expensive for pharmacies and already ingrained in the current workflow of chain pharmacies. In addition to cost, the chains identified e-prescribing errors, changes to workflow, and lack of resources to troubleshoot as barriers to adoption. To address these concerns, OHIT will encourage chain pharmacies to use the full functionality of e-prescribing and employ tactics to that end.

### **Independent Pharmacy Phone Outreach**

After fielding an online survey in February 2011 with a low response rate, the workgroup decided to make individual calls to these pharmacies. A third year doctoral pharmacy student conducted phone outreach to these pharmacies to understand their current operations and to identify barriers to e-prescribing. E-prescribing data from July 2010 identified 62 independent pharmacies that had not adopted any e-prescribing functionality, and these were included in the call lists.

Responses revealed that independent pharmacies are interested in more information on adopting e-prescribing and have experienced similar barriers as chain pharmacies. These pharmacies also found challenges with the transaction costs, security, lack of internet access and a lack of e-prescribing standards for long-term care and compounding pharmacies. 30% of the respondents had adopted e-prescribing since July 2010 and many were beginning the process. OHIT will focus on material development and educational outreach to the remaining independent pharmacies without e-prescribing capability, and encourage adoption and ongoing use.

### **Hospital Pharmacy Directors Online Survey**

To achieve Stage 2 Meaningful Use, as current proposed, eligible hospitals need to e-prescribe 50% of discharge and outpatient prescriptions. Based on a 2010 environmental scan of Oregon hospitals, the workgroup identified this as an important topic to discuss with hospitals to identify potential workflow changes and determine if any additional support is needed. The survey was fielded in collaboration with the Oregon Association of Hospitals and Health Systems.

Oregon invited 54 hospital pharmacy directors to participate in the online survey and 20 submitted a response. Results found that ten hospitals do not use e-prescribing to order discharge medications currently. However, nine of the ten hospitals have plans to add that functionality within the next two years. Due to a proposed extension of the timeline to meet the Stage 2 requirements, this information will be used as background for future surveys and outreach efforts in 2012 (phase 2 of this plan).

### **E-prescribing Adoption Data – ONC provided**

OHIT analyzed e-prescribing adoption data provided by the Office of the National Coordinator of Health IT (ONC) in spring 2011. This analysis is referenced in Appendix II.

The data displayed a high adoption rate among chains and a growing adoption rate for other pharmacies. This analysis provides OHIT a baseline for monitoring the success and any remaining challenges with e-prescribing adoption and use. Evaluation of e-prescribing data will occur on an ongoing basis.

## E-prescribing Challenges

This list summarizes the top barriers identified in the environmental scan to adopting and improving e-prescribing use in Oregon.

- Prescriber errors when writing and transmitting electronic prescriptions to pharmacies
- High cost of Surescripts transaction fees borne by the pharmacies
- Lack of coordination between prescribers and pharmacies to support e-prescribing workflows
- EHR vendor configurations that do not facilitate accurate e-prescription generation
- Pharmacies don't trust the accuracy of e-prescriptions
- Faxing a refill request is cheaper, automatic and fits in the workflow for pharmacies
- Lack of education and understanding about e-prescribing in the healthcare community
- Many independent pharmacies do not have Surescripts certified dispensing systems
- Lack of business incentives or savings for pharmacies to participate in e-prescribing
- DEA rules and standards for controlled substance e-prescriptions are onerous and have not been adopted by prescribers
- Some prescribers and hospitals must change workflow and technology to adopt e-prescribing
- Lack of standards for long-term care e-prescribing transactions and low technology adoption in the long-term care community

## V. Approach

OHIT will employ a phased approach to achieve e-prescribing goals. Three phases were identified:

- Phase 1: Implementation in 2011
- Phase 2: Implementation in 2012 - 2014 (timeline may shift if resources become available)
- Ongoing: Tactics will start in 2011 and continue in future years

The following tables provide an audience-segmented overview of the implementation plan focused on maximizing return on investment. Each tactic is explained in further detail in the text following the table. In order to determine which tactics have the highest impact, the table identifies the presumed contribution to the goal (Impact), and the resources (Effort) committed to each audience affected during Phase 1 using a High, Medium, and Low scale.

