Australian Government
Australian Digital Health Agency

Electronic Prescribing Solution Architecture

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v2.0

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Electronic Prescriptions Project Technical Working Group
The Electronic Prescriptions Project Technical Working Group (TWG) was established by the Australian Digital Health Agency to co-develop the solution architecture and conformance framework for the Electronic Prescribing Project. Over 30 members representing the medical software industry, medical practitioners, pharmacists, consumers, Department of Health and jurisdictional members made up the TWG and provided their time and expertise to the successful delivery of this solution architecture document.

Department of Health Electronic Prescribing Project Team
The Department of Health has overall accountability for the Electronic Prescriptions Project, and the Department's Electronic Prescribing Project Team provided valuable guidance and feedback on the draft versions of this solution architecture document.

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1 Introduction

1.1 Purpose

The purpose of the solution architecture is to provide an overview of the architectural components of the end-to-end national electronic prescribing system.

It reflects:

- the scope of the project as defined by the Electronic Prescribing Working Group (EPWG);
- agreed overarching principles of the project that have informed development of the architecture;
- agreed environmental influences that have informed development of the architecture; and
- assumptions that have informed development of the architecture.

It provides details of the behaviours and interactions between system components in different settings and contexts, and considers the behaviours required of the system should key components of the system be unavailable.

It is the outcome of input from stakeholders representing Commonwealth departments and agencies, jurisdictional health departments, clinical groups, consumers, and the healthcare software industry via the project Technical Working Group. It intends to leverage existing applications and infrastructure and as such is *not intended to be prescriptive*. For applications to participate in electronic prescribing, they will need to attest that they meet conformance requirements, which are documented separately.

This document will be updated from time to time based on feedback received. Changes will be managed under governance arrangements for electronic prescribing that are yet to be determined.

1.2 Related Documents

- National Requirements for Electronic Prescriptions 29 September 2017, v1.0: Australian Digital Health Agency
- MSIA Position Statement: ETP 2.0 11 October 2018: Medical Software Industry Association
- Pharmacy Guild of Australia: Position Statement – Electronic Prescriptions: October 2018
- Electronic Prescriptions Project Solution Architecture June 2018 v2.0: Department of Health
- Electronic Prescribing Conformance Assessment Scheme 31 October 2019, v2.0: Australian Digital Health Agency
- Electronic Prescribing Conformance Profile 31 October 2019, v2.0: Australian Digital Health Agency
- National Health (Pharmaceutical Benefits) Regulations 2017

1.3 Intended Audience

The intended audience of this document is described below:

- Any and all organisations which develop and/or implement software for the preparation, dispensing, communication or management of electronic prescriptions.
- The Commonwealth Department of Health (Department) policy and service delivery business lines – to verify that proposed solutions meet their operational and policy needs.
- The Agency – to inform the development and implementation of appropriate conformance profiles.
- The Agency – to inform the development of the Medicines Blueprint, ensure alignment with the future architecture for national infrastructure and broader digital health systems, EMM Systems etc.
- Services Australia – to assist in the development of technical solution designs to accommodate new conformance data within their existing claiming systems.
- Federal, state and territory regulators responsible for legislation relating to the writing and dispensing of prescriptions in Australia.
- The Digital Transformation Agency (DTA) – to inform their engagement with the Department on the implementation of electronic prescribing.

This solution architecture document should be read in conjunction with the associated conformance profile document.

1.4 Background

The Australian Digital Health Agency (the Agency) has released Australia's National Digital Health Strategy - "Safe, seamless and secure: evolving health and care to meet the needs of modern Australia". The Strategy proposes seven strategic priorities, with outcomes to be achieved by 2022, and a focus on delivering safe, high-quality and effective health services for all Australians.

Under its Medicines Safety strategic priority, the Strategy defines an outcome for improved availability and access to prescriptions and medicines information. The strategy commits that *"by 2022, there will be digitally enabled paper-free options for all medication management in Australia. People will be able to request their medications online, and all prescribers and pharmacists will have access to electronic prescribing and dispensing, improving the safety of our systems."*

The Review of Pharmacy Remuneration and Regulation identified that the implementation of a fully electronic (i.e. 'paperless') prescription system in Australia should be an urgent priority. The Final Report was presented to the Minister for Health in May 2018. Recommendation 2-6 of the Final Report states that:

"The Australian Government should initiate an appropriate system for integrated electronic prescriptions and medicine records as a matter of urgency. Under this system the electronic record should become the legal prescription record. Participation in the system should be required for any prescriber of a PBS-listed medicine, any pharmacist wishing to dispense a PBS-listed medicine and any consumer who is seeking to fill a PBS prescription."

In the Australian Government Response to the Review the Government accepts-in-principle this recommendation.

In the 2018 Budget, the government provided funding to upgrade the e-prescribing software systems used by clinicians to prescribe medicines.

The budget documents state that the measure:

"…will support a national electronic prescribing system that will contribute to Pharmaceutical Benefits Scheme (PBS) efficiency, compliance, drug safety and data collection. It will also create an electronic prescribing framework that will provide an option for prescribers and their patients to have a fully electronic PBS prescription as an alternative to paper PBS prescriptions".

Electronic prescriptions form part of the broader digital health and medication safety framework and will enable the prescribing, dispensing and claiming (where applicable) of medicines directly from an electronic prescription. Prescribers and their Subjects of Care will have the option to use a fully electronic prescription as an alternative to a paper prescription.

Without affecting existing paper prescribing processes, the aims of the electronic prescriptions initiative are to:

- support Subject of Care safety by reducing the risk of dispensing errors;
- assist health practitioners by reducing unnecessary paperwork;
- improve data for health technology assessments, post market reviews, and broader health policy and planning;
- provide Subject of Care choice in the new digital health world; and
- become a platform to enable digital health services and initiatives.

The implementation of the ICT solution is to enable use of an electronic prescription in all prescribing circumstances, as an alternative to a paper prescription. The Department has undertaken technical scoping and gap analysis activities in consultation with the Agency and Services Australia (formerly the Department of Human Services - DHS). The architecture defined acknowledges that adoption of fully electronic prescribing will be an iterative process and allows for the coexistence of paper and electronic methods.

2 Scope - Electronic Prescribing Project

2.1 Prescriber Types

All eligible prescribers will be able to prescribe a medicine by means of an electronic prescription, including:

- medical practitioners;
- nurse practitioners;
- midwives;
- nursing prescriber;
- partnership registered nurses;
- podiatrists;
- optometrists; and
- dentists.

Prescribing by veterinarians and the dispensing of Prescribed Animal Remedies is out of scope.

2.2 Medication Categories

All medicines that can be prescribed, supplied and claimed by means of a paper prescription will be able to be prescribed, supplied and claimed by means of an electronic prescription.

These include:

- PBS medicines;
- Private prescriptions; and
- Repatriation PBS medicines.

2.3 Supply Settings

Electronic prescriptions will be able to be used in all supply settings where paper prescriptions can be used, including:

- Community Pharmacies;
- Public and Private Hospitals;
- Residential Aged Care facilities;
- In-home nursing services;
- Mental Health services;
- Aboriginal and Torres Strait Islander Health Services; and
- Day Treatment / Outpatient facilities.

2.4 Authority PBS Prescriptions

Electronic prescribing does not change the intent or method of applying for an Authority for a PBS Prescription.

Authority required prescriptions fall into two categories - Authority required and Authority required (STREAMLINED). Authority PBS prescriptions cannot have retrospective approval, and lack of a required approval means that no PBS/RPBS benefit can be claimed. [1]

Prescriptions that require WRITTEN authorisation for PBS subsidy are within scope for electronic prescribing. Processes to submit a written authority prescription in an electronic format are currently not fully supported, with possible operational changes required.

If the prescriber sends the authority request to Services Australia via the post, a paper prescription will be used. If the prescriber uses the Services Australia HPOS system to upload the authority request, there is the potential for the electronic prescription to be used, however further investigation into operational changes is required prior to this being implemented.

Paper prescriptions may continue to be required in the instance where State or Territory Regulations require additional handwritten wording to support the form of prescription or authority (for example, for Schedule 8 medicines in all states but WA).

Any prescription that requires only the authorisation number and no additional hand-written wording may be generated as an electronic prescription, with one item per prescription.

Requirements for retention of authorities by prescribers and pharmacies remain unchanged, but it is noted that this retention will be of an electronic record rather than a paper form.

2.5 Success Statement and Key Principles

The Electronic Prescribing Working Group met via teleconference on 13 December 2018. The following success statement and principles were presented by the Department at that meeting.

2.5.1 Success Statement

By October 2019 the electronic prescribing project will allow an electronic prescription to progress from prescribe through to dispense and claim in an electronic format. The scope includes implementation of legislative changes (both national and state & territories), facilitation and management of solution architecture, development of conformance frameworks, changes to the claims system and changes to enabling systems software.

2.5.2 Principles

1 Security of patient information

Electronic Prescribing must maintain the safety and privacy of current and historical patient and prescription data.

2 Integrity of prescription data

Electronic Prescribing must maintain the integrity of prescription data to ensure patient safety.

3 Continues to support patient choice of prescriber

Electronic Prescribing will continue to support a patient's right to choose their approved prescriber.

4 Continues to support patient choice of pharmacy

Electronic Prescribing will continue to support a patient's right to choose the pharmacy to supply their medicines.

[1] http://www.pbs.gov.au/info/healthpro/explanatory-notes/section1/Section_1_2_Explanatory_Notes#Authority-PBS accessed 1 May 2019

5 Electronic and paper prescriptions will co-exist as the legal form of the prescription

Electronic prescriptions and paper prescriptions will co-exist. Electronic Prescribing will not be mandatory, and patients and prescribers will be able to choose an electronic prescription.

6 National Electronic Prescribing framework

Paper and electronic prescriptions will continue to meet the relevant Commonwealth and State and Territory legislation.

7 Supports existing PBS policies

Electronic and paper prescriptions will be valid in existing PBS supply settings. Electronic Prescribing is not intended to change the broader PBS policy environment.

8 Leveraging existing assets and capabilities

Electronic Prescribing will support Australia's National Digital Health Strategy principle of leveraging existing assets and capabilities to reuse and build on existing infrastructure. This will reduce the impacts on the processes for clinicians.

3 Concepts and Roles for the Proposed System

3.1 User Roles

The following table provides a description of the solution overview roles:

Role	Description
Active Script List Registry Operator	The operator of the Active Script List Registry - the system and services that allow: • a Subject of Care to register for an active script list; • Prescriber and dispensing systems to add prescriptions/dispense records to a Subject of Care's active script list; and • mobile application vendors to provide mobile applications to allow Subjects of Care to view and manage access to their active script lists.
Department of Health (Department)	The Department has overall accountability for the Electronic-Prescriptions Project.
Department of Veterans' Affairs (DVA)	The DVA manages the RPBS and receives RPBS claim data from Services Australia.
Dispenser	A clinician who is permitted to dispense medicines under state regulations. These include dispensers (e.g. pharmacists) that work in the community, hospitals, and contracted pharmacies. Dispensers are an approved supplier under the National Health Act 1953.
Prescriber	Clinicians who are permitted under Commonwealth and state regulations to prescribe a medicine. These may include but are not limited to, general practitioners, specialists, dentists and allied health professionals based in community, residential care and hospital settings. Also see Section 2.1 Prescriber Types.
Prescription Delivery Service Operator	The operator of a prescription delivery service (the mechanism through which an electronic prescription is communicated from a prescribing system to a dispensing system).
Private Hospital	A privately managed hospital facility.
Public Hospital	A hospital facility managed by State or Territory government.

Role	Description
Residential Care Facility	As defined in the Aged Care Act 1997, residential care is personal care or nursing care, or both, that: a is provided to a person in a residential facility in which the person is also provided with accommodation that includes: i appropriate staffing to meet the nursing and personal care needs of the person; and ii meals and cleaning services; and iii furnishings, furniture and equipment for the provision of that care and accommodation; and b meets any other requirements specified in the Subsidy Principles.
Services Australia	Services Australia (formerly Department of Human Services- DHS) receives PBS claims from the Approved Supplier. Services Australia receives conformance data for both prescription software and dispensing software in the claim from the Approved Supplier, and conformance register data from the Agency. Services Australia sends approved PBS claim data to the Department daily.
Subject of Care	The Subject of Care is the person for whom the medicines described on the prescription are intended.

3.2 System Roles and Concepts

3.2.1 Overview of Components

The following table provides a description of solution overview components and systems and their roles:

Role	Description
Active Script List Registry	The system and services that allows: • a Subject of Care to register for an active script list; • Prescribing and dispensing systems to add prescriptions/dispense records to a Subject of Care's active script list; and • mobile application vendor to provide mobile applications to allow Subjects of Care to view and manage access to their active script lists.
API Gateway	Programming that sits in front of a set of application programming interfaces (APIs) and acts as a single point of entry for subscribing software systems.
Dispensing Software	Clinical Information System software that is used by authorised dispensers to facilitate the retrieval of prescriptions from a Prescription Delivery Service and the dispensing of medicines.
Mobile Application	A mobile application is used by the Subject of Care to manage their prescriptions as well as provide the capability to present the electronic prescription token (see below) to a pharmacy.

Role	Description
Mobile Intermediary	Software which manages communication between the delivery services (i.e. Open Prescription Delivery Services and Active Script List Registry Services) and Mobile Applications. The mobile intermediary's main purpose is to access prescription information contained in one or more Open PDSs on behalf of mobile applications and provide other functionality such as user authentication and validation. The mobile intermediary may also store electronic prescription tokens on behalf of the Subject of Care. In most cases the mobile intermediary will be the mobile application's server component.
Notification Service	A service provided by prescribing, dispensing and ASLR systems which supports the transmission of electronic prescription notifications to Subject of Care via their preferred electronic notification channel.
Prescribing Software	Clinical Information System software that is used by an authorised prescriber to facilitate the creation of prescriptions.
Prescription Delivery Service	The mechanism through which an electronic prescription is communicated from a prescribing system to a dispensing system.
Token Delivery Service	A service provided by a Mobile Application which supports the electronic communication of tokens from one party to another. A token delivery service may be used to send the token to the Subject of Care's mobile device, their agent's mobile device or a residential care system. A token delivery service may also be used to send the token from the Subject of Care's mobile device or a residential care system to a pharmacy of the Subject of Care's choice (e.g. online pharmacy).

The following diagram represents, at the highest level, the various roles undertaken by systems that participate in electronic prescribing.

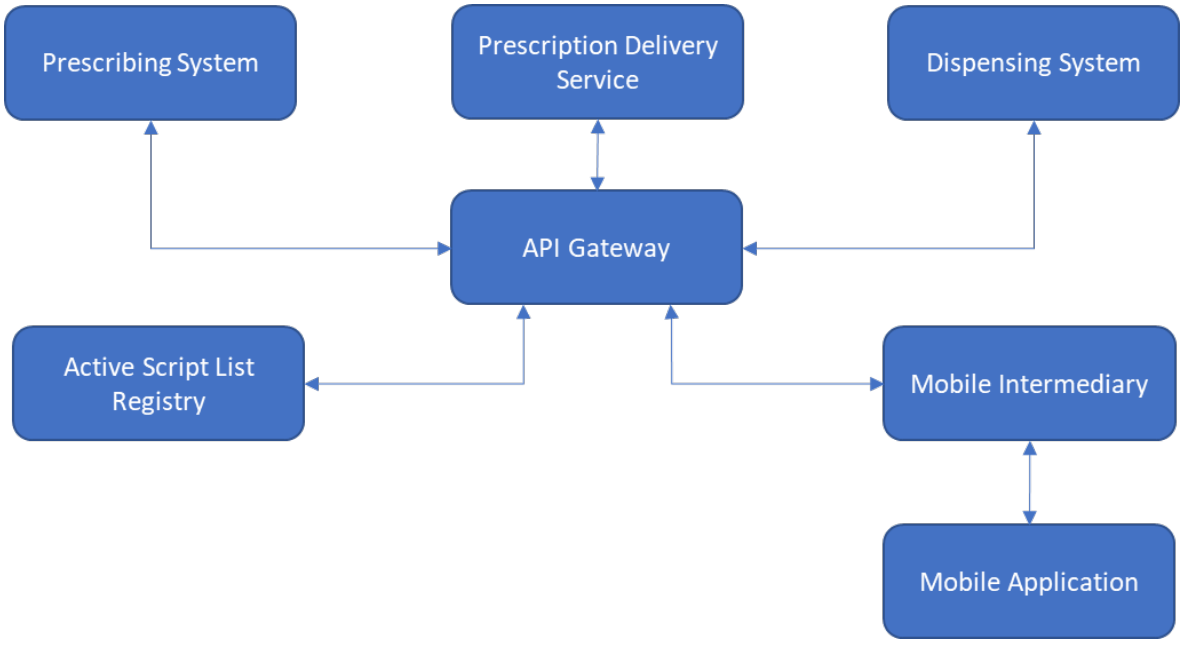


Figure 1. Electronic prescription system overview

3.2.2 Models of Prescription Delivery Services

Prescription delivery services will be Direct or Open. The following diagram provides a high-level breakdown of the two core models.

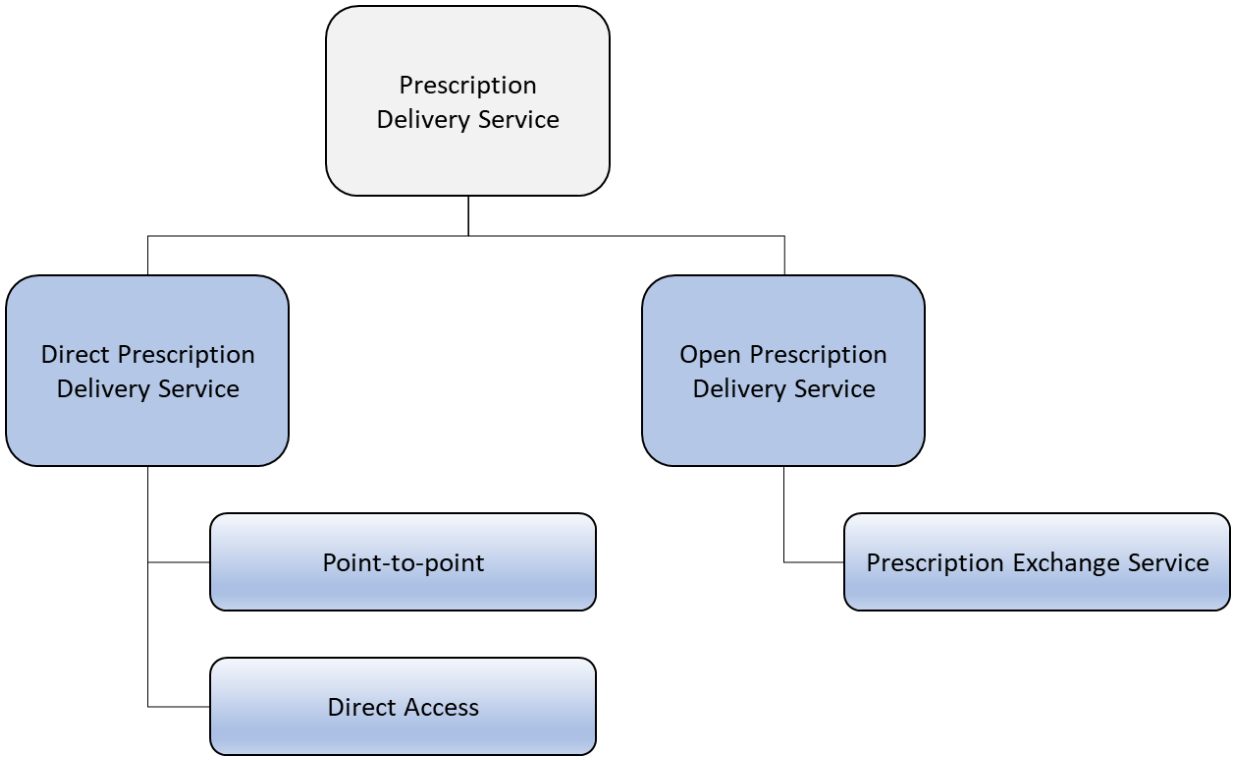


Figure 2. Prescription Delivery Service models

The following table provides a description of the Prescription Delivery Service models and systems:

Role	Description
Prescription Delivery Service (PDS)	A prescription delivery service is the mechanism through which an electronic prescription is communicated from a prescribing to a dispensing system.
Open Prescription Delivery Service	A prescription delivery service that accommodates choice of supply by the Subject of Care. An Open Prescription Delivery Service may be constructed using a variety of implementation patterns provided they all interoperate. Interoperate means where an electronic prescription sits in one Open Prescription Delivery Service, it can be accessed for use by a dispenser who is connected to a different Open Prescription Delivery Service.
Direct Prescription Delivery Service	A prescription delivery service that communicates an electronic prescription directly to a nominated dispenser. Such a mechanism is only permitted under circumstances where a choice of dispenser is made before prescription such as during the admission to a residential care or hospital facility.

Role	Description
Prescription Exchange Service (PES)	An implementation pattern of an Open Prescription Delivery Service that provides a prescription store accessible to prescribers and dispensers. Electronic prescribing systems lodge electronic prescriptions into the store. Dispensers may access the electronic prescriptions in the store and lodge dispense information.

3.3 The "Location" of an Electronic Prescription

In a community context, the electronic prescription issued from the GP system (e.g.) resides in an Open Prescription Delivery Service (Open PDS) where it is housed pending retrieval by an authorised dispenser. In order to be considered an electronic prescription, it must contain all the data elements as specified in the National Health Act (PBS Regulations), together with additional data as may be required by State and Territory Regulation. These data elements specifically include the Conformance ID of the Prescribing System, Dispensing System and Open PDS, together with the Globally Unique Prescription ID (unique PBS electronic prescription number).

When it is retrieved from the Open PDS, the electronic prescription is resident in the Dispensing system where it may be processed. It is no longer available for retrieval from the Open PDS as this would permit multiple dispensing from the same prescription. If the Dispense is abandoned (does not complete) the electronic prescription in the Open PDS becomes available again for retrieval. In effect, it is "returned" from the Dispense System back to the Open PDS.

3.4 Data Classification

Electronic prescription data are considered "Unclassified" by government departments and agencies, with a Dissemination Limiting Marker of "Sensitive: Personal".

4 Architecture Context

4.1 Business Requirements

The Business Requirements for the solution architecture are outlined in the *Requirements: Electronic Prescriptions Project* document prepared by The Department. These contain requirements from the Department's *IT Gap Analysis*, *Objectives and Outcomes* and requirements from National Requirements for Electronic Prescriptions (www.digitalhealth.gov.au/implementation-resources/ehealth-foundations/electronic-prescribing/DH-2625-2017)

4.2 Overarching Project Principles

4.2.1 Safe

The system shall ensure that medication information is captured, transmitted and rendered as the prescriber intended and, in a manner, legible and understandable to the dispenser which is equal to, or better than that afforded in current practice.

4.2.2 Secure

The solution shall ensure that the potential for fraudulent activity is minimised, at least to the extent afforded in current practice.

4.2.3 Private

The system shall ensure that the medication information is accessible only to those who have a need to know and for the benefit of the Subject of Care in a manner which is equal to, or better than, that afforded in current practice.

4.2.4 Acceptable and Sustainable

The system shall ensure that the processes for prescribers, dispensers and Subjects of Care are no more onerous than those afforded in current practice.

4.2.5 Accessible

The system shall ensure that medicines may be made available to Subjects of Care without additional delays, irrespective of the mode of prescription (paper or electronic), and irrespective of the digital literacy or abilities of users.

4.2.6 Flexible

The system shall accommodate a variety of implementations and solution specific architectures. All existing modes of prescription will persist, in concert with one or more electronic methods.

