



Overview of ePrescribing Solutions in Australia

A guide for General Practice

Version 3 - February 2010

What is ePrescribing?

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

Why is ePrescribing important?

While the benefits may not be immediately apparent in general practice, ePrescribing is a crucial stepping stone to achieving integrated, patient centred eMedication Management.

A nation wide integrated eMedication Management would provide both patient and practitioner with many benefits. Some of these are outlined below:¹

- **More appropriate prescriptions.** eMedication Management 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.
- **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 eMedication Management

The National E-Health Transition Authority (NEHTA) is the lead organisation supporting the national vision for e-health in Australia.

One of NEHTA's priorities is to coordinate the progression of the priority e-health solutions and processes. This includes e-medication management which encompasses prescribing, dispensing and administration, and achieving the secure and consistent transfer of prescription and medication information between health care providers to improve the quality and safety of healthcare.

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



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

This will likely 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.

NEHTA plans to release the electronic transfer of prescription specifications in March 2009 at which time they 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 Fred Health and endorsed by the Pharmacy Guild of Australia and MediSecure supported by the Royal Australian College of General Practitioners and the Australian Association of Practice Managers.

Both providers have described the mid 2009 launch of their products as being 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 exchange. Both ePrescribing 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.

ePrescribing Workflow in General Practice

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.

ePrescription Workflow

Each product has an essentially identical workflow:

1. Within their clinical software, a GP generates a prescription and prints it out as normal.
2. A barcode is added by the software to the printed prescription and 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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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 has been provided by eRX and MediSecure to assist general practice in making that choice.

This information is accurate as at 8 February 2010. For up to date information please contact the respective vendors directly.

| | eRx Script Exchange | MediSecure |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Contact details and FAQs</i> | www.erx.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 funded 10.6 million</i> | 25c per item dispensed. |

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| | <i>ePrescriptions and AFSPA 500,000 ePrescriptions for their members. (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 member pharmacies do not pay.</i> | |
| <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 arrangements of the clinical software vendors. | 8am-5pm weekdays : 1800 4 SCRIPTS 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 • iSynergy • 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> | Any of the following (eRx Script Exchange is integrated within the | Any of the following: <ul style="list-style-type: none"> • CDC Forte |

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| | <p>dispensing software):</p> <ul style="list-style-type: none"> • Fred • Simple Aquarius • Minfos • LOTS • Amfac • PharmacyPro <p>Further to the above, eRx has contracts with the following to integrate eRx Script Exchange:</p> <ul style="list-style-type: none"> • Twitch • ScriptPro • Phoenix | <ul style="list-style-type: none"> • 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. | |
| <p><i>Dispense notification</i></p> <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> | If patient consent is obtained, eRx automatically sends the dispense notification to the GP's clinical software, which stores the details (e.g. date of dispense, brand, quantity and dispensing pharmacy) for later viewing if desired. | Dispense notifications are securely viewed via an application installed on the GP desktop. |
| <i>Security</i> | Encrypts and transports the e-prescription using 3 layers of security | Encrypts prescription details using the GP's Medicare PKI location certificates. X509 |

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| | including the GP's Medicare PKI location certificates. | encryption standards. |
| <i>Adoption of current standards</i> | HeSA PKI | HeSA PKI SA 4700.30: <ul style="list-style-type: none"> • HL7 2.5 (Current interim Australian standard) IT14: <ul style="list-style-type: none"> • X509 encryption • HL7 2.5 |
| | Both Vendors have committed to implementing NEHTA standards for ePrescribing when they become available. | |
| <i>Secondary use of collected data</i> | With patient consent, information can be provided to an EHR when these become available. | Terms of the licence limit use of data for ePrescription purposes only. |