### Phase 1

Tactics	Prescribers (Eligible Providers)		Independent Pharmacies		Chain Pharmacies		LTC Community		Patients		EHR Vendors	
	Impact	Effort	Impact	Effort	Impact	Effort	Impact	Effort	Impact	Effort	Impact	Effort
Develop and distribute educational materials to promote e-prescribing adoption and functionality												
Improve prescriber accuracy and promote EHR configuration												
Engage and collaborate with stakeholders and the community												

### Develop and distribute educational materials to promote e-prescribing adoption and functionality

This tactic addresses findings from the environmental scan (phone outreach, surveys, and ONC Surescripts data). It was identified in the scan that prescribers' full adoption of e-prescribing and the lack of accuracy of e-prescriptions are significant barriers to Oregon eligible providers adopting e-prescribing as a step

toward receiving EHR incentive payments by achieving Meaningful Use. In addition, it was identified that vendor EHR products and configurations could be improved to enhance e-prescription accuracy and transmission.

OHIT will take the following steps to complete this tactic:

- 1) Identify and review existing e-prescribing materials to promote the highest quality, most concise content for distribution and promotion of e-prescribing.
- 2) Distribute RAND Health, Surescripts and e-Health Initiative Clinician Guide to e-Prescribing materials to educate prescribers, independent pharmacies and vendors about e-prescribing. The highest priority is to reach out to prescribers and vendors. OHIT will act as the conduit for these materials to these key audiences.
- 3) Collaborate with the colleges of pharmacy at Pacific University and Oregon State University to identify internship opportunities to promote e-prescribing using the materials mentioned above, educating students about e-prescribing and promoting having students work with prescribers during the students' internship assignments to improve electronic prescribing accuracy and EHR configuration.
- 4) Distribute a piloted e-prescribing toolset developed by RAND Health to identified independent pharmacies who requested more information about e-prescribing during the phone outreach to encourage adoption and support.
- 5) Promote the application of interested independent pharmacies to participate in the RAND Health pilot project.

### **Improve prescriber accuracy and promote EHR configuration to support error reduction**

This tactic was identified as an issue during the independent pharmacy and chain pharmacy outreach efforts. Both groups identified the need for more accurate e-prescription entry by the prescribers (eligible providers) so that pharmacies will not have as many call backs and follow up issues with electronic prescriptions. Both indicated they would use e-prescribing more frequently if accuracy was improved.

OHIT will take the following steps to complete this tactic:

- 1) Provide information from the outreach and surveys conducted to O-HITEC, Independent Physician Associations (IPAs), Oregon Medical Association, Oregon Primary Care Association (OPCA), the ONC Community of Practice, Medicaid EHR Incentive Program staff, and additional professional associations to generate support to encourage vendors to enhance and improve their EHR products to support e-prescribing accuracy and ease of use for prescribers.
- 2) Engage with Oregon's Regional Extension Center (O-HITEC) to support e-prescribing accuracy and easily configured EHR functionality and selection options for prescribers. O-HITEC can encourage and assess their clinics with EHRs for e-prescribing functionality, such as medication master files, preference lists, available fields and decision support. These advance functions improve accuracy and transfer.
- 3) Engage with Oregon's Regional Extension Center (O-HITEC) to work with their preferred vendors to improve medication master file configuration, preference lists, favorites, etc. to avoid prescriber selection errors when initiating an electronic prescription.
- 4) Encourage enhanced communication between prescribers and pharmacies through raising awareness of e-prescribing accuracy and distributing materials (see above) that promote e-prescribing adoption.

Seek to identify funding for underwriting an e-prescribing assessment process for prescribers that helps them evaluate their EHR e-prescribing configuration, clinic work flows and competency.

## Engage and collaborate with stakeholders and the community

HITOC believes in strong stakeholder and community engagement to improve policy and drive change.