4.2.7 Supports Innovation

The system shall afford industry the scope to innovate the architectures, methods and technologies by which electronic prescriptions are delivered and by which systems interoperate, to ensure electronic prescriptions become the method of choice for prescribers, dispensers and Subjects of Care (subject to adherence with the aforementioned design objectives).

4.3 Agreed Environmental Influences

4.3.1 Legislation and Regulation Compliance

Compliance with Commonwealth and State legislation and regulation

Rationale:
All electronic prescribing participants are required to comply with the Privacy Act 1988, National Health Act 1953, PBS regulations and individual state and territory drugs and poisons Acts.

Implications:

- Requirement to operate data collection and storage mechanisms in a manner consistent with privacy legislation as defined in the *Privacy Act 1988* and/or state or territory privacy legislation;
- Requirement to operate prescriptions in a manner consistent with Health legislation as defined in the *National Health Act 1953*;
- Requirement to manage data and information in a manner compliant with record keeping legislation as defined in the *Archives Act 1983*; and
- Requirement to operate in a manner consistent with the Healthcare Identifiers act as defined in the *Healthcare Identifiers Act 2010.*

4.3.2 National Digital Health Strategy

The architecture defined will align with and promote the National Digital Health Strategy

Rationale:
The National Digital Health Strategy has been developed through detailed consultation and co-production with patients, consumers and carers, and the healthcare professionals, industry, organisations and innovators who serve them. It has been approved by the Council of Australian Governments (COAG) Health Council.

Implications:
It is critical that with the introduction of electronic prescriptions, consumers are provided with choice, control and transparency.

4.3.3 Mutually Exclusive Prescription Types

For any prescription, there will be either a single paper prescription or a single electronic prescription, never both

Rationale:
Electronic prescribing will introduce an alternative, fully digital form of the legal instrument issued by prescribers that authorises dispensers to provide medicines to Subjects of Care.

For dispensers to be able to dispense prescribed medicines safely and according to relevant legislation and guidelines, it is imperative that there is only one legal instrument that can be acted on to dispense the medicine, and that the “source of truth” of the current state of the prescription, including dispense history and repeat authorisations for example, is clear.

Implications:

- If a prescription is initially issued as a paper prescription, it will remain a paper prescription and follow current workflows for the life of that prescription. A paper prescription cannot be converted to an electronic prescription.
    - Paper to Electronic: It is assumed that regulation will require obligations be placed on healthcare organisations which create electronic prescriptions. There can be no guarantee that these obligations were met when the paper prescription was created. Electronic prescriptions carry data elements (such as HPI-O and Conformance Identifiers) in addition to those of a paper prescription. Furthermore,

these required elements cannot be "reconstituted" from an ETP message as the ETP message has no legal standing.

- Electronic to Paper: A key feature of a paper prescription is that it conveys legal authority through the presence of the prescriber's signature on the paper. There is no way to "convert" the authority vested in an electronic prescription to a paper prescription (i.e. recreate the prescriber's signature).

- Where it is an electronic prescription, supply will be against the electronic prescription, not the paper-based Evidence of Prescription form, information rendered via a third-party application, or token carried by the Subject of Care.

4.3.4 Open Prescription Delivery Service Consent

No requirement for additional Subject of Care consent for electronic prescriptions to be sent to an Open Prescription Delivery Service

Rationale:
The electronic prescribing solution architecture does not require increased disclosure of information concerning the Subject of Care to parties beyond those for paper prescriptions supported by ETP. The architecture describes optional concepts (such as active script lists) that may access this information but only with explicit consent. Use of these systems is not necessary for the operation of electronic prescriptions.

Implications:

- The electronic prescription, like the Electronic Transfer of Prescriptions (ETP) data, will not be exposed to a 3rd party without consent or legal authority.
- The prescriber or dispenser will not be able to search an Open Prescription Delivery Service for electronic prescriptions – the electronic prescription can only be retrieved using the token or the list of medicines contained in a Subject of Care's active script list.
- Consent capture at prescriber will operate per current processes.
- If the Subject of Care misplaces a token, it is effectively the same as losing a paper prescription (status quo).

4.3.5 Mobile or Web Application Consent

Any Subject of Care mobile or web application will be required to obtain Subject of Care consent for the Open Prescription Delivery Service operator to provide the decrypted electronic prescription data

Rationale:
For the electronic prescription to be accessed and information about the electronic prescription to be made available through a Subject of Care's mobile or web application, Subject of Care consent will need to be captured by the mobile or web applications and provided to the service operators.

5 Solution Architecture Assumptions

The following assumptions have informed development of the solution architecture.

Assumption	Implications
The legal environment enacted through legislation and regulation to support electronic prescribing will support the electronic prescription as a legal instrument for dispensing purposes	• The electronic prescription is the source of truth and legal instrument for dispensing services. • An electronic prescription shall remain immutable and never be altered or changed. • Records created in relation to dispensing activity will be associated with the original electronic prescription and made available to subsequent dispensers. • The authority to dispense is obtained through reference to the electronic prescription (original and repeat) and any associated dispense records. • Any token supporting retrieval of the electronic prescription is not an authority/legal instrument for dispensing.
Repeat authorisations are not a separate artefact or transaction in an electronic prescription context	• The original electronic prescription, together with the dispense records, provide all the information and authority necessary for any further dispensing activity by a dispenser. • The SoC will be provided with information at the time of supply that indicates the number (if any) of further supplies available.
Deferred supply is not a separate artefact or transaction in an electronic prescription context	• The original electronic prescription, together with (all) the dispense records, provide all the information and authority necessary for any further dispensing activity by a dispenser. • Should the SoC not want supply of one of the prescriptions retrieved using the token, they will be provided with information that indicates the number of further supplies available.
Delivery Services may not be assumed to provide any functionality or capability that supports validation of the content of the prescription	• A Delivery Service will not accept a malformed or incomplete electronic prescription but may not be assumed to provide any validation of, or add value to, the content of the message. • Validation of the content of the electronic prescription will be done by the authorised prescriber with support, as required, by their prescribing software. • Validation of the content of the electronic prescription will be done by the dispenser at the time of dispensing with the aid of real time feedback from PBS online (where applicable).
Prescribing regulatory and legislative requirements for prescription controls are managed by prescribing systems & user expertise	• Prescribing restrictions, including authorisations, repeats and quantity controls, are managed through expertise of the authorised prescriber with support, as required, by their prescribing software. • Individuals who prepare electronic prescriptions are authorised to do so under relevant regulation. • Organisations who provide their staff with access to software capable of producing electronic prescriptions must do so only for identified and authorised prescribers.

Assumption	Implications
Dispensing regulatory and legislative requirements for prescription controls are managed by dispensing systems & user expertise	• The Open PDS will not validate prescription content (paper or electronic prescriptions). • Individuals who dispense are authorised to do so under relevant regulation. • Dispensing restrictions, including authorisations, repeats and quantity controls, are through expertise of authorised suppliers with support, as required, by their dispensing software.
The Subject of Care must be provided with an electronic prescription notification at the time the electronic prescription is created when utilising an Open Prescription Delivery Service	• The SoC will leave the consultation with a valid electronic prescription notification or paper token. • If it is not possible to provide the SoC with an electronic prescription notification, they will be provided with a paper token. • A SoC may choose to be issued a paper token. • The token will be accompanied by supplementary information such as barcode/QR code, medicine name, medicine strength and number of repeats.
The Subject of Care must have a means of identifying medicines prescribed	• Where prescription information is not provided to the Subject of Care by the prescriber, they shall have a means of obtaining that information.
The availability of electronic prescriptions for a Subject of Care is independent of other national programs such as the My Health Record (MHR) or the Pharmaceutical Benefits Scheme.	• Not all Subjects of Care participate in the My Health Record system or qualify for Medicare Benefits. Electronic prescribing shall be accessible to all, irrespective of their participation in such programs, however electronic prescriptions have a dependency on the Subject of Cares' Individual Healthcare Identifier (IHI) number.
Paper prescriptions, such as the current practice for paper scripts, will continue to be supported	• Prescribers may issue either a paper prescription or electronic prescription, subject to their service and SoC preference. • The introduction of electronic prescribing will in no way change the operation of paper prescriptions.
Paper prescriptions and electronic prescriptions are mutually exclusive	• A prescriber shall not issue the same prescription in both paper and electronic form. • Paper and electronic prescriptions facilities are distinct; they cannot convert, merge or join to accomplish the same service objective over the life of the prescription.
ETP shall continue to operate independently of electronic prescriptions	• Paper prescriptions shall continue to be supported by ETP as required. • The same PES infrastructure may be used to convey both ETP and electronic prescriptions. • Prescription Exchange Services which convey electronic prescriptions are subject to the electronic prescription regulations and conformance requirements.
ETP specific Mobile Applications shall continue to operate independently of electronic prescriptions	• Consumer management of paper prescriptions shall continue to be supported by mobile applications. • The same mobile application infrastructure may be used to support Subject of Care management of electronic prescriptions. • Mobile application infrastructure which is used to support Subject of Care management of electronic prescriptions are subject to electronic prescription regulation and conformance requirements.

Assumption	Implications
Dispenser discretion to supply shall be permitted in scenarios where access to the electronic prescription is temporarily unavailable	• In circumstances where the dispenser is unable to access the electronic prescription (due to technical difficulty), they may – if allowed by state legislation - exercise their discretion and provide emergency supply, or they may request verbal authorisation to dispense from the prescriber (in line with current practice). • In such circumstances, the dispenser shall NOT rely on medication information which may accompany the electronic prescription token. Confirmation of medication information may be from the record within the Open PDS, or directly from the prescriber.
The requirement for authorised agents to collect prescriptions on behalf of SoCs will remain and be available for electronic prescriptions	• Dispensers may exercise their judgement under applicable regulation as to whether to supply to a person presenting a token for dispense considering they may be, or are, an agent of the Subject of Care. • As per applicable regulation, dispensers may request and record evidence of identity as appropriate.
A prescriber can exercise choice to offer a Subject of Care an electronic prescription or paper prescription	• A prescriber may exercise their judgment to determine whether or not to issue an electronic or paper prescription. • A prescriber may choose not to offer electronic prescriptions.
Subjects of Care are not required to provide additional consent to electronic prescriptions	• Open PDS Operators are prohibited from accessing electronic prescription information unless compelled to do so under court order or as required under legislation. • The electronic prescriptions solution architecture will not expose a Subject of Care's personal information to any parties in addition to those involved in paper prescriptions. • The electronic prescription solution architecture does not expose more personal information to participants than is currently exposed to those participants by paper prescriptions.
Subjects of Care will be required to consent to the provision of their personal information to parties supporting their electronic access to electronic prescription information	• Where Subjects of Care elect to access their electronic prescription information using electronic services, the providers of such services will require access to their information. • Open PDS Operators may allow such service providers to access electronic prescription information. • Mobile Application Intermediary providers may request and provide electronic prescription information to a consumer where they have received informed consent from the Subject of Care or they have reasonable grounds to believe that the consumer is an authorised agent of the Subject of Care. • Mobile and Web Application Service providers are subject to all applicable electronic prescribing regulations and conformance requirements.
Retention of legal instrument (electronic prescription) for audit purposes will remain the obligation of the dispenser	• Dispensers are currently obliged to retain the paper authority for dispensing for a period (two years) to support PBS audit and investigation. Where the requirement for retention under state-based regulation exceeds the requirement under PBS, that retention period should be observed. • As and where required by regulation, all participating software must be able to maintain an archive/audit log to support this requirement for dispensing against electronic prescriptions.

Assumption	Implications
Retention requirements of an electronic prescription and subsequent dispense records will be determined by legislation	• An electronic prescription, and its associated dispensing records, may be deleted from the Open Prescription Delivery Service at some time following expiry of the electronic prescription.
The privacy notice that is currently provided on the reverse side of a paper prescription will also be provided to a consumer who receives an electronic prescription	• Information provided to a consumer accompanying an electronic prescription must allow the consumer to read the text that currently forms the Privacy Notice printed on the reverse side of paper prescription stationery.

6 Current State Architecture

6.1 Current State Overview

The following diagram outlines the current state community architecture at a high-level.

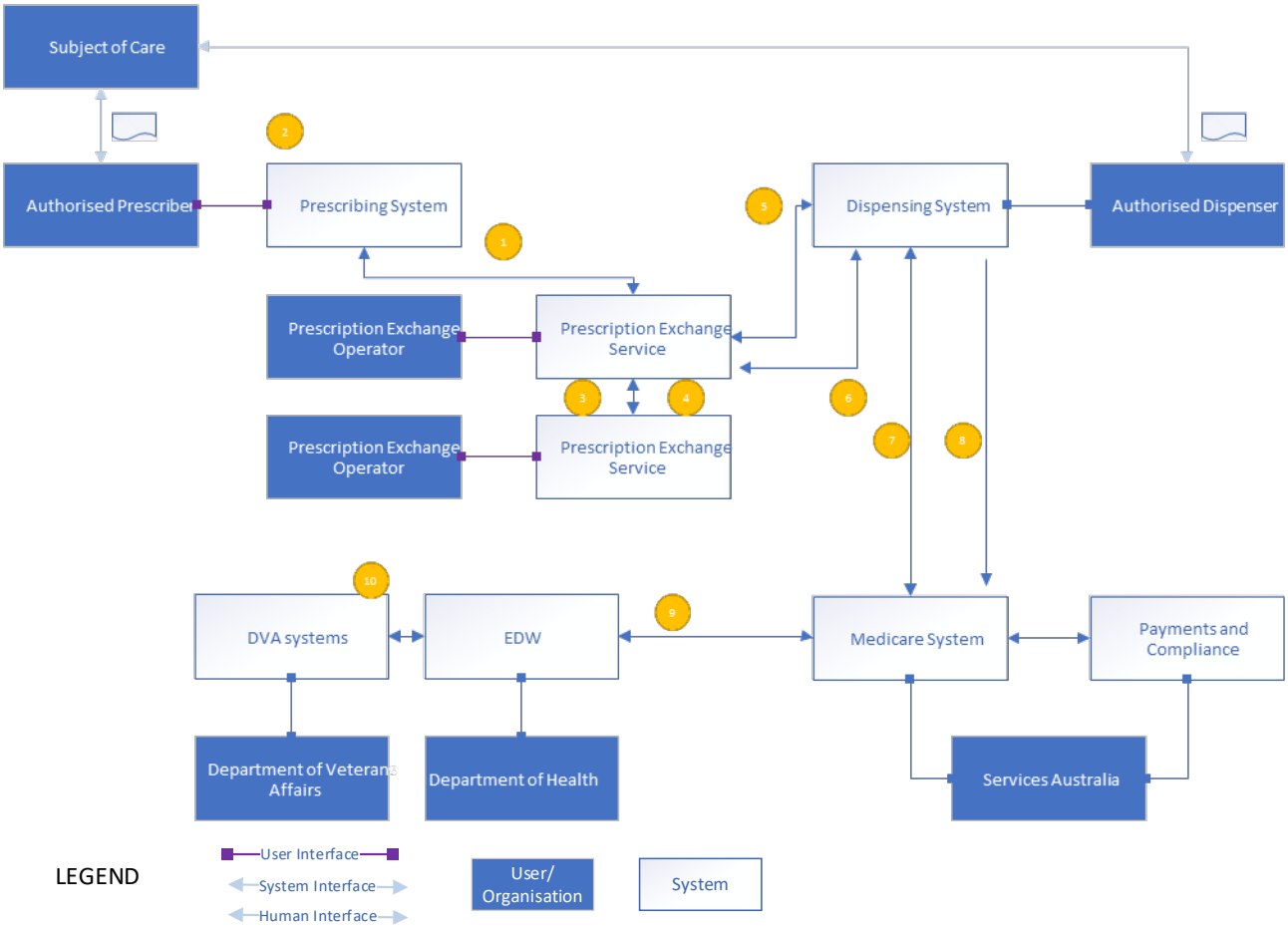


Figure 3. Logical diagram of current state community architecture at a high-level

6.2 Current State Process

#	Interaction	Detail
1	ETP upload – on creation of new ETP	Authentication: Prescriber system PES credential. Send: ETP data within structured message to PES, with the clinical content encrypted the prescriber agent encryption key and the transaction encrypted using PES public key. Receive: Notification.
2	Print prescription for the Subject of Care	Printed prescription data.

#	Interaction	Detail
3	Inter-PES transfer – on retrieval of ETP by a Dispensing System if the PES does not have the ETP stored	Authentication: PES credential. Send: Message requesting the ETP with Delivery Service Prescription Identifier (DSPID). Receive: ETP data within structured message, with: • clinical content decrypted using the host PES agent key; • transaction transformed to the requesting PES format; • clinical content encrypted using the requesting PES agent key; and • the transaction encrypted using requesting PES public key.
4	Inter-PES transfer – on upload of dispense record if the PES does not have the ETP stored	Authentication: PES credential. Send: Dispense record data within structured message with: • clinical content decrypted using the requesting PES agent key; • transaction transformed to the host PES format; • clinical content encrypted using the host PES agent key; and • the transaction encrypted using host PES public key. Receive: Notification.
5	ETP download by dispensing software	Authentication: dispenser system PES credential. Send: Request with DSPID. Receive: ETP data within structured message.
6	Dispense record upload to PES	Authentication: dispenser system PES credential. Send: Dispense record data within structured message, with the clinical content encrypted using dispenser agent encryption key and the transaction encrypted using PES public key. Receive: Notification.
7	PBS Claim authorisation on dispense	Authentication: dispenser's Medicate site certificate. Send: Message requesting authorisation that PBS claim is payable (as per Services Australia specifications). Receive: Notification of whether claim is payable.
8	PBS Claim lodgement to Services Australia	Authentication: dispenser's Medicare site certificate. Send: PBS claim data (as per Services Australia specifications). Receive: Notification.
9	Send PBS and RPBS claim data to the Department	Send: PBS and RPBS claims data. Receive: Notification.
10	Send RPBS claims data to DVA	Send: RPBS claim data (as per the Department/DVA specifications). Receive: Notification.

7 Future State Architecture

7.1 Future State Overview

The following diagram shows the future state community architecture at a high-level.

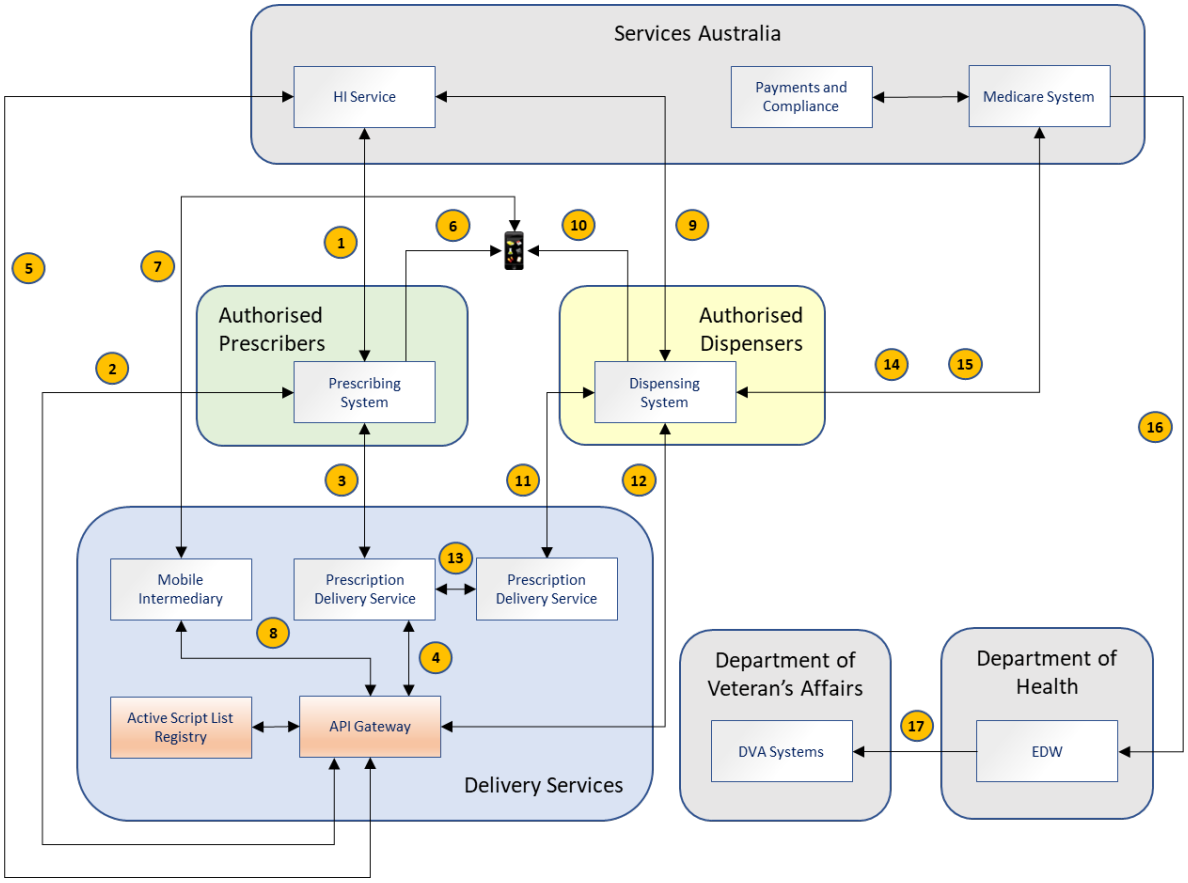


Figure 4. Logical diagram of future state community architecture at a high-level

7.2 Future State Process

#	Interaction	Detail
1	Prescribing system calls HI Service	• If the prescribing system holds the SoC's IHI number, it must attempt to verify that the IHI number has a record status of "verified" and a number status of "active" with the HI Service prior to creating an electronic prescription. If the HI Service does not return an IHI number (existing or new) with a record status of "verified" and a number status of "active", an electronic prescription cannot be issued to the SoC. If the IHI number cannot be verified (e.g. the HI Service is unreachable), an electronic prescription *may* be issued to the SoC. Authentication: Prescribing organisation's: • Medicare site certificate; or • NASH certificate; or • PRODA credential. Send: SoC's: • IHI number; • Family name; • Given name; • Date of birth; and • Sex. Receive: SoC's: • IHI number; • IHI record status; • IHI number status; • Family name; • Given name; • Date of birth; and • Sex. If the prescribing system does not hold the SoC's IHI number, it must obtain it from the HI Service prior to creating an electronic prescription. If the IHI number cannot be obtained, the SoC cannot be issued with an electronic prescription. Authentication: Prescribing organisation's: • Medicare site certificate; or • NASH certificate; or • PRODA credential. Send: SoC's: • DVA file number; or • Medicare card number and Medicare IRN; and • Family name; and • Given name; and • Date of birth; and • Sex. Receive: SoC's: • DVA file number; or • Medicare card number and Medicare IRN; and • IHI number; and • IHI record status; and

#	Interaction	Detail
		• IHI number status; and • Family name; and • Given name; and • Date of birth; and • Sex.
2	Prescribing System calls Active Script List Registry	When a prescriber launches the prescription function within their prescribing system, whether a SoC has an ASL or not, a call is made to the ASLR via the API Gateway. If the SoC has an ASL, a visual indicator will be established in the prescribing system and all electronic prescriptions created in the prescribing system will be sent to it, unless the prescriber and SoC agree otherwise. If the prescriber has been granted with "view access" to the SoC's ASL, by the SoC, the prescriber will be able to view the ASL. If the SoC does not have an ASL, all electronic prescriptions will be token-based. Pre-conditions for adding electronic prescriptions to the ASL: • SoC must have an IHI number with a record status of "verified" and a number status of "active". • SoC must have registered for an ASL. Pre-conditions for prescriber's ability to view ASL: • In addition to the above two pre-conditions, the SoC must have granted view access for the ASL to the prescriber. Authentication: Prescribing organisation's OAuth 2.0-based API Gateway credential. Send: • SoC's: ○ IHI number; ○ Family name; and ○ Given name. • Prescribing organisation's OAuth 2.0-based API Gateway credential. Receive: • ASL exists indicator. • ASL (if prescriber has been granted with view access).
3	Prescribing system sends electronic prescription to an Open PDS	All electronic prescriptions, whether token-based or active script list-based, are sent to an Open PDS. Authentication: Prescribing organisation's PKI-based Open PDS credential. Send: electronic prescription data within structured message to an Open PDS, with the clinical content encrypted using the prescribing organisation's Open PDS agent key and the transaction encrypted using Open PDS public key. Receive: Notification. If the SoC does not want an electronic prescription, they can, at the time of prescription, elect to be issued with a paper prescription.
4	Open PDS sends electronic prescription to Active Script List Registry	If the electronic prescription sent to the Open PDS contains an IHI number within the prescription metadata that matches a registered ASL, along with an ASL consent indicator, the Open PDS will send a copy of the electronic prescription to the ASLR. Authentication: Open PDS's OAuth 2.0-based API Gateway credential. Send: Electronic prescription to ASLR.

