



Overview of ePrescribing Solutions in Australia

A guide for General Practice

January 2010

What is ePrescribing?

ePrescribing refers to the secure electronic transmission of prescriptions from a GP's desktop to the dispensing pharmacy. With ePrescribing it is possible to not only ensure prescriptions are accurately and efficiently transferred from GP to pharmacy but can allow for medication information be made available securely in a wide range of healthcare settings from hospitals to community health centres and pharmacies.

Why is ePrescribing important?

ePrescribing provides both patient and practitioner with many benefits. Some of these are outlined below:¹

- **More appropriate prescriptions.** ePrescribing systems can track what medications an individual is currently taking, and what medications have been prescribed in the past. This ensures that doctors can be confident the prescription they write will work appropriately with the individual's other medications.

¹ <http://nehta.gov.au/e-communications-in-practice/emedication-management>

- **More efficient dispensing.** A pharmacist will no longer have to decipher handwritten prescriptions and will save time in dispensing medications because the required dosage and strength, as well as any other specific information, will all be contained in the electronic prescription.
- **Greater empowerment of patients.** Individuals will also have access to details of the medications they are currently taking and all the medication they have been prescribed in the past. This affords a greater sense of control over their health records.
- **Avoid hospitalisation or death due to adverse effects.** As doctors will be aware of all the medications an individual is taking, the opportunity to diagnose adversely affecting medications will be dramatically reduced.

NeHTA Perspective on ePrescribing

The National eHealth Transition Authority (NeHTA) is an organisation tasked with leading the progression of eHealth implementation in Australia.

NEHTA's strategy includes e-medication management (NEHTA's term for ePrescribing) project which focuses on achieving the secure and consistent transfer of prescription and medication information between health care providers to improve the quality and safety of healthcare.

The first phase is to establish national specifications for the electronic transfer of prescriptions between general practitioners and community pharmacy.

This will include:

- Unique identification of healthcare providers so there is certainty as to who generated the prescription and who dispensed the medication



- The capability to accurately transfer medication between systems with the Australian Medicines Terminology
- A standard secure way of sending that information and using common specifications to ensure a consumer can have their prescription filled regardless of the general practitioner or pharmacist they visit.

These components will support and enable future initiatives such as shared medications history lists, current medications lists and in the future contribute to individual electronic health records.

The draft electronic transfer of prescription specifications were released in October 2009 and following a period of consultation, final specifications are planned for release in March 2010 at which time NEHTA will be working with prescribers, dispensers and software vendors to support the implementation of electronic transfer of prescription nationally.

Australian ePrescribing Vendors

There are currently two ePrescribing vendors operating in Australia, eRX Script Exchange owned by the Pharmacy Guild of Australia and MediSecure supported by the Royal Australian College of General Practitioners and the Australian Association of Practice Managers.

Uptake of both solutions has been very successful since they launched in mid 2009 has been very successful, with a sizeable proportion of pharmacies, both large and small, expressing interest or signing up for one or the other, or both, of the systems.

While national ePrescribing standards are being developed by NeHTA, unfortunately no mechanism exists currently for these two products to share prescriptions between them. Both vendors have however indicated their intention to comply with national standards



when they become available and are working closely with NeHTA which should lead to interoperability in the future.

Vendor Comparison

In the current non interoperable environment, pharmacies and general practice have a choice whether to sign up with eRX, MediSecure or both. The following information on each product is provided to assist general practice in making that choice.

From a workflow perspective there is a great deal of similarity between the two products. What follows is a description of how each product handles key tasks.

Prescription Generation

Each product has an essentially identical workflow:

1. Within their clinical software, a GP generates a prescription and prints it out as normal. The only change is the addition of a barcode to the printed prescription.
2. At this point an electronic version of the prescription is sent to a secure server.
3. The patient takes the printed prescription to a participating pharmacy.
4. The pharmacist scans the barcode on the prescription and their system retrieves the electronic version from the server and auto-populates the prescription details into their dispensing system.

Each product uses their own central server and these servers are each accessible from all over Australia. This means a prescription generated in Hobart, can be dispensed in Perth (assuming that the prescribing GP and the dispensing pharmacy are using the same ePrescription service).