OHIT will take the following actions to complete this tactic:

- 1) Leverage the HITOC – O-HITEC collaboration and other key committees and organizations.
- 2) Promote the educational materials mentioned above through collaboration with the Oregon Regional Extension Center (O-HITEC) and the Medicaid EHR Incentive Program to promote e-prescribing to eligible providers.
- 3) Continue to seek stakeholder input during implementation of phase 1 and reassess progress.
- 4) Inform professional organizations and other forums in Oregon of e-prescribing webinars, speakers and educational materials to provide educational opportunities for prescribers and pharmacies to learn more about e-prescribing.
- 5) Flag that the e-prescribing educational material needs to be incorporated into any consumer materials that are developed and distributed by the Office of Health Information Technology. Also, educate the Consumer Advisory Panel about e-prescribing.

## Phase 2

During the last quarter of 2011, the HITOC stakeholder group will re-evaluate progress. Below is a table of the phase 2 tactics that have been identified for consideration at this time. Regional and federal e-prescribing incentives and activity will help inform the Phase 2 plan.

Tactics	Prescribers (Eligible Providers)		Independent Pharmacies		Chain Pharmacies		LTC Community		Patients		Hospitals		EHR Vendors	
	Impact	Effort	Impact	Effort	Impact	Effort	Impact	Effort	Impact	Effort	Impact	Effort	Impact	Effort
Develop and distribute educational materials to promote e-prescribing adoption and functionality														
Improve prescriber accuracy by promoting EHR configuration														
Engage and collaborate with stakeholders and the community														

## Develop and distribute educational materials to promote e-prescribing adoption and functionality

In phase 2, OHIT will additionally target the long-term care (LTC) community and hospitals with education materials about e-prescribing while continuing to focus on the prescriber and EHR vendor audiences. Continue engaging and collaborating with stakeholders and the community.

OHIT is currently conducting an environmental scan of the LTC community to assess technology needs. OHIT will coordinate any efforts resulting from the environmental scan with information on e-prescribing.

OHIT will engage hospital administration during phase 2 to promote the use of HIE and support hospitals in achieving Meaningful Use. During the environmental scan, pharmacy directors were surveyed to determine preparedness. Many hospitals do not currently send discharge or out-patient prescriptions as e-prescriptions, which is a requirement in Stage 2 of Meaningful Use (proposed). An action plan will be developed for this tactic that supports hospitals achieving Stage 2 e-prescribing requirements once Stage 2 Meaningful Use is finalized by CMS, and the timing for Stage 2 is announced.

OHIT will have data available on consumer attitudes to help inform the development of consumer educational materials on e-prescribing and health information exchange (HIE).

## Improve prescriber accuracy by promoting EHR configuration and collaborate with stakeholders

Assess progress from Phase 1 activities and identify needed next steps.

## Ongoing

Starting in 2011, OHIT will implement the tactics below on a continuing basis.

Tactics		
	Impact	Effort
Establish and monitor e-prescribing metrics for monitoring adoption and activity in Oregon		
Participate and monitor national initiatives and standards		
Engage and collaborate with stakeholders and the community		

## **Establish and monitor e-prescribing metrics for monitoring adoption and activity in Oregon**

OHIT will use Surescripts, CMS, and ONC data, as well as Oregon-specific environmental scan evidence to support strategies to improve e-prescribing, follow adoption progress, and monitor eligible providers who achieve meaningful use in Oregon. The intention is to design metrics that align with national standards and allow Oregon to compare progress against other states and the nation. A report about e-prescribing metrics will be created quarterly as ONC provides Surescripts data for Oregon. Goals and tactics will be developed on an annual basis using these metrics as the foundation.

OHIT will also monitor and collaborate around state initiatives and programs, such as the Prescription Drug Monitoring Program, Oregon Prescription Drug Program, the Medicaid EHR Incentive Program, and the Department of Medical Assistance Programs.

Based upon the metrics reported and results achieved, quarterly reminders will be generated and distributed to pharmacies who haven't adopted e-prescribing to encourage adoption.

## **Participate and monitor initiatives and standards (state and national)**

OHIT staff participates and finds value in the ONC Communities of Practice e-Prescribing calls (CoP). The CoP gives Oregon the opportunity to exchange information with other states on best practices and challenges. OHIT will continue to actively participate in the CoP and other forums that promote e-prescribing. OHIT will continue to monitor national e-prescribing initiatives and standards as they develop including certification standards for e-prescribing for EHRs.

OHIT will monitor the national incentive programs including the Medicaid and Medicare EHR Incentive programs, and the Medicare E-prescribing Incentive Program.