#	Interaction	Detail
		Store summary data: The ASLR agent will decrypt the clinical payload, extract and securely store the summary prescription information.
5	ASLR validates SoC with HI Service	For each electronic prescription sent to it, the ASLR will validate the IHI number for the SoC with the HI Service. Authentication: ASLR's OAuth 2.0-based HI Service credential (i.e. PRODA). Send: SoCs: • DVA file number (if exists); or • Medicare card number and Medicare IRN (if exists); or • IHI number; and • Family name; and • Given name; and • Date of birth; and • Sex. Receive: SoC's: • DVA file number; or • Medicare card number and Medicare IRN; and • IHI number; and • IHI record status; and • IHI number status; and • Family name; and • Given name; and • Date of birth; and • Sex. If the HI Service does not return an IHI number (existing or new) with a record status of "verified" and a number status of "active", the electronic prescription cannot be added to the SoC's ASL and the ASLR must return an error to the prescribing system.
6	Send prescription notification to SoC	If the SoC elects to have an electronic prescription, whether token-based or ASL-based, the prescribing system will send an electronic prescription notification to the SoC. The choice of channel for notifications is up to the SoC. The electronic addresses for the SoC are drawn from the prescribing system. • Send: Electronic notification with URI. The URI links to a web resource holding the electronic prescription token, which includes: • the barcode/QR code; • Delivery Service Prescription Identifier (DSPID); • medicine name; • medicine strength; • number of repeats; and • privacy notice. The SoC may elect to be issued with a paper token for the electronic prescription. The paper token will contain the same information as the electronic token. The prescribing organisation may elect for the Open PDS to manage electronic notifications to the SoC on the organisation's behalf. To support this, the electronic address for the SoC must be included in the electronic prescription metadata – with the consent of the SoC.

#	Interaction	Detail
		If the SoC has an ASL, the electronic address for the SoC must be included in the electronic prescription metadata. The SoC's consent for this is captured as part of the ASL registration process. The ASL will send an electronic notification to the SoC upon the successful persistence of the electronic prescription in the SoC's ASL.
7	SoC uses mobile or web application	Using a mobile or web application, the SoC can do any or all of the following: • view the electronic prescription associated with an electronic prescription token. • register for an active script list. • view their active script list. • revoke or re-instate access to their active script list by prescribers and dispensers. • delegate, revoke and reinstate access to agents or carers. • view an audit trail of who has accessed their active script list. • forward prescription links to online or bricks and mortar pharmacies. • pre-populate ASL. • create an electronic token for an ASL prescription item. • hide/unhide prescription items. Authentication: SoC's mobile or web application credential
8	Mobile Intermediary interacts with API Gateway	The mobile intermediary will interact with the Open PDS and the ASLR, via the API Gateway, to support the functions of the mobile application. Authentication: Mobile Intermediary's OAuth 2.0-based API Gateway credential.
9	Dispensing system retrieves/validates the Subject of Care's IHI	If the dispensing system holds the SoC's IHI number, it must attempt to verify that the IHI number has a record status of "verified" and a number status of "active" with the HI Service. If the HI Service does not return an IHI number (existing or new) with a record status of "verified" and a number status of "active", electronic prescriptions cannot be retrieved for the SoC. If the IHI number cannot be verified (for example, the HI Service is unreachable), electronic prescriptions may be retrieved for the SoC. Authentication: Dispensing organisation's: • Medicare site certificate; or • NASH certificate; or • PRODA credential. Send: SoC's: • IHI number; • Family name; • Given name; • Date of birth; and • Sex. Receive: SoC's: • IHI number; • IHI record status; • IHI number status; • Family name; • Given name; • Date of birth; and

#	Interaction	Detail
		• Sex. If the dispensing system does not hold the SoC's IHI number, it must obtain it from the HI Service. If the IHI number cannot be obtained, the dispensing system will be unable to retrieve electronic prescriptions for the SoC. Authentication: Dispensing organisation's: • Medicare site certificate; or • NASH certificate; or • PRODA credential. Send: SoC's: • DVA file number; or • Medicare card number and Medicare IRN; and • Family name; and • Given name; and • Date of birth; and • Sex. Receive: SoC's: • DVA file number; or • Medicare card number and Medicare IRN; and • IHI number; and • IHI record status; and • IHI number status; and • Family name; and • Given name; and • Date of birth; and • Sex.
10	Dispenser views the Subject of Care's active script list	When a dispenser opens the SoC's record in their dispensing system, a call is made to the ASLR via the API Gateway. If the Subject of Care has registered for an ASL, and has granted access to the dispenser, the dispenser can view a summary list of the SoC's electronic prescriptions. The dispenser selects a medicine from the ASL to retrieve the complete prescription from the Open PDS using the DSPID. Authentication: Dispensing organisation's OAuth 2.0-based API Gateway credential. Send: • SoC's: ○ IHI number; ○ Family name; and ○ Given name. • Dispenser system OAuth 2.0-based API Gateway credential. Receive: • ASL exists indicator. • ASL (if dispenser has been granted access to it by the SoC).
11	Dispense record sent to Open PDS	All dispense records for electronic prescriptions, whether token-based or active script list-based, are sent to the Open PDS. Authentication: Dispenser organisation's Open PDS credential.

#	Interaction	Detail
		Send: Dispense record data within structured message, with the clinical content encrypted using the dispenser organisation's Open PDS agent key and the transaction encrypted using Open PDS public key. Receive: Notification.
12	Dispense record updated in Subject of Care's active script list	If the dispense record sent to the Open PDS is linked to an ASL prescription, the Open PDS will send it to the ASLR via the API Gateway. Send: Dispense record to ASLR. Store summary data: The ASLR agent will decrypt the clinical payload, extract and securely store the required summary dispense record information.
13	Inter-PDS transfer	On retrieval of an electronic prescription by a dispensing system if the Open PDS does not have the electronic prescription stored. Authentication: Open PDS credential. Send: Message requesting the electronic prescription with DSPID. Receive: Electronic prescription data within structured message with: • clinical content decrypted using the host Open PDS agent key; • transformed to the requesting Open PDS format; • clinical content encrypted using the requesting Open PDS agent key; and • the transaction encrypted using the requesting Open PDS public key. On upload of dispense record if the Open PDS does not have the electronic prescription stored. Authentication: Open PDS credential. Send: Dispense record data within structured message with: • clinical content decrypted using the requesting Open PDS agent key; • transformed to the host Open PDS format; • clinical content encrypted using the host Open PDS agent key; and • the transaction encrypted using the host Open PDS public key. Receive: Notification.
14	PBS Claim authorisation on dispense	Send: Message requesting authorisation that PBS claim is payable (as per Services Australia specifications). Receive: Notification of whether claim is payable.
15	PBS Claim lodgement to Services Australia	Send: PBS claim data (as per Services Australia specifications). Receive: Notification.
16	Send PBS and RPBS claim data to the Department	Send: PBS and RPBS claims data. Receive: Notification.
17	Send RPBS claims data to DVA	Send: RPBS claim data (as per the Department/DVA specifications). Receive: Notification.

7.3 Active Script List

Active script lists support the optional ability to access electronic prescriptions through an individual's assertion of identity rather than through presentation of a token. This overcomes the issue of lost tokens and would assist medication management and adherence for Subjects of Care who have complex medical needs. It is only relevant in the context of an Open Prescription Delivery Service and is not applicable to electronic prescriptions under the direct model of prescription delivery.

Active script lists contain the summary information associated with electronic prescriptions where:

- The Subject of Care has registered for an active script list; and
- The electronic prescriptions are "active" – i.e. not expired, exhausted or cancelled.

Active script lists do not contain electronic prescriptions. The summary data in an active script list includes the DSPID for each electronic prescription to enable the retrieval of electronic prescriptions from the Open Prescription Delivery Service.

When a Subject of Care registers for an active script list, this becomes their default channel for electronic prescriptions. A Subject of Care with an active script list may, at the time of prescribing, request that the electronic prescription not be added to their active script list, or elect to be issued with a paper prescription.

Using a mobile application, a Subject of Care with an active script list can choose to present a token version of an electronic prescription that has been added to their active script list. This enables the Subject of Care to present a specific electronic prescription to a dispenser without disclosing their entire active script list.

7.3.1 Active Script List Registry

Active script lists are enabled through an Active Script List Registry – the system and services that enables:

- a Subject of Care to register for an active script list;
- prescribing and dispensing systems to add prescriptions/dispense notifications to a Subject of Care's active script list; and
- mobile application intermediaries to provide mobile applications to allow Subjects of Care to view and manage access to their active script list.

The Active Script List Registry provides the following services:

1 Registration – the Active Script List Registry stores the information submitted to it by prescribers and dispensers via the assisted registration process, or by the Subject of Care via a mobile or web application.

2 Registration verification – the Active Script List Registry is operated by a HI Service Contracted Service Provider acting on behalf of the prescribing and dispensing organisations that connect to it. It will verify Subject of Care information submitted to it by prescribing and dispensing organisations with the HI Service.

3 Check registration – when a prescriber or dispenser opens a Subject of Care record within their Clinical Information System and commences a prescription or dispense transaction, a call is made to the Active Script List Registry using the Subject of Care's IHI number, family name and given name to see if the Subject of Care has already registered for an active script list.

4 Check provider access – when a prescriber or a dispenser requests *view access* to a Subject of Care's active script list, a call is made to the Active Script List Registry using the prescriber or

dispenser system's API Gateway identifier to see if the prescriber or dispenser has been granted access to the Subject of Care's active script list.

5 Verify agent/carer authority – when an agent or carer for the Subject of Care requests the dispensation of medicines from the Subject of Care's active script list on behalf of the Subject of Care, a dispenser with view access will be able to see a list of all registered carers/agents. The dispenser will verify the identity of the carer/agent and confirm that they are listed in the Subject of Care's active script list before dispensing medicines.

6 Add prescription –supports the addition of electronic prescriptions by an Open Prescription Delivery Service.

7 Add dispense notification - supports the forwarding of electronic dispense notifications by an Open Prescription Delivery Service to mark the prescription or repeat as being dispensed.

8 Display active prescription list – supports the viewing of active script lists by prescribers, dispensers, Subjects of Care or their carers/agents.

9 Manage access – supports the ability for Subjects of Care to view who has access to their active script list, remove access, re-instate access or delegate access via a mobile or web application.

10 Delegate access – supports the ability for Subjects of Care to add, revoke and reinstate access to agents or carers via a mobile or web application.

11 View audit trail - supports the ability for Subjects of Care to view who has accessed their active script list via a mobile or web application.

12 Forward prescription link – supports the forwarding of links to electronic prescriptions to online or bricks and mortar pharmacies via a mobile or web application.

13 Pre-populate ASL - supports the ability for a Subject of Care to transfer their active prescriptions that are available in the Open Prescription Delivery Services to their Active Script List via a mobile or web application.

14 Create token – supports the ability for the Subject of Care to convert a prescription item listed in the ASL into an electronic token.

15 Hide/unhide prescription item – supports the ability for the Subject of Care to control the visibility of individual electronic prescription items on their Active Script List, to all entities with view access to their ASL, except for the registered owner of the ASL.

16 Notifications – supports the ability for the Subject of Care to receive electronic notifications for:

- ASL registrations;
- Access requests (from prescribers, dispensers, or carers/agents);
- Electronic prescriptions are added to their ASL;
- Electronic prescriptions held on their ASL are dispensed;
- Their ASL is viewed (by prescribers, dispensers, or carers/agents).

Only systems that have been registered with the Active Script List Registry can interact with the Active Script List Registry. All interactions between the Active Script List Registry and external systems (e.g. prescribing systems, dispensing systems, mobile intermediaries) is secured using TLS v1.2.

7.3.2 Active Script List Registration

7.3.2.1 Assisted Registration

A Subject of Care can choose to register for an active script list at a prescribing system location or a dispensing system location.

When the prescriber or dispenser clicks the Active Script List registration icon within the patient record in their Clinical Information System, the Open Prescription Delivery Service agent installed on prescribing or dispensing systems will launch a registration screen, pre-populated with the Subject of Care's locally stored personal information, including (where available):

- IHI number
- Family name
- Given name
- Date of birth
- Sex
- Address
- Mobile phone number
- Email address
- DVA file number
- Medicare card number
- Medicare IRN

If the prescriber or dispenser system sends the Subject of Care's IHI number to the Active Script List Registry, it should first verify with the HI Service that the IHI record status is "verified" and the IHI number status is "active". If the prescriber or dispenser system cannot verify, or does not hold, the Subject of Care's IHI number, it may submit the registration with the other demographic details listed above. The Active Script List Registry will attempt to resolve the Subject of Care's details with a single record within the HI Service for which the IHI record status is "verified" and the IHI number status is "active". If successful, and only if successful, registration can be completed.

Subjects of Care may add the details of carers/agents via the assisted registration process to allow carers/agents to collect prescribed medicines on their behalf. These details include:

- Family name
- Given name
- Address
- Mobile phone number
- Email address

A check box indicating the Subject of Care's consent to registration, and for carers/agents to act on their behalf (if any) to collect prescription medicines on their behalf, must be checked before the information can be submitted to the Active Script List Registry.

When the registration is submitted, the Active Script List Registry will send an electronic notification of registration to the Subject of Care. The Subject of Care can confirm or reject the registration. Upon confirmation, the Subject of Care's Active Script List becomes "active".

7.3.2.2 Self-registration

A Subject of Care may self-register for an Active Script List via a mobile or web application. These applications will use the personal information of the Subject of Care provided during the application registration process, including (where available):

- IHI number
- Family name
- Given name
- Date of birth
- Sex
- Address
- Mobile phone number
- Email address
- DVA file number
- Medicare card number
- Medicare IRN

The Active Script List Registry will attempt to resolve the Subject of Care's details with a single record within the HI Service for which the IHI record status is "verified" and the IHI number status is "active". If successful, and only if successful, registration can be completed.

Subjects of Care may add the details of carers/agents via the self-registration process to allow carers/agents to collect prescribed medicines on their behalf. These details include:

- Family name
- Given name
- Address
- Mobile phone number
- Email address

The Subject of Care will be required to indicate their consent for using their personal information to register for an active script list, and for carers/agents (if any) to collect prescription medicines on their behalf.

When the registration is submitted, the Active Script List Registry will send an electronic notification to the Subject of Care. The Subject of Care can confirm or reject the registration. Upon confirmation, the Subject of Care's Active Script List becomes "active".

Mobile and web application communication is secured via TLS.

7.3.2.3 Carers/agents

A carer or agent may register for an active script list on behalf of a Subject of Care. A typical scenario would be a parent registering for an active script list on behalf of their child which the parent can then manage. Registration may be via assisted registration or self-registration channels. In such cases, registration must be supported by evidence of a carer relationship (e.g. parent and child listed on the same Medicare card).

Should the Subject of Care seek to assert control over their active script list, and be legally entitled to do so, they can register themselves with the Active Script List Registry. Their existing active script list will be associated with this new registration and previous carer/agent access to their

active script list will be deactivated. The Subject of Care may re-instate access to carers/agents if they so choose.

7.3.3 Prescribing to an Active Script List

If a Subject of Care has registered for an active script list and seeks a prescription, the prescribing system will show that the Subject of Care has an active script list. Each time the prescriber opens the prescribe medicine screen for that Subject of Care, a call is made to the Active Script List Registry with the Subject of Care's IHI number, family name and given name, along with the identifier and name of the prescriber. If the Subject of Care has registered for the active script list, the ability to add electronic prescriptions to the Subject of Care's active script list will be present. A prescriber does not need to be granted access to the Subject of Care's active script list in order to add electronic prescriptions to it.

If the Subject of Care has granted access to the prescriber (i.e. the prescriber details are associated with the Subject of Care's active script list and their access status is current and active), the prescriber will be able to view the Subject of Care's active script list.

All active script list prescriptions are sent to the Active Script List Registry via the Open Prescription Delivery Service. The IHI number for the SoC within in the electronic prescription metadata is used to determine whether or not the SoC has a registered active script list. If registered, and the prescription metadata contains an ASL consent indicator, the electronic prescription will be forwarded to the Active Script List Registry. The Active Script List Registry agent will decrypt the clinical content and store summary information within the Active Script List Registry. All information stored in the Active Script List Registry is encrypted at rest.

7.3.4 Dispensing from an Active Script List

If a Subject of Care has registered for an active script list and seeks the dispensation of a medicine, the dispensing system will show that the Subject of Care has an active script list. The dispenser will follow established business processes to verify the identity of the Subject of Care and retrieve their record in the dispensing system. When the Subject of Care's record is retrieved, a call is made to the Active Script List Registry with the Subject of Care's IHI number, family name and given name, along with the identifier and name of the dispensing organisation. If the Subject of Care has registered for the active script list (i.e. there are summary electronic prescriptions in the Active Script List Registry associated with the Subject of Care's IHI number, family name and given name), and the Subject of Care has granted access to the dispenser (i.e. the dispenser details are associated with the Subject of Care's active script list and their access status is current and active), the option to retrieve the Subject of Care's active script list will be present. If the dispenser does not have access to the Subject of Care's active script list, then by clicking on the active script list icon, an electronic message will be sent to the Subject of Care. The Subject of Care can:

- accept the request;
- accept the request for a pre-defined limited period of time; or
- deny the request.

In addition to the summary list of a Subject of Care's electronic prescription, the dispenser will be able to view the details of any carers/agents associated with the Subject of Care's active script list. This will give dispensers the ability to assure that carers/agents collecting prescription medicines on behalf of the Subject of Care are doing so with the Subject of Care's authorisation.

7.3.5 Access Control

Access to the active script list is controlled by the Subject of Care. Initially, when a prescriber or dispenser attempts to access a Subject of Care's active script list, an electronic notification will be

sent to the Subject of Care advising them that the prescriber or dispenser is requesting access to their active script list. The Subject of Care can:

- accept the request;
- accept the request for a pre-defined limited period of time; or
- deny the request.

If the Subject of Care accepts the request, the prescriber or dispenser will be able to view their active script list. If the prescriber or dispenser's previous access has expired or been removed by the Subject of Care, clicking on the active script list icon will trigger a new electronic access request notification to the Subject of Care.

The Subject of Care can use a mobile or web application to hide/unhide individual prescription items, revoke and re-instate access to prescribers and dispensers; delegate, revoke and re-instate access to carers and agents; and view an audit trail of previous access to their active script list.

7.4 Community Context

The Community Context is defined by those circumstances where the Subject of Care exercises their choice of supply. In other words, the Subject of Care is prescribed medicines which they are free to have dispensed at a pharmacy of their choosing. This covers primary care prescribing and community pharmacy dispensing, but importantly also applies where medicines are prescribed in outpatient settings or on discharge from hospital when the Subject of Care can fill the prescription at a pharmacy of their choice. It also applies in residential care settings where the resident exercises their choice to manage their own prescription supply.

To support this choice, information to retrieve the prescription can be in the form of a paper-based Evidence of Prescription form (including token), an electronic token carried by the Subject of Care (or their Agent), or an active script list retrieved using the Subject of Care's personally identifying information. These provide the dispenser with access to the prescription lodged with an Open Prescription Delivery Service where the prescription is accessible to all potential dispensers.

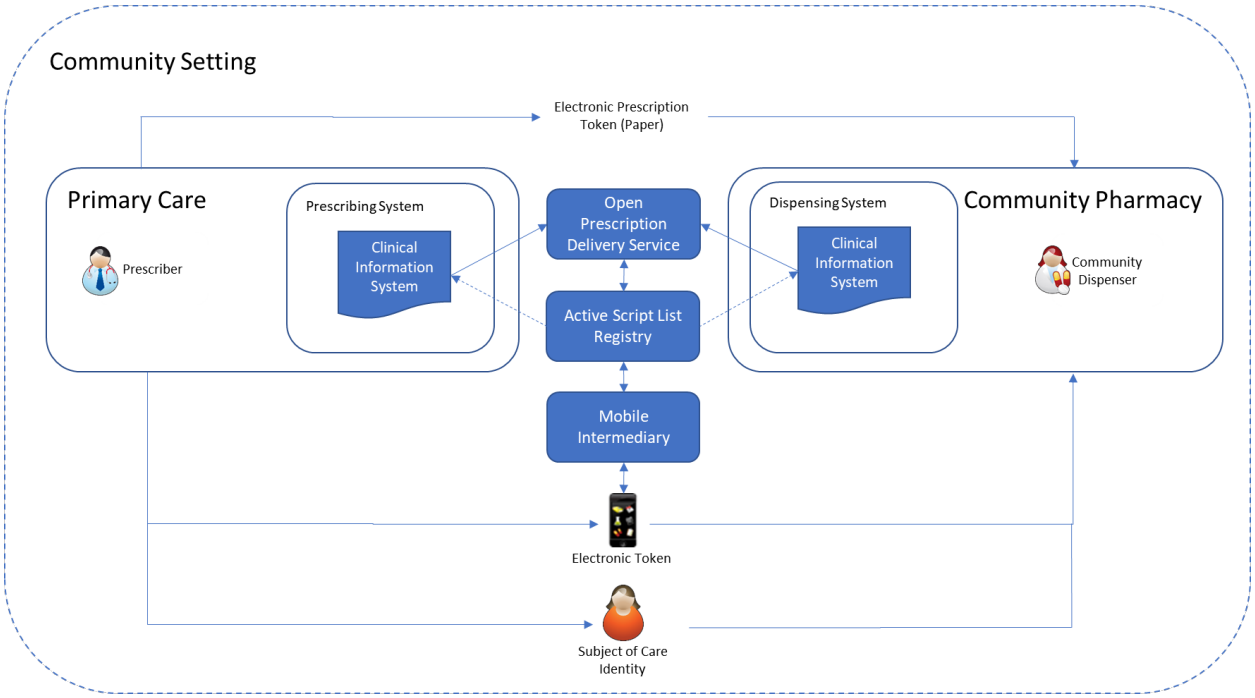


Figure 5. Electronic Prescriptions Future State - Community Context

In the Community Context, prescribers are prohibited from “channelling” prescriptions to specific pharmacies, thereby denying Subject of Care choice.

It is worth noting that certain healthcare facilities, such as private hospitals or Residential Care Facilities, may, subject to consent, obtain the bulk of their supply on behalf of their Subjects of Care through contractual arrangements with community pharmacies. In such cases, prescription delivery may occur via any choice of open prescription delivery service. However, as noted above, where prescriptions are provided on discharge or residents exercise their choice of supply, these facilities may provide paper prescriptions or issue electronic prescriptions via Open Prescription Delivery Services.