Repeat prescriptions

Each system allows for repeat prescriptions. Their server stores the number of allowable repeats left for each prescription. When a repeat prescription is dispensed, the server updates the number of repeats left.

If the electronic prescription was generated by the pharmacist (because the script did not come from a participating GP), it too stores the number of allowable repeats left and makes the repeat available to other pharmacies also using the system.

Planned and Owing prescriptions

Each system enables prescriptions to be requested in advance.

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Comparison Table

The below table provides a comparison of the eRx and MediSecure solutions in a number of areas.

	eRx Script Exchange	MediSecure
<i>Contact details and FAQs</i>	www.ernx.com.au	www.medisecure.com.au
<i>Contract</i>	No contract. Use is based on the acceptance of eRx terms and conditions which are available at the eRx website. No time commitment - pharmacies and GP clinics are free to cancel use at any time.	No contract. Pharmacies and medical practices sign a Licence to use MediSecure. Pharmacies and medical practices / GPs can stop using at any point.
<i>Cost to join – GPs</i>	No charge.	No charge.
<i>Cost to join – pharmacies</i>	No charge.	\$275 (inc. GST), but waived if nominated by a GP.
<i>Cost per transaction – GPs</i>	No charge	No charge
<i>Cost per transaction – Pharmacists</i>	25c per item dispensed. <i>For users of the eRx Script Exchange (the dispensing system), the Pharmacy Guild of Australia has pre-purchased 10.6 million scripts (the equivalent of 4.4% of the average number of scripts produced in a year). Until the total of pre-purchased transactions is reached, the relevant pharmacies do not pay.</i>	25c per item dispensed.
<i>Coverage</i>	For the latest figures on pharmacy uptake in your area, please contact eRx and MediSecure.	
<i>Technical support</i>	Available through the standard support	8am-5pm weekdays : 1800 4 SCRIPTS

	arrangements of the clinical software vendors.	1800 47 27 47
<i>GP software requirements</i>	<p>Any of the following (eRx Script Exchange is integrated within the clinical software):</p> <ul style="list-style-type: none"> • Best Practice • Medical Director 3 (available early 2010) <p>Further to the above, eRx has contracts with the following to integrate eRx Script Exchange:</p> <ul style="list-style-type: none"> • Zedmed • Genie • Stat Health • Virtual Practice • Houston Medical 	<p>Any of the following:</p> <ul style="list-style-type: none"> • Best Practice • Genie (available early 2010) • Medical Director 3 • Medical Director 2 • Zedmed • Stat Health (available in 2010) <p>In addition, a small program is required on the clinic's server to send the prescriptions.</p> <p>MediSecure manages the implementation and training for the practice – call 1800 4 SCRIPTS.</p>
<i>Pharmacy software requirements</i>	FRED	<p>Any of the following:</p> <ul style="list-style-type: none"> • CDC Forte • minfos • PharmacyPro • Corum LOTS • Corum AMFAC
<i>Other requirements</i>	Each product works by sending encrypted information over the internet. Therefore both the clinic and the pharmacy need a working broadband connection.	
<i>Dispense notification</i>	If patient consent is obtained, eRx automatically sends the dispense notification to the GP's clinical software,	Dispense notifications are securely viewed via an application installed on the GP desktop.

<p><i>Note: the AMA advises there may be a medico-legal risk if data from an external system is inserted into GP clinical software.</i></p>	<p>which stores the details (e.g. date of dispense, brand, quantity and dispensing pharmacy) for later viewing if desired.</p>	
<p><i>Security</i></p>	<p>Encrypts and transports the e-prescription using 3 layers of security including the GP's Medicare PKI location certificates.</p>	<p>Encrypts prescription details using the GP's Medicare PKI location certificates. X509 encryption standards.</p>
<p><i>Adoption of standards</i></p>	<p>HeSA PKI</p>	<p>HeSA PKI SA 4700.30:</p> <ul style="list-style-type: none"> • HL7 2.5 (Current interim Australian standard) <p>IT14:</p> <ul style="list-style-type: none"> • X509 encryption • HL7 2.5
<p><i>Secondary use of collected data</i></p>	<p>Not indicated</p>	<p>Terms of the licence limit use of data for ePrescription purposes only.</p>