OHIT will monitor opportunities where Direct messaging services can be leveraged to replace the use of electronic fax in the pharmacy and prescriber community. In Oregon, many pharmacies continue to use electronic fax to send refill requests and most Long-term care communities use electronic faxes to send new prescriptions and refill requests. Secure Direct messaging services could be used as a low cost option to replace electronic fax where appropriate. A brief describing Direct in more detail is available in the appendix IV.

OHIT will monitor activities at the NCPDP, including the Long-term Care and Post-acute workgroup developing e-prescription standards for the long-term care community. National Council for Prescription Drug Programs (NCPDP) is a not-for-profit ANSI-accredited Standards development organization that both creates standards and provides guidance for information exchange of medications and other services within the healthcare system.

## VI. Stakeholder Organizations

Oregon will collaborate with public and private partners, including the list below, to reach the goal of improving e-prescribing adoption and functionality in Oregon in order to maximize the ability for providers to meet Meaningful Use objectives related to e-prescribing.

Electronic Health Record (EHR) Vendors

Medicaid Electronic Health Records Incentive Program

Office of National Coordinator for Health IT (ONC)

ONC Communities of Practice – E-prescribing

Oregon Academy of Family Physicians

Oregon Association of Hospital and Health Systems

Oregon Board of Pharmacy

Oregon Colleges of Pharmacy (Pacific University & Oregon State University)

Oregon Department of Medical Assistance Program (DMAP) & Medicaid Management Information System (MMIS)

Oregon Medical Association (OMA)

Oregon Prescription Drug Monitoring Program

Oregon Prescription Drug Program

Oregon Primary Care Association (OPCA)

Oregon Regional Extension Center (O-HITEC)

Oregon Society of Health-System Pharmacists

Oregon Society of Physician Assistants

RAND Health

Surescripts

## VII. Appendices

### I. Glossary

- **Health Information Technology Oversight Council (HITOC):** A statutory body of governor-appointed, senate-confirmed citizens, tasked with setting goals and developing a strategic health information technology plan for the state, as well as monitoring progress in achieving those goals and providing oversight for implementation of the plan.
- **Office of Health Information Technology (OHIT):** has been established within the Oregon Health Authority to facilitate coordination of planning and policies for health information technology and health information exchange within Oregon. OHIT enables Oregon to leverage resources and institutional knowledge across agencies, and will work to ensure that the adoption and implementation of health IT is as strategic and cost effective as possible.
- **Regional Extension Center (REC):** The extension program consists of regional extension centers and a national Health Information Technology Research Center (HITRC). The regional centers will offer technical assistance, guidance, and information on best practices to support and accelerate health care providers' efforts to become meaningful users of Electronic Health Records (EHRs). In Oregon, OCHIN runs the REC, which is known as O-HITEC.
- **E-prescribing:** Writing, ordering and filling prescriptions using electronic means. E-prescriptions are placed in the system directly and transmitted electronically. Staff inputting the prescription from the prescribers written or faxed prescription does not qualify as an e-prescription.
- **Electronic Health Records (EHR) Technology:** A system that contains electronic health records for individuals that can be created, managed and consulted by authorized clinicians and staff. EHR technology also performs functions concerning day-to-day operations and reporting.
- **Meaningful Use:** Is a set of criteria a provider must meet to show they are using certified EHR technology in ways that can be measured significantly in quality and quantity. (see Appendix III)
- **Office of the National Coordinator for Health Information Technology (ONC):** is the principal Federal entity charged with coordination of nationwide efforts to implement and use the most advance health information technology and the electronic exchange of health information.

### II. Environmental scans

- [Original Progress Report on E-prescribing](#) – October 2010
- [E-prescribing Survey for all Pharmacies](#) – February 2011 (low response rate)
- [Independent Pharmacy Phone Outreach Results](#) – April 2011
- [Hospital Pharmacy Survey Results](#) – April 2011
- [Surescripts-ONC E-prescribing Activity](#) – May 2011

### III. Reference

- [Direct Messaging Service Brief](#)
- [Meaningful Use Specification Sheet for Eligible Professionals](#)
- [Meaningful Use Specification Sheet for Eligible Hospitals](#)