7.4.1 Community Electronic Prescribing

7.4.1.1 Community Electronic Prescribing Pre-conditions

In order for an authorised prescriber to be able to create an electronic prescription, the following steps are required:

1 The Healthcare Organisation must have obtained and installed clinical software which is conformant with the requirements for electronic prescriptions.

2 The Healthcare Organisation must have contracted with a conformant Open Prescription Delivery Service for the delivery of Electronic Prescriptions and established a connection with its clinical software.

3 The Healthcare Organisation must have defined and implemented a security policy which governs the Access to electronic prescribing capability and information in its clinical software.

4 The Healthcare Organisation must have authorised employees as approved prescribers and provisioned them with access to the electronic prescribing capability.

7.4.1.2 Community Electronic Prescribing Process

Prescribers in a community context such as General Practice will not perceive any variations in the process for the recording of medicines to be prescribed in their clinical systems.

The point of departure in current process will occur at the time in the consultation when the prescription is produced.

At this point, there are a series of decisions required:

1 Should the prescription be provided as a paper prescription or an electronic prescription? Considerations include:

   a Does the prescription carry specific legislative requirements precluding it from being generated as an electronic prescription, such as Written Authorities?
   In these circumstances, a paper prescription must be provided.

   b Does the prescriber have the capability and willingness to produce an electronic prescription?
   Prescribers have a choice as to whether to provide electronic prescriptions.

   c Does the Subject of Care have the desire to receive an electronic prescription?
   Subjects of Care have the right to express a specific choice of form.

2 If an electronic prescription is provided, in what form? The Subject of Care may request a token, or the electronic prescription can be added to their active script list.
   If an electronic prescription is provided as a token, delivery options include:

   a Plain paper containing the token (barcode/QR code) and information pertaining to the medicine(s) prescribed (paper-based Evidence of Prescription form with token).
   The plain paper contains similar information as would be found on a paper prescription except for:

i Prescriber's signature
The Evidence of Prescription form is not a legal prescription and must not be perceived as such by an authorised dispenser.

ii Any other details which the Subject of Care may not find relevant or informative may be omitted. For example, prescriber Number, PBS Entitlement Number, Authority Number, Local Prescription Number and/or Authority Approval Number.

b Electronic token delivery service such as SMS/MMS or Email.
Only a link to the token itself (barcode or QR code) and other limited information (name of the Subject of Care, medicine name, medicine strength, number of repeats, privacy notice) may be transmitted in this manner. This will enable redemption of the prescription by an authorised dispenser but will not expose any personal or clinical information if the electronic communication is misaddressed.
Should the Subject of Care or their agent wish to access the information regarding their prescribed medicines, they may use the token to retrieve the information using a conformant system (e.g. Mobile Application).

If the Subject of Care has registered for an active script list, the electronic prescription will be added to that list. The active script list can be seen by the Subject of Care and any prescriber or dispenser that the Subject of Care has granted access to. The Subject of Care can control access to the active script list via a mobile or web-based application and view an audit trail of who has accessed their active script list.

A Subject of Care with an active script list for electronic prescriptions may, at the time of prescribing, request that the prescription not be added to their active script list by electing to be issued with a paper prescription.

All clinical systems with electronic prescribing capability will have the ability to produce a plain paper form of token.

Considerations regarding choice of token delivery include:

a Is the Subject of Care physically able to receive a paper token?

b Does that Subject of Care have their prescriptions managed by an agent (e.g. Residential Care Facility) who is not present and able to receive a paper token?

c Does the Subject of Care or their agent have a device (e.g. smartphone or computer system) capable of receiving the electronic token?

d Does the Subject of Care want to receive the token electronically?

e Does the provider have the capability to send the token electronically?

Note: If Subjects of Care or their agents are in possession of their token, they may use their smartphone or computer systems to scan the barcode/QR code, or manually enter the barcode/QR code ID (if available), on a paper token at any time.

7.4.1.3 Community Electronic Prescribing Exception Conditions and their Treatment

1 Open Prescription Delivery Service Unreachable/Unavailable
Prescribing software systems may be able to detect when the Open Prescription Delivery Service is unavailable or unreachable (e.g. internet unavailable).
In such circumstances, the prescriber should be made aware in advance, so they may proceed directly with the preparation of a paper prescription.

2 Electronic prescription is slow to lodge or fails to lodge in the open prescription delivery service
The Subject of Care does not have a redeemable prescription until it is lodged in the open prescription delivery service. Prescribing software systems should provide an indication which confirms that the electronic prescription has been successfully lodged in the open

prescription delivery service. If the prescriber has not received confirmation within an acceptable period, they may instruct their prescribing software to cancel the electronic prescription and produce a paper prescription.
The time which a prescriber finds "acceptable" may vary from individual to individual and in accordance with circumstances.

Note: Prescribing software systems will continue to retry until lodgement is successful or the operation is cancelled by the prescriber. As such, there is no obligation on prescribers to wait for confirmation, although it would be good practice to ensure lodgement has been successful before the Subject of Care leaves the consultation.

3 Prescriber identifies a prescribing error
While different software systems may have different methods for handling electronic prescription amendments, the Subject of Care or their agent should always be provided with a replacement token. This will ensure that the Subject of Care or their agent is made aware of the accurate and up-to-date prescription information.

Note: Depending on how the prescribing software manages the amendment, the token itself may, or may not, be different to the original.

Note: An amendment to an electronic prescription is only possible prior to the prescription having been dispensed.

4 Electronic prescription unobtainable when the Subject of Care presents at dispenser
This scenario may arise if the Subject of Care presents to a pharmacy before the electronic prescription has been successfully lodged or the pharmacy is unable to access the Open Prescription Delivery Service (e.g. internet unavailable). In such an event, the pharmacy is unable to dispense autonomously as the paper form or token for an electronic prescription does not carry any legal authority.

The prescriber must, through due diligence processes, provide confirmation of the prescription details and that it was created as an electronic prescription. The prescriber may have a record in their prescribing system when the electronic prescription was successfully lodged. The pharmacy may, where regulations permit, elect to dispense as an urgent case (upon verbal confirmation from the prescriber), and reconcile with the electronic prescription when it becomes available.

Where regulations do not permit, the prescriber may be required to cancel the electronic prescription and create a paper prescription.

5 Electronically transmitted token not received
If it is agreed that the token be sent electronically to the Subject of Care or their agent, but it is not received, the prescriber should immediately confirm the electronic address (mobile number, email address, etc.) with the Subject of Care and instruct their prescribing system to re-send the token. If the failure is persistent, the prescriber should instruct their prescribing system to cancel the electronic prescription and create a paper prescription.

6 Subject of Care changes their mind
In the event that the Subject of Care, having been provided with an electronic prescription changes their mind and requests a paper prescription instead, the prescriber may instruct their prescribing system to cancel the electronic prescription and create a paper prescription.
In the event that the Subject of Care, having been provided with a paper prescription changes their mind and requests an electronic prescription, the prescriber may destroy the paper prescription and instruct their prescribing system to create an electronic prescription.

Note: This "change of form" is only possible prior to the prescription having been dispensed. If the prescriber is unclear regarding this fact, they may choose to deny the request.

7 Subject of Care loses their token
If the Subject of Care, or their agent, has lost the token, and has not previously registered for an active script list, they will be unable to redeem the prescription. The Subject of Care may request the prescriber to create a new prescription and cancel the original prescription or reissue the original token if they reasonably believe the token to be valid and operational (e.g. dispense has not yet occurred). A prescriber should have confidence the token in the Subject of Care's possession is valid.

7.4.2 Community Electronic Dispensing

7.4.2.1 Community Electronic Dispensing Pre-conditions

In order for an authorised supplier to be able to dispense an electronic prescription, the following steps are required:

1 The Healthcare Organisation must have obtained and installed clinical software which is conformant with the requirements for electronic dispensing.

2 The Healthcare Organisation must have contracted with a conformant Open Prescription Delivery Service for the delivery of electronic prescriptions and established a connection with its clinical software.

3 The Healthcare Organisation has installed equipment necessary to acquire the tokens used to access electronic prescriptions. This includes, but is not limited to, equipment that can scan tokens presented as barcodes or QR codes on mobile devices or on paper.

4 The Healthcare Organisation must have defined and implemented a security policy which governs the access to electronic dispensing capability and information in its clinical software.

5 The Healthcare Organisation must have approved employees as approved dispensers and provisioned them with access to the electronic dispensing capability.

7.4.2.2 Community Electronic Dispensing Process

Dispensers in a community context such as community pharmacy may see more substantive variations in process for supply against an electronic prescription.

The following are considerations for pharmacies engaged in electronic prescribing and places where dispensing software can alleviate potential issues:

1 Method of presentation

Community pharmacy may receive requests for prescription supply in the following forms:

a Paper Prescription
Paper prescriptions will persist, and pharmacies will be obliged to dispense against paper prescriptions as they presently do.
Paper prescriptions may carry an ETP barcode/QR code which may be scanned to facilitate the retrieval of prescription details into the dispensing system.
As per current state, the paper prescription is a legal instrument and information acquired electronically in these circumstances has no legal standing.

b Evidence of Prescription
Subjects of Care who elect to receive electronic prescriptions may also elect to receive the information about the prescription and the token in paper form. The Subject of Care provides the token in paper form to the pharmacist. The pharmacist scans the token (barcode/QR code) just as they would on a paper prescription. The Subject of Care may also choose to present the Evidence of Prescription to the pharmacist.

In this case, however, the Evidence of Prescription (i.e. paper token) has no legal standing. It is the electronically retrieved prescription (retrieved using the token), displayed on the dispensing system, that is the legal instrument. Pharmacists may NOT

provide supply based on information contained on the Evidence of Prescription. This information is intended for the Subject of Care and may NOT be construed, in any way, to constitute a legal authority to dispense.

There is no requirement for pharmacies to retain the Evidence of Prescription. If the Subject of Care asks the pharmacy to dispose of the Evidence of Prescription on their behalf, it should be disposed of securely.

c Token presented on Mobile Device
Subjects of Care may elect to manage their tokens on their mobile devices. The mobile device will display the token in a manner suitable for scanning using existing pharmacy equipment (similar to an airline boarding pass on a mobile device).
Pharmacies may need to consider the physical location of scanning equipment and display screens. Subjects of Care may be unwilling to surrender their mobile devices for scanning and there is a risk that the mobile device's screen could lock if there is a delay between acquisition and scanning.
As above, there may be information present on the mobile device which refers to prescribed medicines. This information is intended for the Subject of Care and may NOT be construed, in any way, to constitute a legal authority to dispense.

d Token received electronically
Where the pharmacy has implemented the capability, Subjects of Care may elect to send their tokens electronically to a pharmacy. The pharmacy may use the token to retrieve the electronic prescription. This is an optional facility.
As above, there may be information present on the electronic communication which refers to prescribed medicines. This information is intended for the Subject of Care and may NOT be construed, in any way, to constitute a legal authority to dispense.

e Active Script List
A Subject of Care may request the dispenser to perform a search for active prescriptions from the open prescription delivery services using their personally identifying information. This requires the patient to be registered for the active script list, which can be facilitated by the pharmacy via the Assisted Registration Service

Once registered with the Active Script List Registry, the Subject of Care determines who can access their active script list, and for how long. If a prescriber or a dispenser attempts to access a Subject of Care's active script list for the first time, the Subject of Care will receive an electronic notification. The Subject of Care can:

- accept the request;
- accept the request for a pre-defined limited period of time; or
- reject the request.

Using a prescription app, the Subject of Care can remove access for prescribers or dispensers that previously had access to their active script list. Subjects of Care can also see an audit trail of prescriber and dispenser activity related to their active script list.

2 Prescriber's original instructions

All paper prescriptions, including repeat authorisations, are attached to or carry the original instructions of the prescriber. For an electronic prescription, the prescriber's original instructions are available ONLY in electronic form via the dispensing system having been obtained from a conformant open prescription delivery service.

While there may be information accompanying the token presented by the Subject of Care on the Evidence of Prescription, this represents advice for the Subject of Care and may NOT be construed, in any way, to constitute a legal authority to dispense.

When either a token or the active script list model is used by the dispensing system to retrieve the electronic prescription, the dispensing system must display:

a The details contained on the original prescription

b The "status" of the electronic prescription (e.g. "cancelled")

c The details contained in the previous dispense record (if any)

d Annotations that may have been recorded by previous dispenser(s) (if any)

3 Evidence of ownership

As is the case currently, dispensers in community pharmacy may assess the person presenting the prescription and establish a reasonable expectation that the person has a right of supply. For example, the pharmacist has a reasonable belief that the person presenting the prescription is, or is an authorised agent of, the person for whom the medicine is intended.

When a person presents a paper prescription, part of that assessment is simply that the person is physically in possession of an artefact (the prescription) that is difficult to forge, difficult to copy, and is signed by the prescriber. There may be lesser assurance if the person is in possession with a paper or electronic token.

Dispensers may, as a result, place greater reliance on other methods of verification. Where, for example, the electronic prescription carries information which does not accompany the token, dispensers may consider this information in the context of the person. Date of birth may, for example, be available in the electronic prescription but will not be carried with the token.

Where a token is acquired electronically, and the Subject of Care is not physically present, dispensers may choose to rely on other methods. For example, end-user identity verification undertaken by the organisation providing the token delivery service.

4 Selection of medicines required

On presentation of a paper prescription at the "drop-off" counter, Subjects of Care may advise the pharmacist which of the items on the paper prescription they wish to have dispensed.
This process may be replicated if the Subject of Care presents a paper-based Evidence of Prescription form with token.

If the token is presented by other means, the dispenser may only see the list of medicines available when the token is used to retrieve the electronic prescription. If this occurs in a different location in the pharmacy, additional steps may be required to confirm which items are required.

5 Decision to not supply

Where the dispenser retrieves the electronic prescription, which is valid and available for dispensing, but decides not to dispense (for example, they are out of stock of the medicine, or the Subject of Care decides that they do not want to wait), the dispenser will cancel the dispensing process. The electronic prescription, which will have been locked when retrieved from the Open Prescription Delivery Service, will be returned to an unlocked state, and be available for dispensing at another time.

6 Authorised variation of prescriber instructions

There are situations when, if and as permitted under regulation, the dispenser may need to query and confirm the prescriber's instructions.

If permitted under regulation, a dispenser may accept a prescriber's verbal variation to instructions and dispense accordingly. When doing so, they may be required to annotate the

original prescription with a note indicating the reason for variation between the original instructions and the record of supply. Such annotations are intended for subsequent dispensers as an indication that supply was not made in error.
Such annotations must, in the case of an electronic prescription, be recorded in the dispensing system and made available to any subsequent dispenser.

7 Medicine(s) dispensed

The dispenser will complete their dispensing processes and update their local dispensing system to show the medicine(s) as dispensed. At this point, the dispensing system will upload a dispense record to the Open Prescription Delivery Service to reflect the dispense event.

8 Dispense amendment

While different systems may have different approaches to managing amendment of a dispense record (e.g. because of a dispensing error or because the Subject of Care has declined supply), information reflecting the correct dispense event should be communicated to the open prescription delivery service. This may be achieved by cancelling the original dispense record and issuing the correct dispense record.

9 Receipt of supply

Where regulation requires a receipt of supply record, manual capture is the current proposed solution.

10 Provision of new tokens

A new token will be required for subsequent repeats and deferred supply under the token model. If there are subsequent dispenses available on the electronic prescription, the pharmacy must provide the Subject of Care with a new token that may be used by a subsequent dispenser to retrieve the repeats or the original prescription item in the case of deferred supply.

Like the token provided with a prescription, new tokens must not be construed by a subsequent dispenser as representing a legal authority. The legal authority is the original electronic prescription as authored by a prescriber and must be retrieved from an open prescription delivery service when using a token corresponding to a repeat or deferred supply.

Depending on the capability of the dispensing software and the method by which the prescription token was presented, the dispenser may print and provide a paper token or new Evidence of Prescription to the Subject of Care and/or issue the new token via electronic means.

If the dispense record has been amended, the Subject of Care should always be provided with a token that allows access to the subsequent repeats or deferred supply.

11 Token storage (prescriptions held on file)

Where the Subject of Care obtains supply for repeat prescriptions from the same pharmacy, they may request that the pharmacy retain their paper prescription. This is largely for the convenience of the Subject of Care and may mean that the prescription is less likely to be lost.
In similar fashion, a Subject of Care may request that the pharmacy retain their token on file.

In this case, however, the pharmacy would retain (electronically or physically) the token used to retrieve their electronic prescription.
Prior to supply, the token must be used to retrieve the legal electronic prescription and confirm that the prescription has not been dispensed elsewhere.

At each dispense, a new token is generated and, at the request of the Subject of Care, stored for subsequent use.

12 Confirmation of receipt of dispense event from the open prescription delivery service

In the prescribing setting, significant emphasis is placed on the Subject of Care having reliable access to the electronic prescription from the time they leave the consultation. This means that it is recommended that the prescriber is proactively notified if the electronic prescription is not acknowledged as loaded to the open prescription delivery service so that they may choose to instead prepare a paper prescription.

This same level of emphasis is not imposed on acknowledgement of receipt of the dispense record in the open prescription delivery service in the dispensing setting for a number of reasons:

- In the vast majority of cases, the Subject of Care will have accessed the necessary medicines.
- Time will pass before they attempt to have them dispensed again (in the case of a repeat authorisation).
- The dispenser does not have the ability to revert from electronic to paper prescription.

Therefore, different dispensing solutions may choose to notify (or not) the dispenser should there be a delay in acknowledgement of receipt of the dispense record.

7.4.2.3 Community Electronic Dispensing Exception Conditions and their Treatment

1 Request for electronic prescription timed out

In this scenario, dispensers should retry the operation.

If the situation is persistent, continue as “Open Prescription Delivery Service Unreachable/Unavailable” (See below)

2 Electronic prescription not found

Dispensers should be aware that there are several possibilities which may give rise to this scenario:

a An electronic prescription was, in fact, created by an authorised prescriber but it has not yet been successfully lodged in the delivery service.

b The token being presented is somehow corrupt and doesn’t refer to a prescription in the delivery service.

c A technical issue with the inter-prescription exchange service.

The dispenser may, in such cases, contact the prescriber.

When an electronic prescription is created, the prescribing system will maintain a record of when confirmation of lodgement in the delivery service was received.

If confirmation has not yet been received, or has only just been received, the dispenser might be advised to wait and try again.

If confirmation of lodgement was received some time ago, it may be that the token is corrupt. In this case, the dispenser may obtain the token details from the prescriber and use these to retrieve the electronic prescription.

If the electronic prescription still cannot be retrieved, there may be an error in the delivery service infrastructure and the appropriate service operator advised. The prescriber and dispenser may, subject to regulation, agree to an urgent case (owing prescription).

3 Electronic prescription cancelled

Prescribers can cancel an electronic prescription at any time prior to it being dispensed.

If the token retrieves a prescription that has been cancelled, the dispenser should advise the Subject of Care and refuse supply.

4 Electronic prescription already dispensed

If the token retrieves a prescription that has already been dispensed, the dispenser should advise the Subject of Care.
If the pharmacist has reason to believe that the Subject of Care is without necessary medicine, they may contact the prescriber and, if permitted under regulation, request an urgent case (owing prescription), or they may supply medicine under emergency supply provisions if the prescriber is unavailable.

5 Subject of Care presents claiming they have lost or misplaced their token

If the prescription has previously been dispensed at this pharmacy, the pharmacy may have a record of the dispense event, together with the dispense token and be able to retrieve the prescription.

If there has been no prior dispense of this prescription at this pharmacy, this represents a "lost prescription" scenario and normal practice applied i.e. if the pharmacist agrees and regulations permit, an urgent case (owing prescription) or emergency supply process applied.

6 Open Prescription Delivery Service Unreachable/Unavailable on attempting to retrieve an electronic prescription

The pharmacist cannot dispense from information which may accompany the token.
The pharmacists may, if they choose to proceed, contact the prescriber and ascertain the details of the prescription, when it was created, when it was lodged in the open prescription delivery service, whether it is still in date and to confirm any remaining supply (repeats).

If these considerations warrant, and the dispenser agrees (post due diligence), supply may be provided on an urgent case (prescription owing) basis. The dispense event should be reconciled as soon as practical when the open prescription delivery service becomes available again.

7 Open Prescription Delivery Service Unreachable/Unavailable on sending of dispense record

The dispensing software should continue to attempt to send the dispense record, or store and forward once the open prescription delivery service becomes available again.

7.5 Residential Care Context

Subjects of Care in residential care may be receiving more medicines than those in the general community and on a more regular basis. Residential Care Facilities manage the administration of medicines for their residents as recorded on their residential medication chart and may also secure supply.

Under the future state, residential medication charts may be in electronic form and:

- Comply with the requirements of the National Residential Medication Chart;
- Comply with the systems that host them;
- Be conformant with the electronic prescribing requirements for prescribing systems; and
- Be conformant with token management.

Subjects of Care may be issued an electronic prescription token external to a medication chart (e.g. by a specialist), or register for an active script list, which requires token management by the residential care facility.

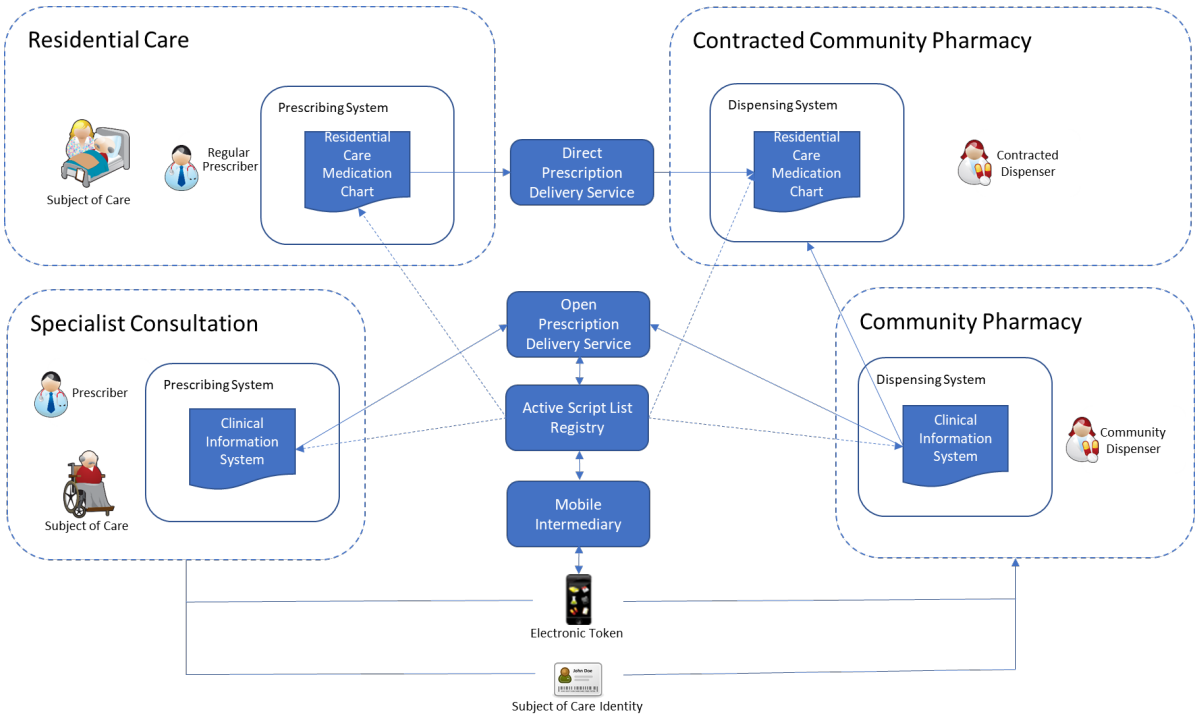


Figure 6. Overview of Residential Care context.

7.5.1 Residential Care Electronic Prescribing

7.5.1.1 Residential Care Electronic Prescribing Pre-conditions

In order for an authorised prescriber to be able to create an electronic prescription in a Residential Care Facility medication chart, the following steps are required:

1 The Residential Care Facility must have obtained and installed clinical software which is conformant with the requirements for electronic prescriptions (including medication charts).

2 The Residential Care Facility must have established Open Prescription Delivery Services.

3 The Residential Care Facility may optionally establish Direct Prescription Delivery Services with any contracted pharmacies.

4 The Residential Care Facility must, at a minimum, have contracted with an Open Prescription Delivery Service for the acquisition of Subject of Care's electronic prescription details through the use of a token (provided by the SoC) or an active script list, including medicines prescribed via the medication chart.

5 The Residential Care Facility must have defined and implemented a security policy which governs the access to electronic prescribing capability and information in its clinical software.

6 The Residential Care Facility must have approved prescribers and provisioned them with access to the electronic prescribing capability.

7.5.1.2 Residential Care Electronic Prescribing Process

There are several variations in the management of Subject of Care prescriptions and the methods though which supply is obtained. Prescribers within residential care context will find the electronic prescribing process similar but streamlined to the existing medication chart processing.

1 Prescription by a regular prescriber

Residents may be attended by a regular prescriber who is provisioned with access to the facility's medication chart prescribing system.

a The medication chart is created by a prescriber per state legislative requirements within the medication chart system adding all the Subject of Care's current medicines. The chart is approved and dated.

b The medication chart is reviewed on a regular basis in accordance with regulatory requirements.

c The medication chart may be amended at any time by an authorised prescriber.

2 Prescription by another authorised prescriber

Residents may attend or be attended by a physician on an ad hoc basis and one who does not have access to the facility's medication chart system.

Note: This practice carries an inherent element of risk and efforts should be made to ensure that the prescriber is made aware of all medicines being taken by the Subject of Care.

In such circumstances, the prescriber may, with the Subject of Care's agreement, issue an electronic prescription, submitted to an Open Prescription Delivery Service, and either:

- add the prescription to the Subject of Care's active script list (where the Subject of Care has registered for an active script list); or
- provide the token to the Subject of Care or, with the Subject of Care's approval, send the token directly to the residential facility's electronic address for inclusion in the medication chart system.

The medication chart system may use the active script list or the token to retrieve the details of prescriptions from the Open Prescription Delivery Service and may attach these details to the Subject of Care's medication chart.

Note: The system may not automatically update the Subject of Care's medication chart with the new information. Generally, there should be a medicine review prior to the medication chart being updated.

Upon review by the Subject of Care's regular prescriber, the medication chart may be updated with the new prescription details and any tokens stored on the medication chart system made void and archived.

The residential care system will present all current medicines for the Subject of Care in a consolidated view, together with pertinent information such as "repeats remaining" as may be applicable to externally sourced prescriptions.

7.5.1.3 Residential Care Electronic Dispensing Process

1 Direct Supply requested from the facility's nominated pharmacy

Residential Care Facilities may source supply from contracted community pharmacies if required and where the Subject of Care has consented.

The Residential Care Facility may utilise any form of Prescription Delivery Service to send the medication chart, or the group of prescriptions that comprise the medication chart, together with any tokens representing additional prescriptions to the pharmacy. The nominated pharmacy may provide supply directly from a NRMC and will need to retrieve the electronic prescriptions associated with any tokens from an Open Prescription Delivery Service[2].

2 Supply requested from a community pharmacy of the Subject of Care's choice

Where the Subject of Care has requested supply from a pharmacy that does not have the means to receive prescription information directly from the facility, the prescriptions from the medication chart may be submitted to an Open Prescription Delivery Service, which can

[2] This process is the same as that detailed in 7.4.2.2 above, and has the same preconditions, exception conditions and treatments.

be accessed via the tokens presented to the pharmacy by the SoC, or the SoC's active script list (subject to the SoC being registered for an active script list).

7.6 Inpatient Context

7.6.1 Public Hospital

The following diagram provides a high-level illustration of the systems and actions within the Public Hospital context. It shows the Direct Prescription Delivery Service operating for inpatient medication orders, and the Open Prescription Delivery Service operating for medicines on discharge from inpatient or emergency settings, or from outpatients (noting that these may also operate through the Direct Prescription Delivery Service should the Subject of Care not wish to exercise choice of dispenser).

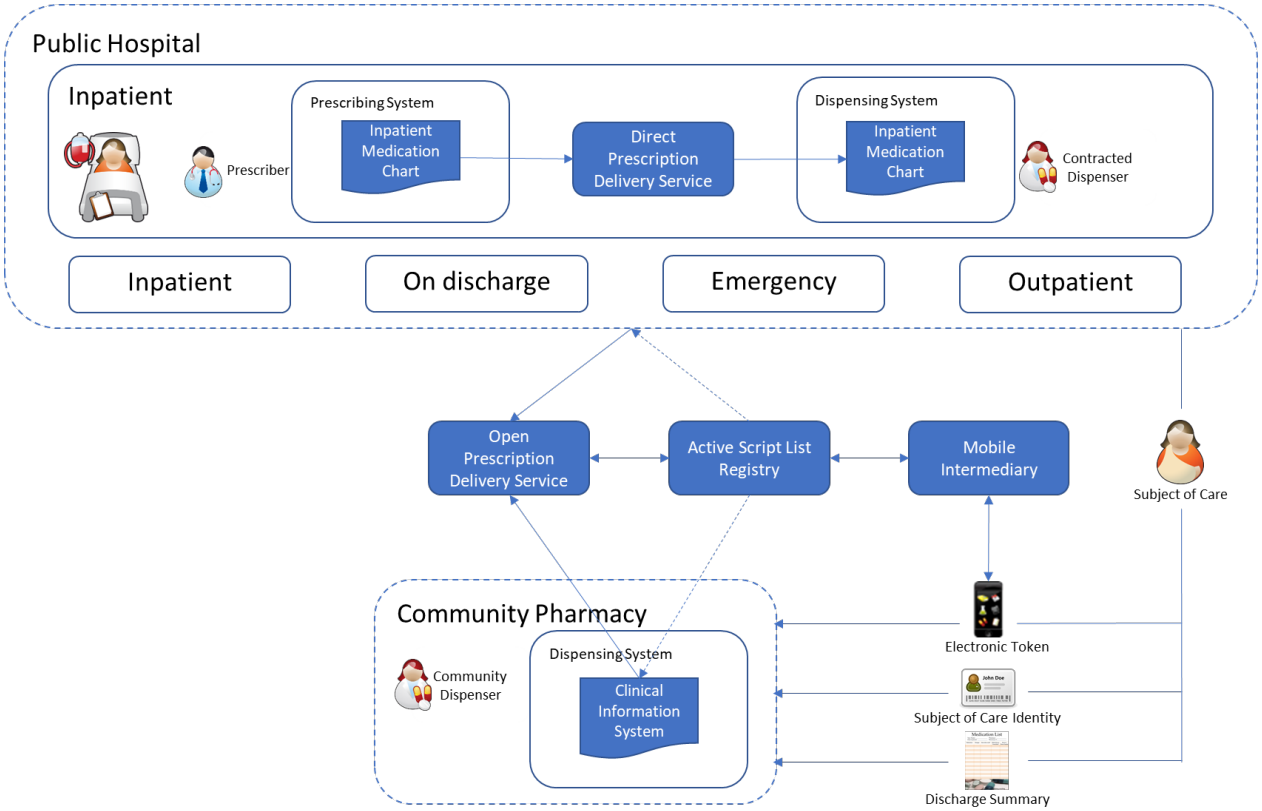


Figure 7. Overview of Public Hospital context.

It is noted that in some hospital systems, the system in which medicines are ordered or prescribed, and the system in which the order is reviewed and in which the dispense is authorised is one single system. This provides significant benefits in both efficiency and safety. The EPP Solution Architecture does not ***require*** that the Direct Prescription Delivery Service is an external service, or that prescriptions need to be transferred out of the prescribing system into a different dispensing system in order to constitute an electronic prescription.

7.6.1.1 Public Hospital Electronic Prescribing

Subjects of Care within inpatient hospital care may be receiving more medicines that those in the general community as well as being on more short-term medicines such as antibiotics, antiemetics, subcutaneous anticoagulants and corticosteroids. Hospitals typically manage the

administration of medicines for their inpatients on their hospital medication chart and in almost all cases the hospital will also supply the medicines[3].

As well as providing medicines for inpatient care, the hospital will also supply prescriptions or medicines (or both) for Subjects of Care at the time of discharge, therefore connecting the hospital to community dispensing.

The future state will allow the hospital medication charts to operate entirely electronically as well as complying with the requirements of the National Hospital Medication Chart. Depending on jurisdictional rules and local processes, including hospital pharmacist's review, Subjects of Care on discharge may also be able to use the discharge summary medication list as a set of prescriptions and have them dispensed at a community pharmacy of their choosing as well as having the option to have them dispensed at the hospital's pharmacy.

7.6.1.2 Public Hospital Electronic Prescribing Pre-conditions

In order for an authorised prescriber to be able to create an electronic prescription within a hospital the following core steps are required:

1 The hospital must have defined and implemented a security policy which governs the access to electronic prescribing capability and information in its clinical software.

2 The hospital must have approved prescribers and provisioned them with access to the electronic prescribing capability.

In addition to these core steps, in order to support hospital medication chart electronic prescribing, the hospital must also complete the following steps:

1 The hospital must have obtained and installed clinical software which is conformant with the requirements for electronic prescriptions (including medication charts).

2 The hospital must have established Direct Prescription Delivery Services with an in-hospital pharmacy or a contracted agreement with an external pharmacy. Note that the Direct Prescription Delivery Service will in most cases be via point-to-point or enterprise integration which meets the minimum conformance requirements for a Prescription Delivery Service, or it may be a logical concept where both the prescribing and dispense authorisations are undertaken within a single system.

In order to support electronic prescriptions on discharge, the hospital must complete the following step:

1 The hospital must have contracted with an Open Prescription Delivery Service for the delivery of electronic prescriptions to community pharmacies.

7.6.1.3 Public Hospital Electronic Prescribing Process - Inpatient

Prescribers within inpatient care will find the electronic prescribing process similar but streamlined to the existing medication chart processing.

Patients are attended by the hospital-based prescriber who is provisioned with access to the facility's medication chart (prescribing) system.

a The medication chart is created by the prescriber within the medication chart system adding all the Subject of Care's current medicines. The chart is signed and dated per relevant legislation and policy.

b The medication chart is reviewed on a regular basis in accordance with regulatory requirements.

c The medication chart may be amended at any time by an authorised prescriber.

[3] Consumer choice in these circumstances is being maintained, as the common practice when people are admitted to a hospital or outpatient clinic is for the hospital to have a consent process for treatment that covers medication supply.

7.6.1.4 Public Hospital Electronic Prescribing Process – On Discharge

Prescribers discharging Subjects of Care will be able to convert the hospital medication chart into valid electronic prescriptions that can be filled in community pharmacy. The prescriptions may also be filled within the hospital's own pharmacy. Additionally, where possible (e.g. not public hospital S100) a combination of both may exist where the initial prescription is filled by the hospital pharmacy and the subsequent repeat electronic prescriptions are provided to the Subject of Care or their agent to have dispensed at a community pharmacy of their choosing.

1 At the time of discharge the prescriber reviews the current medication chart and selects which medicines are required on discharge and how many repeats are required.

2 It is the Subject of Care's choice as to whether these medicines are to be provided by the in-hospital pharmacy or a community pharmacy of the Subject of Care's choosing.

   a If the medicines are to be dispensed by the in-hospital pharmacy the medication order is sent to the pharmacy directly. Any subsequent repeat electronic prescriptions are sent to the Open Prescription Delivery Service so that the Subject of Care may fill these at a community pharmacy of their choosing. The tokens may be passed to the Subject of Care, most likely on paper or, if an electronic address is recorded for this purpose, electronically. If the Subject of Care has registered for an active script list, the electronic prescriptions will be added to that list.

   b If the medicines are to be dispensed by a community pharmacy the electronic prescription(s) are sent to the Open Prescription Delivery Service and the tokens (if generated) are passed on to the Subject of Care[4]. If the Subject of Care has registered for an active script list, their electronic prescriptions may be added to that list.

7.6.1.5 Public Hospital Electronic Prescribing Exception Conditions and their Treatment

When prescribing medicines for the patient in the in-patient setting, the hospital medication chart is less likely to have the technical issues outlined within community prescribing and dispensing as they occur on the same computer network and internet outages should have limited impact. Hospitals shall define their own business continuity strategy to account for system outages, and this will most likely involve paper hospital medication chart prescribing.

For medicines on discharge that involves community pharmacies see 7.4.1.3 Community Electronic Dispensing Exception Conditions and their Treatment.

7.6.2 Private Hospital

Private hospital prescribing is achieved in a variety of ways. They may use a compliant electronic hospital medication chart system or medication orders may be written by the treating prescriber on their own standalone prescribing system. In the event the private hospital uses a fully electronic hospital medication chart, the context is identical to that mentioned in the public hospital context (7.6.1.1 above).

Where the prescribers use their own stand-alone prescribing software, prescriptions may still be filled by in-hospital or contracted pharmacies, but they may also be filled by a community pharmacy if the Subject of Care chooses.

The following diagram provides a high-level illustration of the systems and actors within the Private Hospital context. It shows the Direct Prescription Delivery Service operating for inpatient medication orders, and the Open Prescription Delivery Service operating for medicines on discharge from inpatient or emergency settings, or from outpatients (noting that these may also operate through the Direct Prescription Delivery Service should the Subject of Care not wish to exercise choice of dispenser).

[4] This process is the same as that detailed in 7.4.2.2 above, and has the same preconditions, exception conditions and treatments.

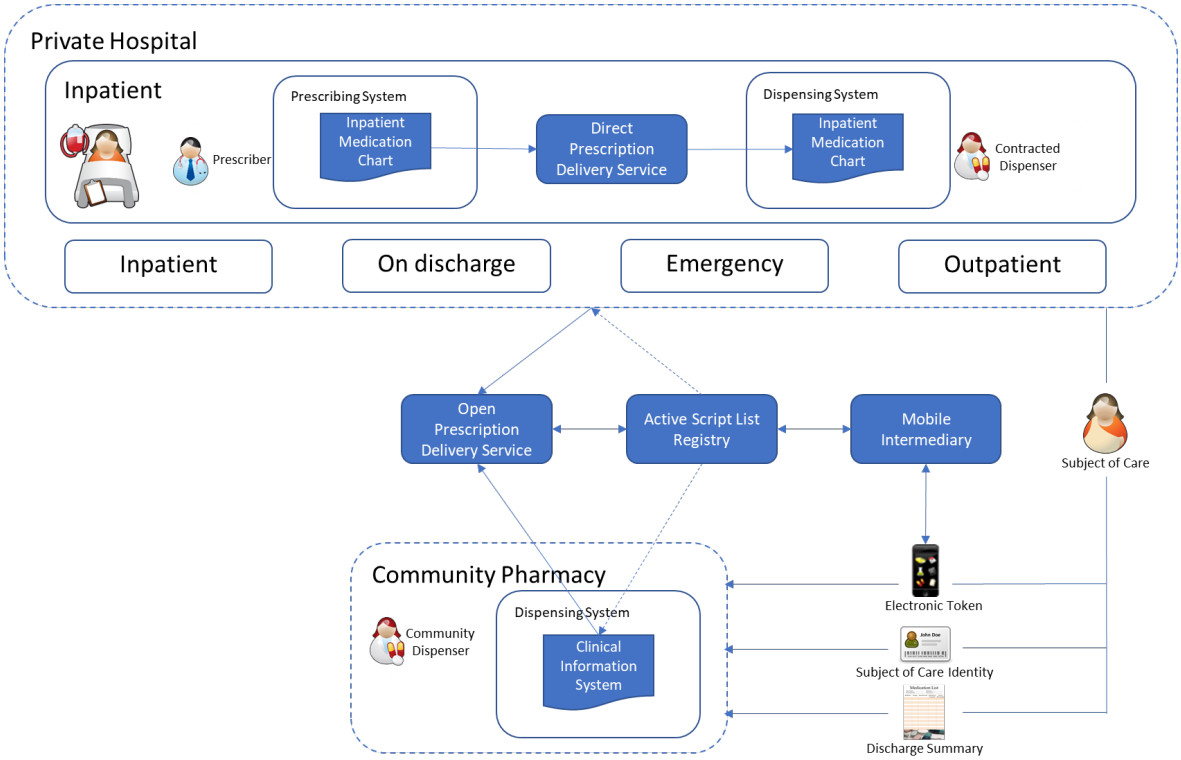


Figure 8. Overview of Private Hospital context.

7.6.2.1 Private Hospital Electronic Prescribing Pre-Conditions

In order for an authorised prescriber to be able to create electronic prescriptions within a hospital the following core steps are required:

1 The hospital must have defined and implemented a security policy which governs the access to electronic prescribing capability and information in its clinical software.

2 The hospital must have approved prescribers and provisioned them with access to the electronic prescribing capability.

3 The hospital must have obtained and installed clinical software which is conformant with the requirements for electronic prescriptions.

4 The hospital must have established conformant Direct Prescription Delivery Services with an in-hospital pharmacy or a contracted agreement with an external pharmacy. Note that the Direct Prescription Delivery Service may be via point-to-point or enterprise integration which meets the minimum conformance requirements for a Direct Prescription Delivery Service as is the case with public hospitals.

In order to support electronic prescriptions on discharge the hospital must complete the following step:

1 The hospital must have contracted with an Open Prescription Delivery Service for the delivery of electronic prescriptions to community pharmacies.

2 Private hospitals may also choose to contract with an Open Prescription Delivery Service if the prescribers opt to use their own standalone prescribing software.

7.6.2.2 Private Hospital Electronic Prescribing Process

The process is consistent with that of public hospitals (see 7.6.1.1)

7.6.2.3 Private Hospital Electronic Prescribing Exception Conditions and their Treatment

In the event that the private hospital chooses to implement an Open Prescription Delivery Service the exception conditions are identical to that of community pharmacy (Community Electronic Dispensing exception conditions and their treatment). In these events using paper prescriptions would be the most likely contingency plan for exception cases and as such private hospitals should make appropriate business continuity plans and ensure the appropriate stationery is available.

7.7 Outpatient Context

Prescribing from outpatient clinics and emergency departments vary from both the inpatient context and the community context. If medicines are provided *during the episode of care,* they are likely to be sourced in accordance with hospital practice from the hospital pharmacy. As per the public hospital context described above, the way consumer choice is maintained as the common practice when people attend an outpatient clinic is for the hospital to have a consent process for treatment that covers medicines supply for administration during the episode.

Prescriptions provided at the conclusion of the episode should, where possible, be provided in a manner that supports patient choice of source of supply. ("Where possible" as some S100s may only be available from the hospital dispensary.)

7.7.1 Outpatient Electronic Prescribing Pre-conditions

In order for an authorised prescriber to be able to create an electronic prescription in an outpatient clinic, the following steps are required:

1 Outpatient clinic must have obtained and installed clinical software which is conformant with the requirements for electronic prescriptions.

2 Outpatient clinic must have defined and implemented a security policy which governs the access to electronic prescribing capability and information in its clinical software.

3 Outpatient clinic must have approved prescribers and provisioned them with access to the electronic prescribing capability.

In order for an authorised prescriber to create a valid electronic prescription that is dispensed by a contracted or in-hospital pharmacy:

- The outpatient clinic must have established Direct Prescription Delivery Services with any contracted or in-hospital pharmacies.

In order for an authorised prescriber to create a valid electronic prescription that can be filled at a community pharmacy of the Subject of Care's choosing the following steps are required:

- Outpatient clinic must have contracted with an Open Prescription Delivery Service for the delivery of electronic prescriptions to community pharmacies and established a connection with its clinical software.

7.7.2 Outpatient Electronic Prescribing Process

Electronic prescribing for medicines to be administered during the episode of care remain similar to the existing workflow and align to 7.6.1.1 Public Hospital Electronic Prescribing.

For prescribing at the end of the episode, a decision is required.

1 Should the prescription be provided as a paper prescription or an electronic prescription? Considerations include:

   a Does the prescription carry specific legislative requirements for a physical (handwritten) signature, annotation or authority? In these circumstances, a paper prescription must be provided.

b Does the prescriber have the capability and willingness to produce an electronic prescription? Prescribers have a choice as to whether to provide electronic prescriptions.

c Does the Subject of Care wish to have the prescription filled by the in-hospital or contracted pharmacy, or do they wish to take the prescription to a community pharmacy?

d Does the Subject of Care have the desire to receive an electronic prescription? Subjects of Care have the right to express a specific choice of form.

2 If the Subject of Care requests an electronic prescription and would like it to be filled by a community pharmacy, they may be issued with a token, or the prescription can be added to their active script list. The approach on what form a token takes is identical to section 7.4.1 Community Electronic Prescribing discussed above, as are the exception conditions and treatments.

3 If the Subject of Care instead requests for the electronic prescription to be dispensed at the hospital or contracted pharmacy, the prescribing software should let the prescriber select either the in-hospital or contracted pharmacy. The software may then send the electronic prescription directly using a Direct Prescription Delivery Service.

7.7.3 Outpatient Electronic Prescribing Exception Conditions and their Treatment

If the Subject of Care wishes to have the prescription filled by the in-hospital or contracted pharmacy the exception conditions are identical to those in the hospital scenarios raised above. If instead the Subject of Care chooses to have the prescription filled by a community pharmacy of their choosing the exception conditions will be identical to that of any community pharmacy dispensing events as described above.

8 Data Elements

The Electronic Prescriptions Solution Architecture, in leveraging existing solutions and permitting further industry innovation, does not define or declare a complete normative data model for the storage, transmission or exchange of prescription or dispense information.

It does, however, require the inclusion of certain data elements which must be accommodated for an Open Prescription Delivery Service implementation to be declared conformant. These are detailed in the relevant national legislation and state and territory regulations.

For guidance on the possible contents of a prescription and dispense record, reference can be made to ATS 4888.1 – 2013 or the eHealth Prescription Record v1.2.1[5].

8.1 Electronic Record Metadata

Each electronic prescription record and dispense record has two sections:

- Metadata - that is decrypted within the Open PDS to support the technical operation of the system
- Clinical content - the body of the record containing personal and sensitive information, which remains encrypted within the Open PDS

Together the metadata and the clinical content comprise the Electronic Prescription.

The requirements for the prescription metadata are described in the tables below. Normative data elements are identified in blue, in the context of example data structures so their use and cardinality may be readily understood.

8.1.1 Electronic Prescription Metadata

Electronic Prescription – metadata			
Field Name	**Data type**	**Optionality**	**Notes**
Delivery Service Prescription Identifier (DSPID)	String	Required	The barcode or QR code on a token is a representation of this value and is used to retrieve the prescription.
Prescription software conformance identifier	String	Normative - Required	Conformance ID of the prescribing software.
originalRepositorySoftUniqueId	String	Normative - Required	This is the conformance id of the Open PDS to which the prescription is sent. This will be populated on submission of the electronic prescription to an Open Prescription Delivery Service.
Electronic Address	String	Normative - Optional	The electronic address to which an electronic prescription notification may be sent.

[5] The eHealth prescription record specification can be found on the Agency's website at: https://www.digitalhealth.gov.au/implementation-resources/clinical-documents/EP-1919-2015/NEHTA-1913-2015

Electronic Prescription – metadata			
ASLR consent indicator	Boolean	Optional	To indicate if the electronic prescription is an active script list prescription and should be forwarded by the Open PDS to the Active Script List Registry.
ASLR identifier	String	Optional	The identifier for the Active Script List Registry to which the electronic prescription is to be sent.
Individual Healthcare Identifier (IHI) number	String	Required	To support the identification of prescriptions contained in an Open PDS belonging to a specific SoC for the purposes of pre-populating their active script list.
Other Metadata			Additional metadata as may be required to support the operation of the delivery service.

8.1.2 Dispense Record Metadata

Electronic Prescription – metadata			
Field Name	**Data type**	**Optionality**	**Notes**
Delivery Service Prescription Identifier (DSPID)	String	Required	The barcode or QR code on a token is a representation of this value and is used to retrieve the dispense record(s) (including repeat record(s)) is applicable.
Dispense software conformance identifier	String	Normative - Required	Conformance ID of the dispensing software.
originalRepositorySoftUniqueId	String	Normative - Required	This is the conformance id of the Open PDS to which the prescription was originally sent. This will need to be copied from the original prescription.
RepositorySoftUniqueId	String	Normative - Required	This will be populated on submission of the Dispense Record to an Open Prescription Delivery Service.
Electronic Address	String	Normative - Optional	The electronic address to which an electronic dispense record notification may be sent.
Other Metadata			Additional metadata as may be required to support the operation of the delivery service.

8.2 Evidence of Prescription Data Requirements

The following tables outline the logical data requirements for presentation on an Evidence of Prescription for a Subject of Care or their agent.

8.2.1 Evidence of Prescription Provided Physically to the Subject of Care (or their agent) at Time of Prescription

Where the Evidence of Prescription can be guaranteed to be provided directly to the Subject of Care or their agent (for example, printed and handed physically over, presented on a screen for printing in an online ordering environment), the following data elements should be provided:

Logical Data Description	Data Elements
Barcode/QR code	A barcode or QR code accompanied by the alphanumeric representation
Barcode/QR code number (DSPID)	DSPID
Name of the Subject of Care	Name title, Given Name, Family Name
Name of the prescriber	Name title, Given Name, Family Name
Name of the prescriber organisation (optional)	Organisation Name
Contact Details of the prescriber/organisation	Address (Line 1, Line 2, Line 3, Suburb, State, Postcode) Telephone number
Medicine name and strength	Medicine name Medicine strength
Date prescribed	Date prescribed
Number of repeats available	Maximum number of repeats
Privacy notice	The privacy notice relating to the collection of personal information by the Australian Government to support the assessment and administration of payments and services.

8.2.2 Evidence of Prescription Provided Physically to the Subject of Care (or their agent) at Time of Dispense

Where the Evidence of Prescription can be guaranteed to be provided directly to the Subject of Care or their agent (for example, printed and handed physically over, presented on a screen for printing in an online ordering environment), the following data elements should be provided on dispense or deferred supply:

Logical Data Description	Data Elements
Barcode/QR code	A barcode or QR code accompanied by the alphanumeric representation
Barcode/QR code number (DSPID)	DSPID
Name of the Subject of Care	Name title, Given Name, Family Name
Name of the prescriber	Name title, Given Name, Family Name
Name of the prescriber organisation (optional)	Prescribing Organisation Name
Contact Details of the prescriber/organisation	Prescribing Organisation Address (Line 1, Line 2, Line 3, Suburb, State, Postcode) Prescribing Organisation Telephone number

Logical Data Description	Data Elements
Most recent dispenser	Dispensing organisation name Dispensing Organisation Address (Line 1, Line 2, Line 3, Suburb, State, Postcode) Dispensing Organisation Telephone number
Medicine name and strength	Medicine name Medicine strength
Date prescribed	Date prescribed
Number of repeats available	Remaining number of repeats
Privacy notice	The privacy notice relating to the collection of personal information by the Australian Government to support the assessment and administration of payments and services.

8.2.3 Notification of Electronic Prescription

Where notification of an electronic prescription is transmitted electronically to the Subject of Care (for example, by email or SMS), the following data elements should be provided:

Logical Data Description	Data Element
Uniform Resource Identifier (URI)	A URI is a string of characters which is used to identify a resource on a computer network. A URI may be a name by itself (URN) or a resource name with a method of getting to it (URL). URI's provide a standardised syntax used by developers to identify a resource. For electronic prescriptions, a URI should follow the format ausrx://<Open Prescription Delivery Service Abbreviation>/<Delivery Service Identifier> (Note: ausrx is yet to be confirmed as an available prefix.)

8.2.4 Evidence of Electronic Prescription

The URI in a notification of an electronic prescription will link to the following data elements:

Logical Data Description	Data Elements
Barcode/QR code	A barcode or QR code accompanied by the alphanumeric representation
Barcode/QR code number (DSPID)	DSPID
Name of the Subject of Care	Name title, Given Name, Family Name
Medicine name and strength	Medicine name Medicine strength

Logical Data Description	Data Elements
Privacy notice	A link to the privacy notice relating to the collection of personal information by the Australian Government to support the assessment and administration of payments and services.

Acronyms

Acronym	Description
ABN	Australian Business Number
AHPRA	Australian Health Practitioner Regulation Agency
AMT	Australian Medicines Terminology
API	Application Programming Interface
APP	Australian Privacy Principles
ASL	Active Script List
ASLR	Active Script List Registry
ATC	Anatomical Therapeutic Classification
CIS	Clinical Information System
DSPID	Delivery Service Prescription Identifier
EDW	Enterprise Data Warehouse
EP	Electronic Prescription
EPWG	Electronic Prescribing Working Group
ETP	Electronic Transfer of Prescriptions
e-Prescribing	electronic prescribing
e-Prescription	electronic prescription
HI Service	Healthcare Identifiers Service operated by Services Australia
HPI-I	Healthcare Provider Identifier - Individual
HPI-O	Healthcare Provider Identifier - Organisation
IHI	Individual Healthcare Identifier
NRMC	National Residential Medication Chart
PBS	Pharmaceutical Benefits Scheme
PDS	Prescription Delivery Service
PES	Prescription Exchange Service
RPBS	Repatriation Pharmaceutical Benefits Scheme
SoC	Subject of Care (patient or consumer)
S100	Section 100 – highly specialised drug as per the Highly Specialised Drugs (HSD) Program
TWG	e-Prescriptions Technical Working Group

Glossary

Term	Meaning
Australian Medicines Terminology	The terminology within SNOMED CT-AU that is the national, standards-based approach to the identification and naming of medicines in clinical systems for Australia.
API Gateway	Programming that sits in front of a set of disparate application programming interfaces (APIs) and acts as a single point of entry for subscribing software systems.
Conformance	A measurement (by testing) of the adherence of an implementation to a specification or standard.
Electronic prescribing (e-Prescribing)	The process by which a prescription is electronically generated by a prescriber, authenticated with an electronic signature, securely transmitted to a prescription delivery service for dispensing and supply, downloaded by a supplier, seamlessly integrated into the dispensing software and, in the case of Australian government subsidised prescriptions, available to be electronically sent to the Services Australia (formerly the Department of Human Services - DHS) for claiming purposes. Notes: This definition does not preclude the use of paper processes to support electronic prescribing activity. Repeat and deferred supply dispense records that are uploaded to a prescription delivery service by a supplier are not electronic authorisations, unless the original prescription was generated by a prescriber as an electronic prescription.
Electronic prescription (e-Prescription)	An electronic clinical document that contains all information relating to an order to supply medicine to an individual and is a legally dispensable instruction. An electronic prescription is generated electronically by an authorised prescriber, authenticated, securely transmitted (either directly or indirectly) for dispensing and supply, integrated into the pharmacy dispensing software and, in the case of Pharmaceutical Benefits Scheme (PBS) prescriptions, available to be sent electronically to Services Australia (formerly the Department of Human Services - DHS) for claiming purposes. Note: This definition does not preclude the use of other processes or artefacts to support e-Prescribing.
Electronic transfer of prescription (ETP)	The current process whereby prescribing systems pass data about a prescription to a Prescription Exchange Service (PES), which is available for download by dispensing systems in support of dispensing a paper prescription. This process provides clinical safety and time saving benefits.
Evidence of Prescription	The prescriber has the capability of offering the Subject of Care or their agent evidence of the electronic prescription. It is important that Evidence of Prescription only contains information that is helpful to the Subject of Care and would provide an authorized dispenser sufficient information to contact the prescriber in the case that the legal electronic prescription cannot be retrieved. The Evidence of Prescription may include a token that supports retrieval of the electronic prescription using a barcode/QR code scanner (or similar).
Medicine record	The record, made by an authorized prescriber in a prescriber system or on a medication chart, detailing what medicine(s) the Subject of Care is, or should be, supplied with.

Term	Meaning
Paper prescription	The current prescription utilised in Australia. A paper prescription may or may not contain an ETP barcode/QR code. A paper prescription constitutes the legal artefact.
Participating system	A computer system that participates in electronic prescribing. Participating systems include any system which generates an electronic prescription, retrieves and dispenses from an electronic prescription, facilitates the transfer of an electronic prescription or manages an electronic prescription.
Prescription	A legally dispensable instruction from an authorised prescriber to supply medicine(s).
Prescription item	One prescription may contain orders for a number of different medicines (per regulation). For example, one prescription form (or electronic prescription) may contain up to three (3) different pharmaceutical benefit prescription items. Not all prescription items are required to be dispensed at the same time.
Token	A piece of information which is used to identify and access an electronic prescription or repeat. The information may be provided to and carried by the Subject of Care in physical form (a piece of paper containing a barcode or QR code) or information (e.g. barcode/QR code, medicine name, medicine strength, number of repeats) sent electronically to a mobile device. The barcode or QR code supports scanning.

References

1. AHMAC Electronic Prescribing Working Group Meeting Papers for 24 July 2018.

2. AHMAC Electronic Prescribing Working Group Meeting Papers for 13 December 2018.

3. ATS 4888.1 – 2013 available at https://infostore.saiglobal.com/en-au/Standards/ATS-4888-1-2013-119976_SAIG_AS_AS_251436/

9 Appendix A – Use Cases

This appendix contains use cases supporting the electronic prescription contexts described in Section 7. Use cases are intended for illustrative purposes only, and do not encompass all edge cases. The use cases provided are listed in the following table.

Prescriber Use Cases	Dispenser Use Cases	Consumer Use Cases
UC4.1.8 – Prescribe	UC4.5.8 – Dispense	UC4.3.8 – Normal flow
UC4.1.9.1 – Create electronic prescription token	D2.6.1 – Dispense prescription owing	UC4.3.9 – Shared access
UC4.1.9.2 – Add electronic prescription to active script list	UC4.5.10.1 – Electronic prescription paper form	
UC4.1.9.3 – Create paper prescription	UC4.5.10.2 – Active script list	
UC4.1.10.2 - Multiple prescription document	UC4.5.10.3 – Electronic prescription not available at request	
UC4.1.10.3 – Cancel prescription delivery option	UC4.5.10.4 – Prescription dispense history	
UC4.1.10.4 – Consult with agent	UC4.5.10.5 – Defer prescription supply	
UC4.1.10.5 – Electronic prescription fail safe	UC4.5.10.8 – Supply unavailable	
UC4.1.9.4 – Prescribe medicines on approved chart	UC4.5.10.9 – Deny supply	
UC4.1.10.6 – Prescribe with Local Chart	UC4.5.10.10 – Invalid electronic prescription transaction (rollback)	
UC4.1.9.5 – Electronic prescriptions on discharge	UC4.5.10.11 – Repeats	
	UC4.5.10.12 – Supply declined	
	UC4.5.10.13 – Prescription delivery option	
	UC4.6.9.4 – Resolve prescription owing	
	UC4.6.9.1 – Cancel dispense	
	UC4.6.9.2 – Amend dispense	

Prescriber Use Cases

UC4.1.8 – Prescribe (electronic prescription) | UC4.1.10.5 – Electronic prescription fail safe | UC4.1.10.4 – Consult with agent

Where a prescriber prescribes medicine, the prescribing software is able to generate an electronic prescription. This process would be used for:

- SoCs / agents requiring prescription medicine where they have opted for an electronic prescription
- Prescribing prescription medicine in an electronic format

Process Overview

The SoC presents to an authorised prescriber. The prescriber determines that prescription medicine is required. The SoC indicates their preference for an electronic prescription. The prescriber either:

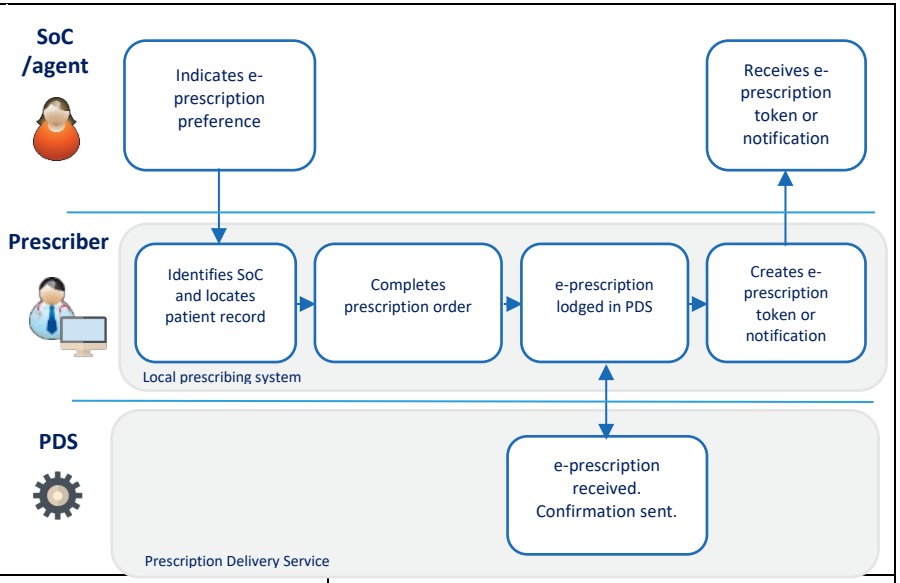
- generates an electronic prescription token for the SoC/agent
- Adds the electronic prescription to the SoC's active script list

Participants

Prescriber, SoC / agent

Systems

Prescribing software, PDS



Operational Policy

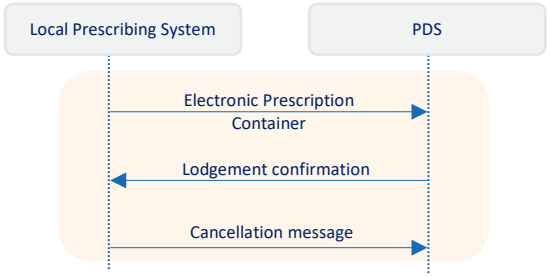
SoC/agent can exercise choice between receiving a paper prescription or an electronic prescription.

SoC/agent consent is required to an electronic prescription token or notification.

A prescriber may make an amendment to an electronic prescription prior to first dispense/deferred supply and *must* have confidence the SoC/agent has the correct prescription, token/notification, and any accompanying information.

If a SoC/agent reports a lost token, the prescriber may create a new prescription without cancelling the original prescription.

System Interaction



Authorised token

Tokens are generated as per conformance specifications. The token includes the unique ID for dispensing systems to access the electronic prescription.

Possibility of system exception

A system exception is possible, preventing a prescriber from confidently passing an electronic prescription token or notification to their SoC/agent. In these circumstances, the prescriber will revert to the paper prescription process.

UC4.1.9.1 – Create electronic prescription token | UC4.1.10.3 – Cancel prescription delivery option

Where a SoC/agent has indicated their preference for an electronic prescription, the prescriber will have the ability to pass the electronic prescription token to them. This process would be used for:

- SoCs / agents requiring prescription medicine where they have opted for an electronic prescription
- Prescribing prescription medicine in an electronic format

Process Overview

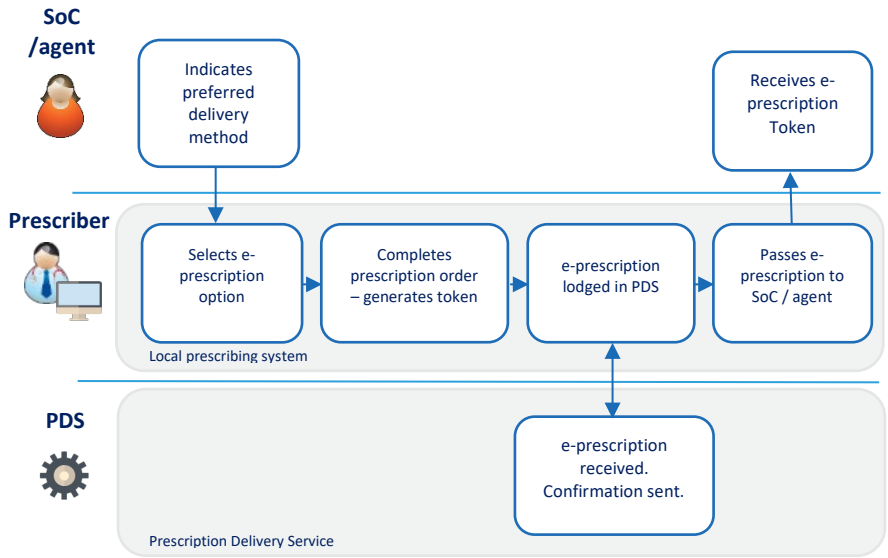
During the prescribing process, the prescriber selects the electronic prescription option within their local prescribing software. The prescribing system calls the ASLR and establishes that the SoC does not have an ASL. The completed electronic prescription is sent to a PDS. An electronic prescription notification is sent to the SoC/agent.

Participants

Prescriber, SoC / agent

Systems

Prescribing software, PDS



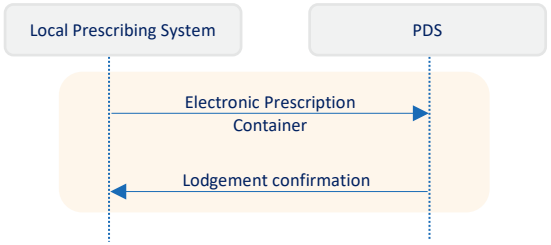
Operational Policy

SoC/agent can exercise choice of delivery method per the options made available by the prescriber.

The prescriber must nominate at least one (1) option to allow SoC/agent access to the electronic prescription.

During consultation, a prescriber may choose to cancel the electronic prescription in favour of a paper prescription.

System Interaction



Authorised token

Tokens are provided to the Subject of Care via conformant systems.

Token delivery service methods may include SMS, MMS, email, print, desktop capture, or other.

Possibility of Exception

The prescriber may cancel the prescription request at any point in the process.

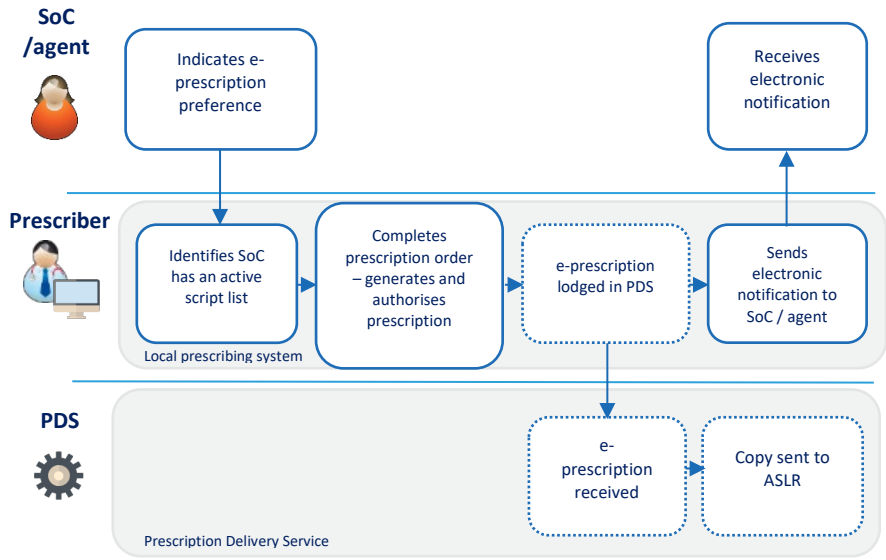
UC4.1.9.2 – Add electronic prescription to active script list | UC4.1.10.3 – Cancel prescription delivery option

Where a SoC/agent has an active script list, the prescriber will have the ability to add the electronic prescription to that list. This process would be used for:

- SoCs / agents requiring prescription medicine who have registered for an active script list
- Prescribing prescription medicine in an electronic format

Process Overview

During the prescribing process, the prescriber selects the electronic prescription option within their local prescribing software. The prescribing system calls the ASLR and establishes that the SoC has an ASL. The completed electronic prescription is sent to a PDS. The PDS sends the electronic prescription to the ASLR. An electronic prescription notification is sent to the SoC/agent.



Participants

Prescriber, SoC / agent

Systems

Prescribing software, PDS

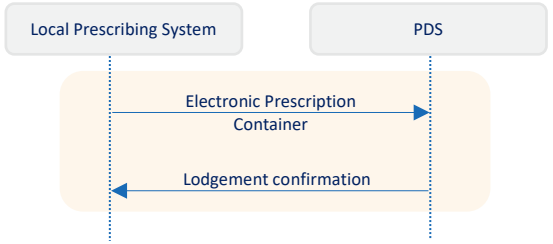
Operational Policy.

The prescriber should ensure the SoC/agent has received the electronic prescription notification during the consultation.

The SoC/agent can choose to receive a paper prescription if they do not want the electronic prescription to be added to their active script list.

During consultation, a prescriber may choose to cancel the electronic prescription in favour of a paper prescription.

System Interaction



Notifications

Electronic prescription notifications are provided to the Subject of Care through their preferred electronic delivery channel, as recorded in the prescribing system.

Possibility of Exception

The prescriber may cancel the electronic prescription request at any point in the process.

UC4.1.9.3 – Paper prescription (current practice)

Where a prescriber prescribes medicine, the prescribing software is able to generate a paper prescription to pass to the SoC/agent for filling. This process would be used for:

- SoCs / agents requiring prescription medicine where they have opted for a paper prescription.
- Prescribing prescription medicine in a paper format.

Process Overview

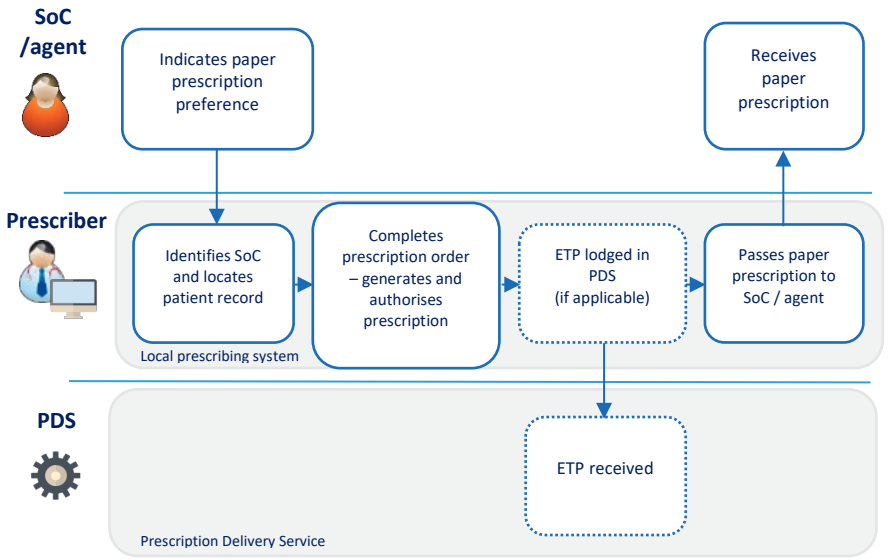
The Subject of Care (SoC) has presented to an authorised prescriber. Following assessment, the prescriber has determined that prescription medicine is required. The SoC indicates their preference for a paper prescription. The prescriber generates the prescription which is passed to the SoC/agent.

Participants

Prescriber, SoC / agent

Systems

Prescribing software, PDS

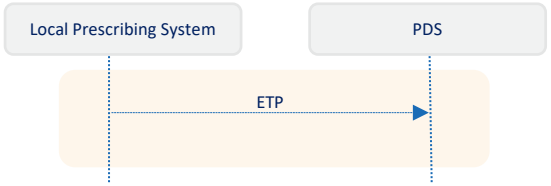


Operational Policy

SoC/agent can exercise choice between receiving a paper prescription or an electronic prescription.

Current policy and process applies to paper prescriptions with or without ETP barcodes/QR codes.

System Interaction



A prescriber may choose to generate a paper prescription which contains an ETP barcode/QR code per existing processes.

Authorised token

Paper prescriptions do not contain an electronic prescription token.

An ETP record is *not* an electronic prescription.

Possibility of exception

A prescriber may cancel the prescription order within prescribing software, simultaneously destroying the paper prescription.

UC4.1.10.2 – Multiple prescription document

The electronic prescription may contain one or more prescription items which meets regulatory and policy requirements. This process would be used for:

- SoCs / agents requiring prescription medicines where they have opted for an electronic prescription.
- Prescribing prescription medicines in an electronic format.

Process Overview

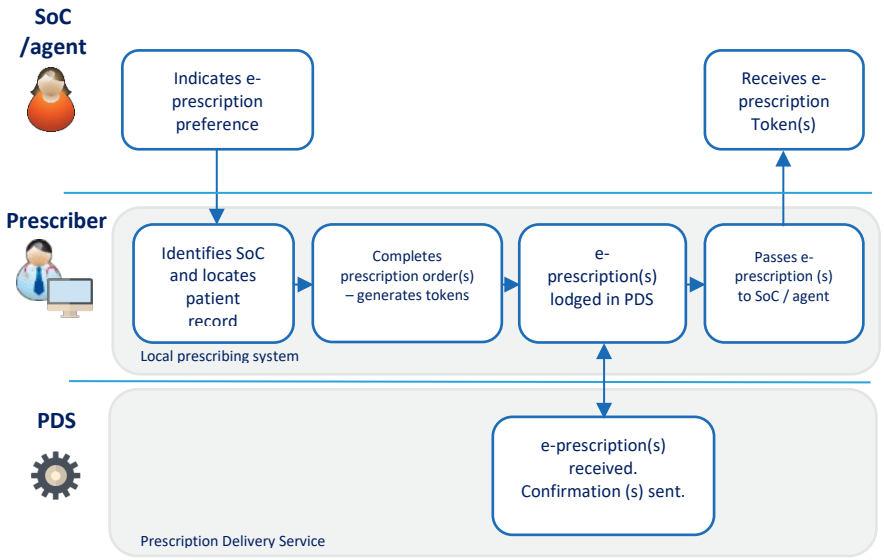
As an element of the prescribing process, the prescriber prescribes multiple medicines to the SoC. According with prescription schemes and regulatory and policy requirements, the SoC / agent is provided with the appropriate medicines order(s).

Participants

Prescriber, SoC / agent

Systems

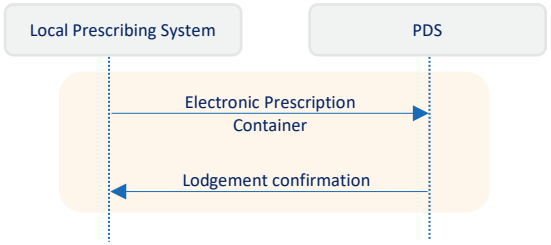
Prescribing software, PDS



Operational Policy

One electronic prescription may contain many prescription items in accordance with regulatory and policy requirements.

System Interaction



Authorised token

Tokens or notifications are generated by the prescribing software as per conformance specifications. Tokens and active scripts lists include the unique ID for dispensing systems to access the electronic prescription.

Possibility of system exception

A system exception is possible, preventing a prescriber from confidently passing an electronic prescription token or notification to their SoC/agent. In these circumstances, the prescriber will revert to the paper prescription process.

UC4.1.9.4 – Prescribe medicines on approved chart | UC4.1.10.6 – Prescribe with local chart

In this process, a SoC has a corresponding *electronic* medication chart (compliant with PBS HMC, or NRMC). The SoC is prescribed medicines via their compliant electronic medication chart. This process would be used for:

- SoCs requiring prescription medicines; and
- Prescribing medicine on a compliant medication chart.

Process Overview

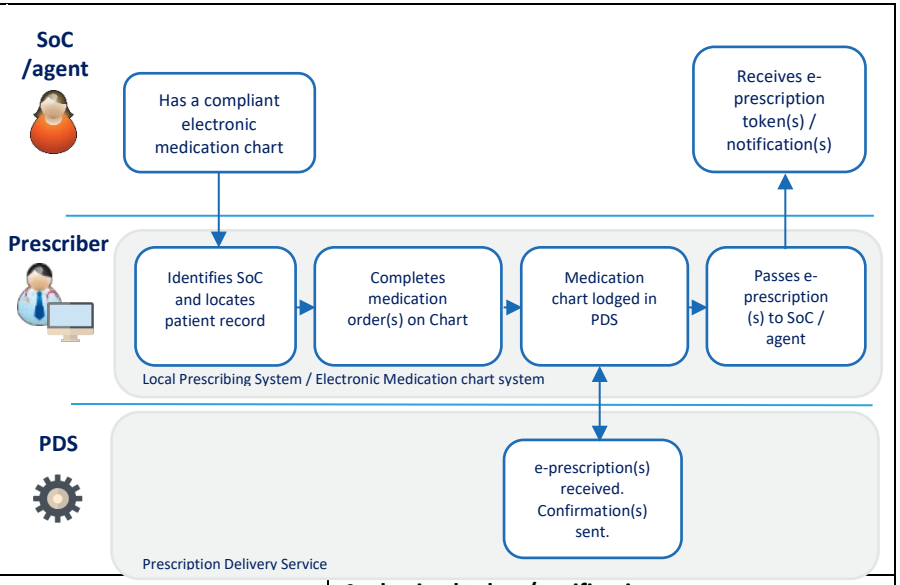
The SoC is assigned a compliant electronic medication chart. The prescriber completes a prescription order onto the electronic medication chart. The electronic medication chart passes through a PDS to the preferred dispenser.

Participants

Prescriber, SoC / agent

Systems

Prescribing software/electronic medication chart, PDS



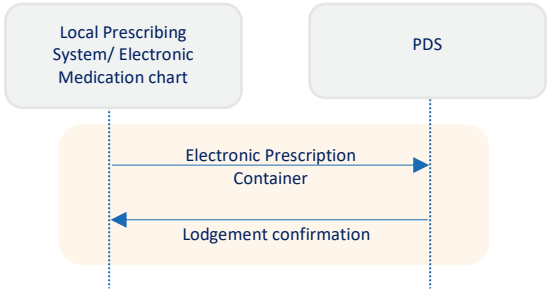
An electronic prescription may be generated exclusive of a compliant medication chart – refer to UC4.1.8. The RCF may provide linking functionality for externally generated electronic prescriptions.

A compliant electronic medication chart (NRMC / PBS HMC) may act as an electronic prescription if it communicates electronic prescription information via a conformant PDS.

Operational Policy

A SoC may exercise their choice of dispenser (as required).

System Interaction



Authorised token/notification

Where a conformant Direct PDS is used, tokens or notifications may not be required.

Authorised agent

A residential care facility may act as a SoC's agent when SoC consent has been granted.

Possibility of system exception

A system exception is possible, preventing a prescriber from confidently generating an electronic prescription. In these circumstances, the prescriber will revert to the paper prescription process.

UC4.1.9.5 – Electronic prescriptions on discharge

In this process, a SoC is being discharged from hospital. The SoC has an electronic medication chart from which a prescriber may generate the SoC's discharge medication prescriptions. This process would be used for:

- SoCs being discharged from hospital requiring prescription medicines; and
- Prescribers discharging SoCs from an inpatient hospital setting.

Process Overview

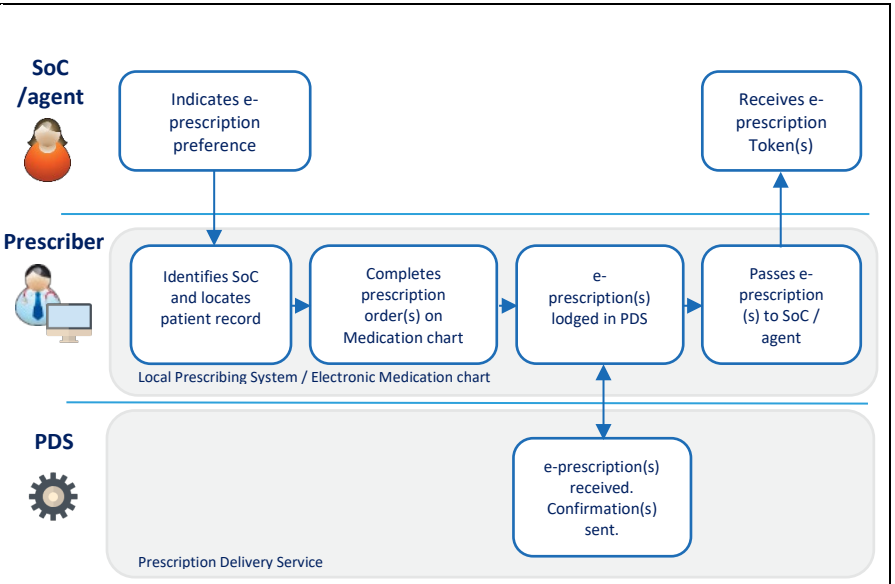
During consultation, the SoC / agent indicates their preference to receive an electronic prescription. The prescriber then generates an electronic prescription from the hospital electronic medication chart. The electronic prescription record is sent to the PDS. Upon discharge, the SoC/agent has the electronic prescription token or notifications in their possession.

Participants

Prescriber, SoC / agent

Systems

Prescribing software, Medication chart, PDS



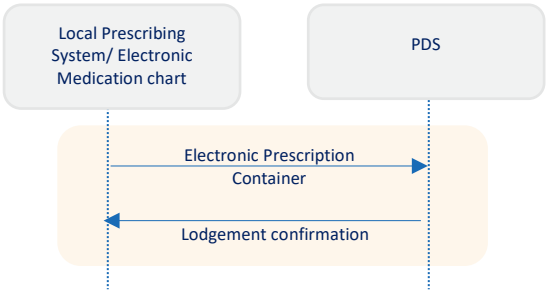
Where paper medication charts are in use, a prescriber may choose to follow UC4.1.8.

Operational Policy

An SoC may exercise their choice of dispenser.

One (1) electronic prescription token or notification may contain a number of prescription items as compliant with relevant regulation.

System Interaction



Authorised token/notification

Where a conformant Direct PDS is used, tokens or notifications may not be required.

Authorised agent

A hospital pharmacist may act as a SoC's agent when SoC consent has been granted.

Possibility of system exception

A system exception is possible, preventing a prescriber from confidently passing an electronic prescription token to their SoC/agent. In these circumstances, the prescriber will revert to the paper prescription process.

Dispenser Use Cases

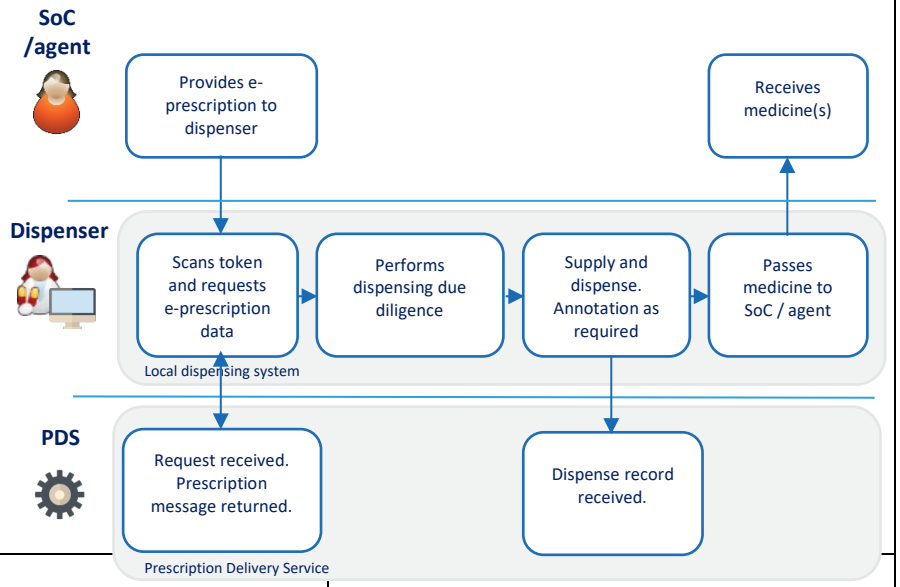
UC4.5.8 – Dispense | UC4.5.10.1 – Electronic prescription paper form | UC4.5.10.4 – Prescription dispense history | UC4.5.10.13 – Prescription delivery option | UC4.6.9.2 – Amend dispense

An electronic prescription is able to be dispensed at a dispensary of SoC's/agent's choice. This process would be used for:

- SoCs / agents requesting supply and dispense of one or more prescription items where they may exercise choice of dispenser; and
- Dispensers supplying and dispensing from an electronic prescription.

Process Overview

The SoC/agent communicates an electronic prescription(s) to the dispenser for supply. The dispenser scans the electronic prescription token, retrieving the electronic prescription data from the PDS. The dispenser consults with the SoC/agent per standard practice and performs supply and dispense. The SoC/agent is provided with required medicine(s).



Participants

Dispenser, SoC / agent

Systems

Dispensing software, PDS

Operational Policy

SoC/agent can exercise choice of dispensary.

Repeat electronic prescription information will be provided to the SoC/agent in the form the electronic prescription was presented.

Dispensers shall review previous dispense history including annotations by retrieving prescription data from the PDS.

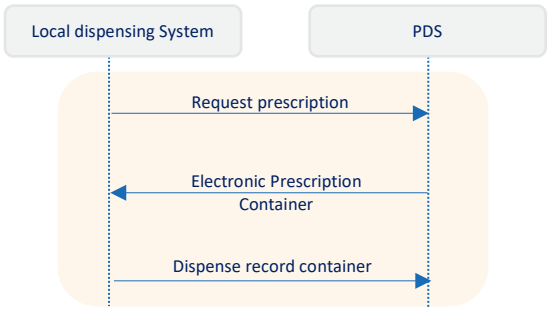
A paper prescription may not be converted to an electronic prescription repeat upon dispense.

A dispenser may review the dispense record and make necessary changes to correct the record.

Prescription Change

Annotations may be made to the electronic prescription per relevant policy and regulation.

System Interaction



Possibility of system exception

The dispensing system must assure service to enable the production of tokens for repeat or deferred medicines for the SoC with the PDS unavailable. The dispensing system should continue to retry updating the electronic prescription message until successful.

Authorised token

Tokens are able to be entered into the dispensing software for electronic prescription data retrieval. New tokens shall be generated and provided to the SoC/agent for repeat prescription items with a one (1) token to one (1) prescription item relationship.

Evidence of Prescription has no legal standing; the electronically retrieved information from the PDS is the legal instrument.

A compliant electronic medication chart received via a conformant PDS may act as an electronic prescription.

Possibility of system exception

A system exception is possible, preventing a dispenser from accessing the electronic prescription data. In these circumstances, the dispenser would follow an UC4.5.10.3 process.

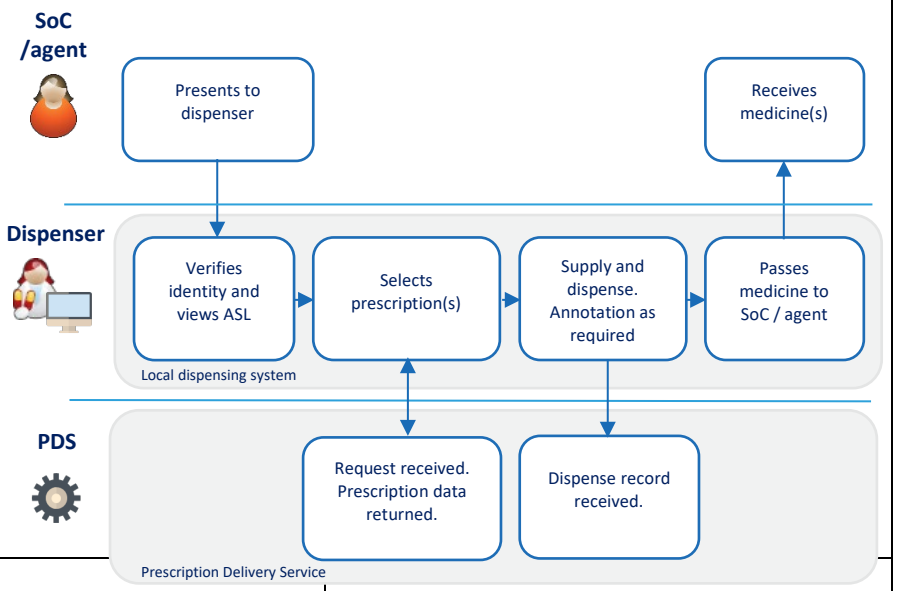
UC4.5.8 – Dispense | UC4.5.10.2 – Active Script List

An electronic prescription is able to be dispensed at a dispensary of SoC's/agent's choice. This process would be used for:

- SoCs / agents with an active script list requesting supply and dispense of one or more prescription items where they may exercise choice of dispenser; and
- Dispensers supplying and dispensing from an electronic prescription.

Process Overview

The SoC/agent is identified by the dispenser and grants the dispenser with access to their active script list. The dispenser views the active script list and selects the prescriptions to be dispensed, retrieving the electronic prescription data from the PDS. The dispenser consults with the SoC/agent per standard practice and performs supply and dispense. The SoC/agent is provided with required medicine(s).



Participants

Dispenser, SoC / agent

Systems

Dispensing software, PDS

Operational Policy

SoC/agent can exercise choice of dispensary.

Dispensers shall review previous dispense history including annotations by retrieving prescription data from the PDS.

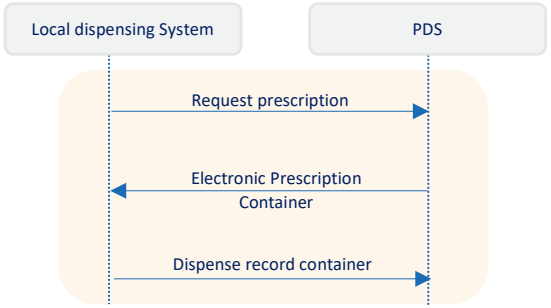
A paper prescription may not be converted to an electronic prescription repeat upon dispense.

A dispenser may review the dispense record and make necessary changes to correct the record.

Prescription Change

Annotations may be made to the electronic prescription per relevant policy and regulation.

System Interaction



Electronic dispense record notifications are provided to the Subject of Care through their preferred electronic delivery channel.

Possibility of system exception

A system exception is possible, preventing a dispenser from accessing the electronic prescription data. In these circumstances, the dispenser would follow an UC4.5.10.3 process.

D2.6.1 – Dispense prescription owing| UC4.5.10.3 – Electronic prescription not available at request

The dispenser may supply the medicines in accordance with regulatory service requirements where a prescription is not present. This scenario may be invoked where a request can be met in consultation with a prescriber.

This process would be used for:

- SoCs / agents requesting supply of one or more prescription medicines without presenting a prescription; and
- Dispensers supplying where a prescription is not present.

Process Overview

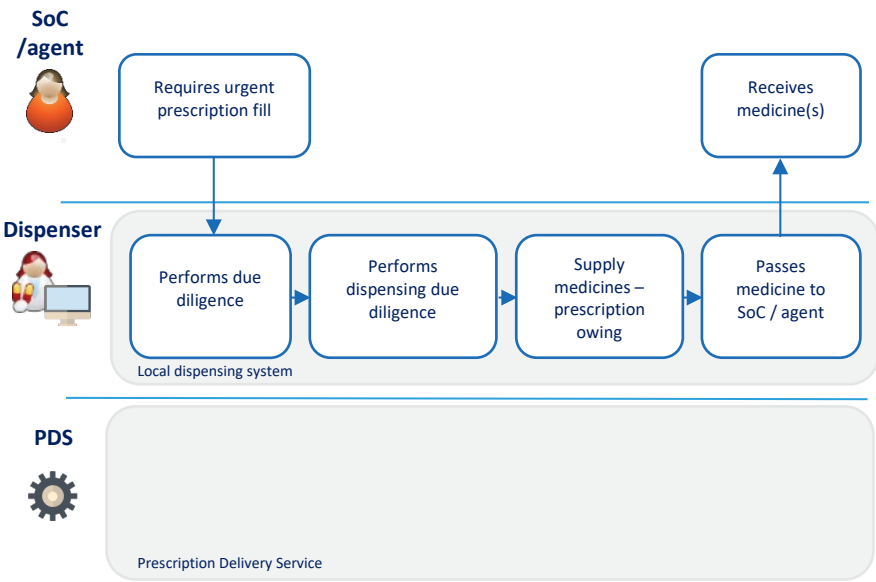
The SoC/agent presents at a dispenser requiring medicine without a prescription available for dispensing. The dispenser appraises the request, completing the required due diligence (including contacting the nominated prescriber). The dispenser will then create a dispense record and make record annotations as necessary. The dispense record will be stored in a prescription owing state until the prescription is provided.

Participants

Dispenser, SoC / agent

Systems

Dispensing software



Operational Policy

Dispenser due diligence is required to confirm SoC/agent prescription requirements and legitimacy.

Supply will be recorded in the local dispensing system per local procedure.

Major deviations should not be supported through this mechanism, where a new prescription is required.

System Interaction

A dispenser may interact with their local dispensing system only (e.g. to record a supply event). Without a prescription, the dispenser will not interact with a PDS.

Possible system exception

An UC4.5.10.3 process may be invoked due to a system exception where:

- Prescription data is not available from the PDS
- Prescription not found or returned by the PDS

Possibility of exception

A dispenser may dispense without verbal authorisation from a prescriber under emergency supply provisions. An emergency supply is not treated as a PBS prescription.

UC4.5.10.5 – Defer prescription supply

An electronic prescription may contain more than one prescription item. During dispense, one or many prescription items may be dispensed. Those that are not dispensed are deferred. This process would be used for:

- SoCs/agents requesting dispense less than the total number of prescription items contained in one electronic prescription; and
- Dispensers supplying and dispensing from an electronic prescription containing more than one prescription item.

Process Overview

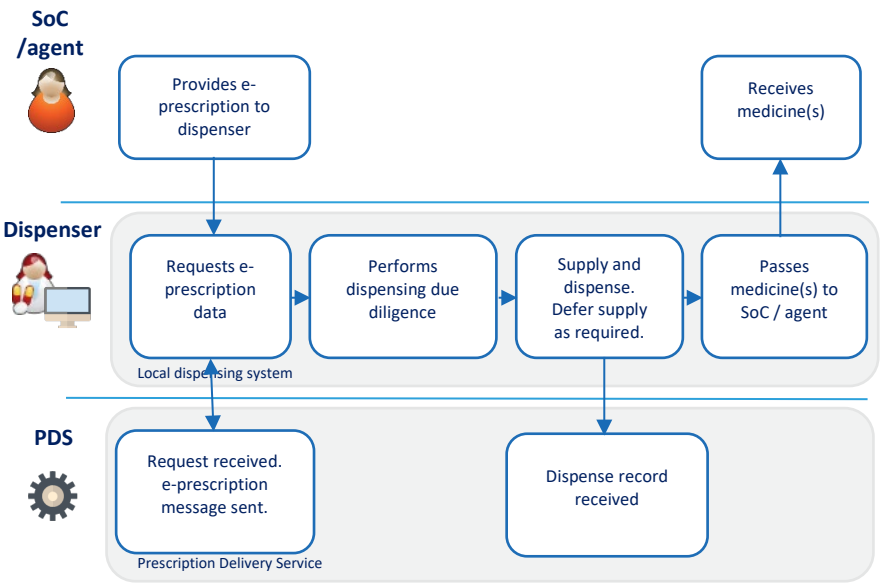
The SoC/agent presents an electronic prescription(s) to the dispenser to be filled. The dispenser scans the electronic prescription token, or views the active script list, retrieving the electronic prescription data from the PDS. The dispenser consults with the SoC/agent per standard practice and performs supply and dispense. The SoC/agent is provided with required medicine(s) and subsequent electronic prescription token(s) if applicable. Medicines that have not been dispensed are marked as deferred. This will be followed with UC4.6.9.4.

Participants

Dispenser, SoC / agent

Systems

Dispensing software, PDS



Operational Policy

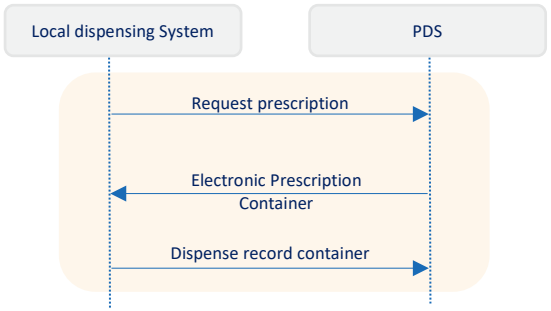
SoC/agent can exercise choice of medicines for dispense.

Electronic prescriptions related to repeats and/or deferred medicines will be provided to the SoC/agent.

Prescription Change

Annotations may be made to the electronic prescription per relevant policy and regulation.

System Interaction



Authorised token/notification

A token or notification will be generated corresponding to a deferred supply prescription item.

Possibility of system exception

A system exception is possible, preventing a dispenser from accessing the electronic prescription data. In these circumstances, the dispenser would follow the UC4.5.10.3 process

The dispensing system must assure service to enable the production of tokens for repeat or deferred medicines for the SoC with the PDS unavailable. The dispensing system should continue to retry updating the electronic prescription message until successful.

UC4.5.10.8 – Supply unavailable | UC4.5.10.9 – Deny supply | UC4.6.9.1 – Cancel dispense

After retrieving the electronic prescription record from the PDS, the dispenser will determine, during due diligence, if the supply is to be prohibited / denied. This process would be used for electronic prescription items which have been:

- Cancelled - the prescription was cancelled after it was issued by the prescriber.
- Exhausted - The prescription is not available for further supply.
- Expired - The prescription has passed its expiry date.
- Deemed to fail dispense due diligence.

Process Overview

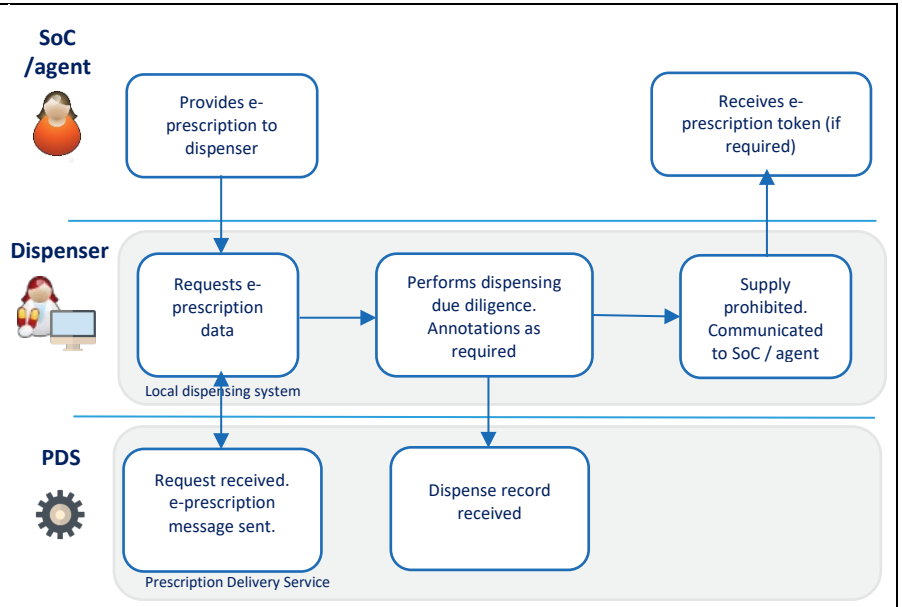
The dispense process is followed with activity ceasing at due diligence. Supply is prohibited / denied. The SoC/agent will be informed of the outcome by the dispenser.

Participants

Dispenser, SoC / agent

Systems

Dispensing software, PDS



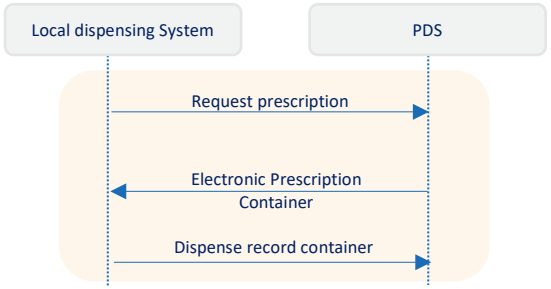
Operational Policy

Medicines will not be provided to the SoC / agent where prohibited, denied or prescription has been cancelled.

Where additional prescription items under the same token are successfully dispensed, the use case specific to those medicines will follow the dispense process.

Annotations may be utilised.

System Interaction



Possibility of system exception

The dispensing system must assure service to enable the production of tokens (if required) for repeat or deferred medicine items for the SoC with the PDS unavailable. The dispensing system should continue to retry updating the electronic prescription message until successful.

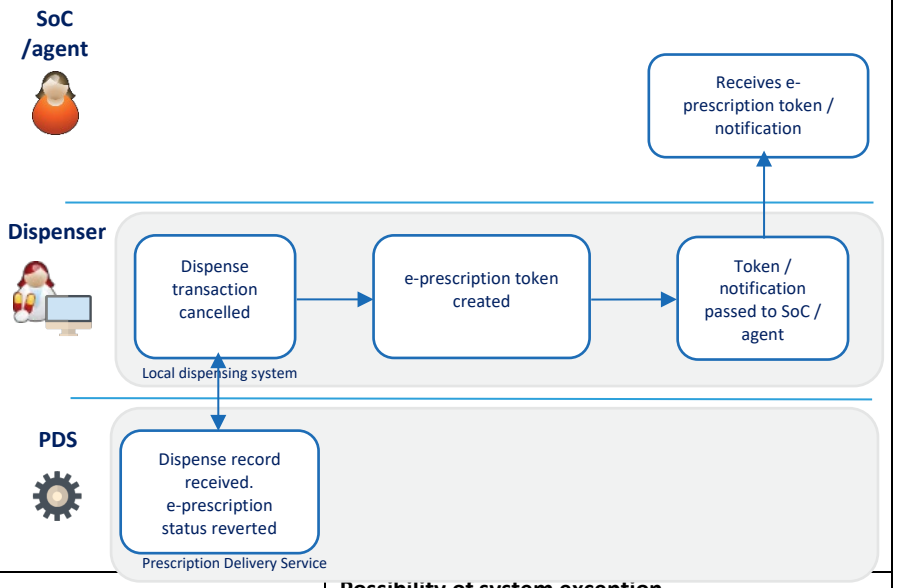
UC4.5.10.10 - Invalid electronic prescription transaction (rollback) | UC4.5.10.12 – Supply declined

If dispensing is not progressed or abandoned, the dispenser will update the Dispensing System (i.e. roll-back dispense changes) if required or cancel the dispense transaction. This process would be used for:

- SoC/agent who does not complete their prescription fill request; and
- Dispensers when prescription dispense is not completed.

Process Overview

During the dispense process, a decision is made to cancel the dispense event. The dispense record will be cancelled and the electronic prescription status reverted. The system generates a token/notification and electronic prescription paper form if required for the SoC/agent.



Participants

Dispenser, SoC / agent

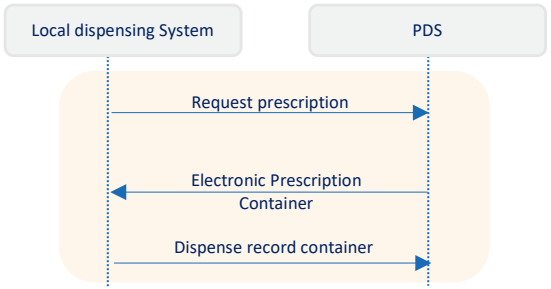
Systems

Dispensing software, PDS

Operational Policy

Annotations may be utilised.

System Interaction



Possibility of system exception

The dispensing system must assure service to enable the production of tokens (if required) for repeat and deferred medicine items for the SoC with the PDS unavailable. The dispensing system should continue to retry updating the electronic prescription message until successful.

UC4.5.10.11 – Repeats

An electronic prescription may contain medicine(s) with repeats. Upon dispense, one or more prescription items may require a new token for dispense of a repeat. This process would be used for:

- A SoC/agent who is prescribed medicine(s) containing repeats; and
- Dispensers authorising prescription item repeats.

Process Overview

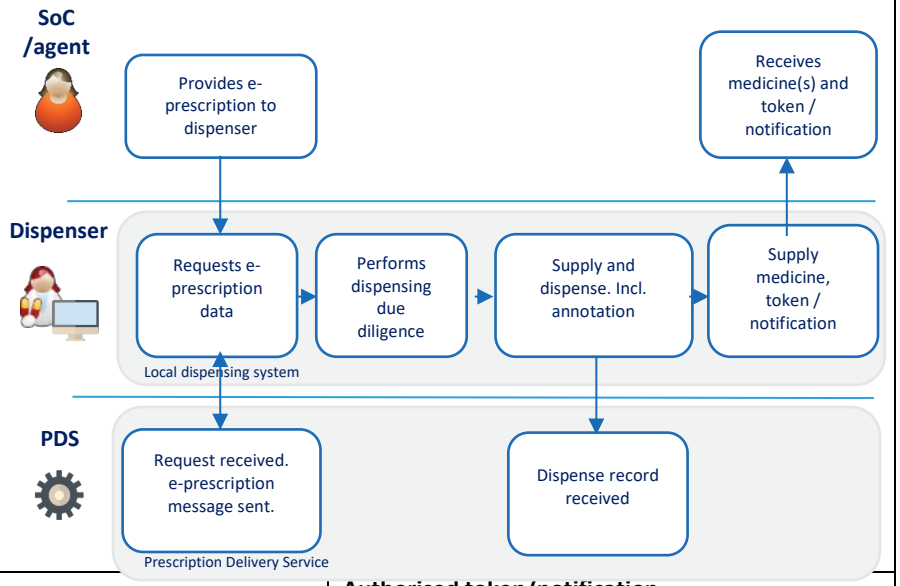
During the dispense process, the dispenser records a repeat authorisation into the dispensing system per the instructions (or amendments) of the electronic prescription. Annotations may be entered against the dispense record. The prescription item is passed to the SoC/agent along with the relevant electronic prescription token(s) or notification.

Participants

Dispenser, SoC / agent

Systems

Dispensing software, PDS



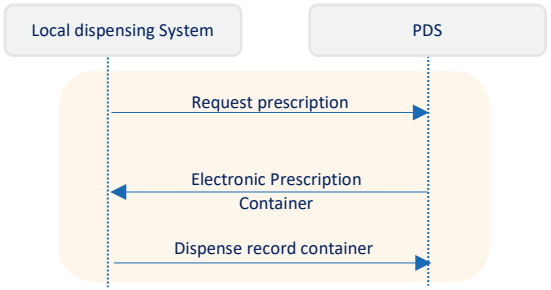
Operational Policy

Annotations may be utilised.

SoC / agent should be in possession of applicable electronic prescription token or notification following dispense.

Repeat and deferred medicine electronic prescriptions will be provided to the SoC/agent.

System Interaction



Authorised token/notification

A token or notification will be generated corresponding to a repeat prescription item.

Possibility of system exception

As with the prescription, there may be a delay in lodgement with the delivery service. The impact of such a delay will be experienced where a subsequent repeat is to be filled within a short period of time under immediate supply necessary provisions.

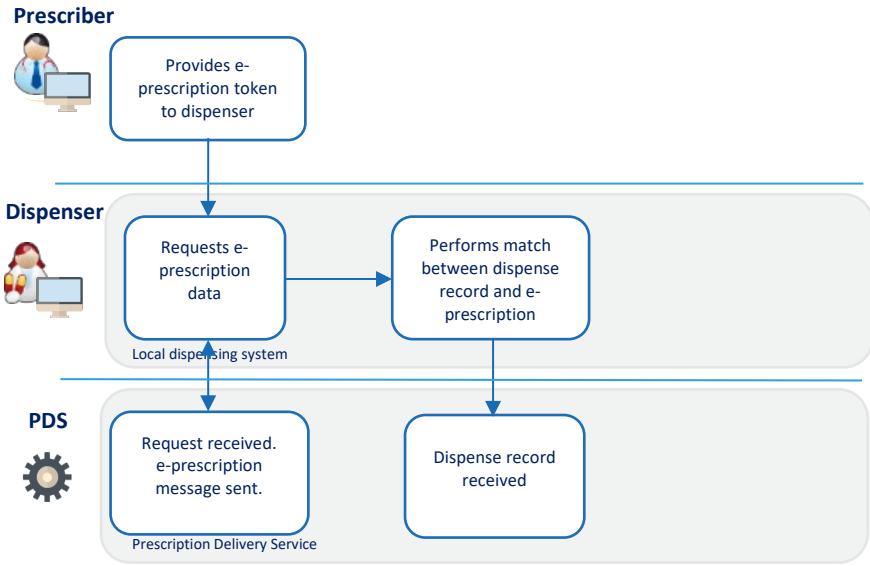
UC4.6.9.4 – Resolve prescription owing

Following supply of a prescription as an 'owing prescription' the dispenser will be provided a valid electronic prescription to reconcile against this event. This process would be used for:

- Dispensers upon receipt of an electronic prescription for a prescription owing event.

Process Overview

Following the prescription owing process, a prescriber will provide the outstanding electronic prescription to the dispenser within timeframes allowed by relevant regulation and policy. The onus is on the prescriber to ensure that the dispenser is provided with a valid prescription. The dispenser will retrieve the electronic prescription from the PDS and reconcile against the owing dispense activity. This may include any necessary annotations. The dispense will be completed and dispense record updated.



Participants

Dispenser, SoC / agent

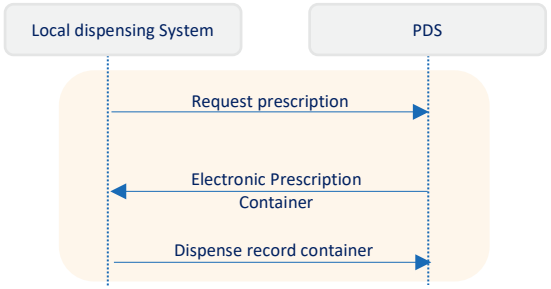
Systems

Dispensing software, PDS

Operational Policy

A dispenser may be able to reconcile an owing dispense record to an electronic prescription per local procedure.

System Interaction



Possibility of exception

In the case where the dispenser finds a significant prescription variation upon receiving the owed prescription, the dispenser will discuss with the prescriber to resolve the variation. This may result in the prescriber providing another electronic prescription. The owing should remain as 'owing' until an accurate prescription is received from the prescriber. There is no other way to reconcile an owing.

Consumer Use Cases

UC4.3.8 – Normal flow (mobile application)

Where a SoC has been prescribed medicine, they will have the ability to exercise their choice of dispenser. This process would be used for:

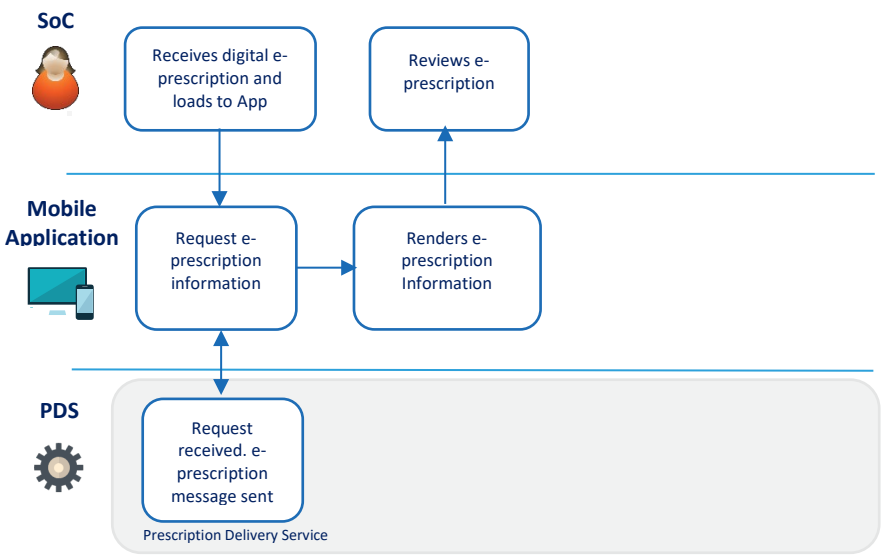
- SoCs prescribed medicines who have received an electronic prescription and choose to use a mobile application.

Process Overview

The SoC receives the digital electronic prescription notification and

- passes it to their preferred mobile application; or
- uses the mobile application to access their active script list.

The mobile application retrieves the electronic prescription information from the PDS via a mobile intermediary. The mobile application renders the electronic prescription information for the SoC's review.



Participants
SoC / agent

Systems
Mobile application, mobile intermediary, PDS

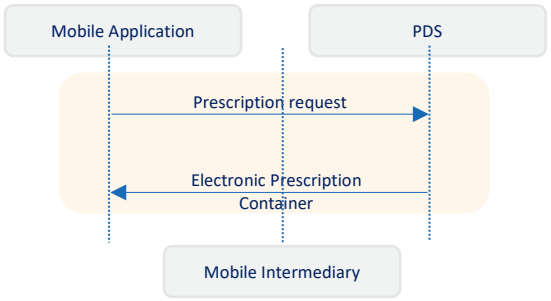
Operational Policy

A mobile application will support SoC choice of dispenser.

Mobile applications will support SoC consent.

Only conformant mobile applications are available for use.

System Interaction



Authorised token

Mobile applications can use tokens or active script lists to retrieve electronic prescription information.

A SoC may choose to store tokens on their personal device independent of a mobile application.

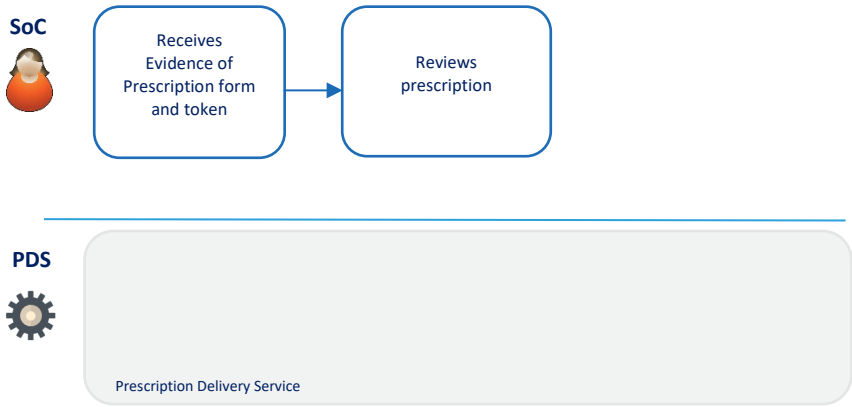
Possibility of system exception

A system exception is possible, preventing a mobile application from retrieving additional e-prescription information from the PDS. The token shall always be available to be rendered and scanned. Additional functionality will be managed by mobile application operators.

UC4.3.8 – Normal flow (Paper Evidence of Prescription and Token)

Where a SoC has been prescribed medicine and chosen to receive a paper-based Evidence of Prescription form. The SoC will have the ability to exercise their choice of dispenser. This process would be used for:

- SoCs prescribed medicines who have received a paper-based Evidence of Prescription form.



Process Overview

The SoC receives the paper-based Evidence of Prescription form with token. The SoC is able to review the Evidence of Prescription form containing relevant medicines information. The SoC presents the paper-based Evidence of Prescription form to their dispenser of choice.

Participants	**Systems**
SoC / agent	N/A

Operational Policy	**System Interaction**	**Authorised token**
A SoC may interact with a paper-based Evidence of Prescription form in any way.	A paper-based Evidence of Prescription form does not interact with any systems when in the possession of the SoC. The SoC may elect to load their electronic prescription to a conformant mobile application using the token.	Tokens printed on paper are able to be converted to digital tokens by using a mobile application. A token may be entered into a mobile application for store and view.

UC4.3.9 – Shared access

Where a SoC has been prescribed medicine, they will have the ability to share their electronic prescription with an agent of their choice to retrieve the electronic prescription dispense. This process would be used for:

- SoCs prescribed medicines who wish to utilise an agent.

Process Overview

The SoC receives an electronic prescription. The SoC accepts the risk of sharing their electronic prescription. The SoC identifies the recipient / agent and method of share. The SoC finalises the share by communicating their electronic prescription to their agent.

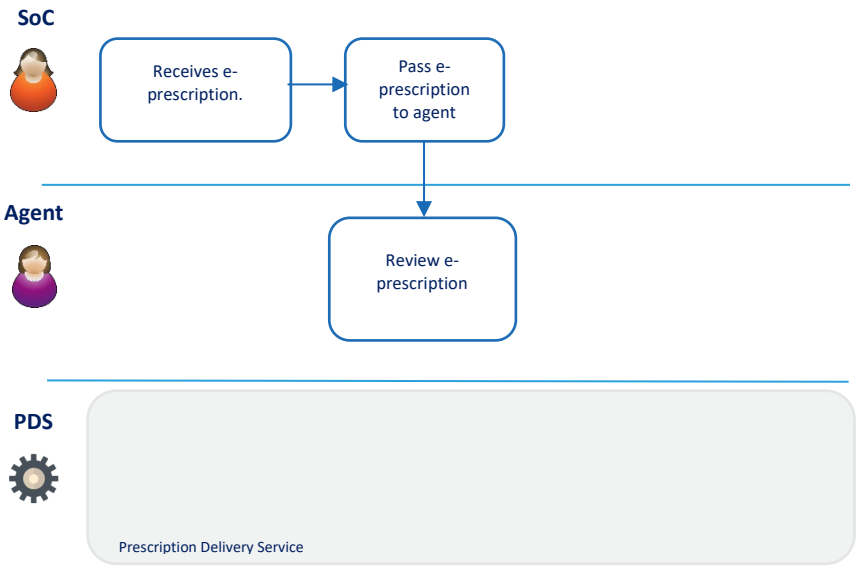
Where a mobile application is used, the agent will enter the Normal Flow (mobile application) process.

Participants

SoC, agent

Systems

Mobile application, mobile intermediary, PDS, Active Script List Registry



Operational Policy

The electronic prescription is transferable between parties; the method of transfer is determined by the SoC and their mobile application if applicable.

Mobile applications will support SoC consent to share an electronic prescription token or access their active script list.

System Interaction

A SoC may elect to share prescription access via conformant mobile applications.

Authorised token

Tokens are able to be communicated between parties.

Possibility of system exception

A system exception is possible, preventing a mobile application from accessing the PDS. The token will be able to be rendered and scanned at a dispenser regardless. Any additional functionality will be managed by mobile application operators.