

Clinical System overview

An integral part of HealthSMART, Victoria's Whole-of-Health ICT Strategy

The HealthSMART program is Victoria's \$360 million whole-of-health information and communication technology (ICT) strategy to modernise and replace ICT systems throughout the Victorian public healthcare sector. The ICT improvements will provide healthcare agencies with the tools required to help meet the growing demand for healthcare services expected in the future.

The HealthSMART program is responsible for managing processes to select design and configure these applications to reflect statewide requirements.

HealthSMART applications include:

- resource management systems (including payroll, rostering and finance and material management systems)
- patient and client management systems
- a clinical system.

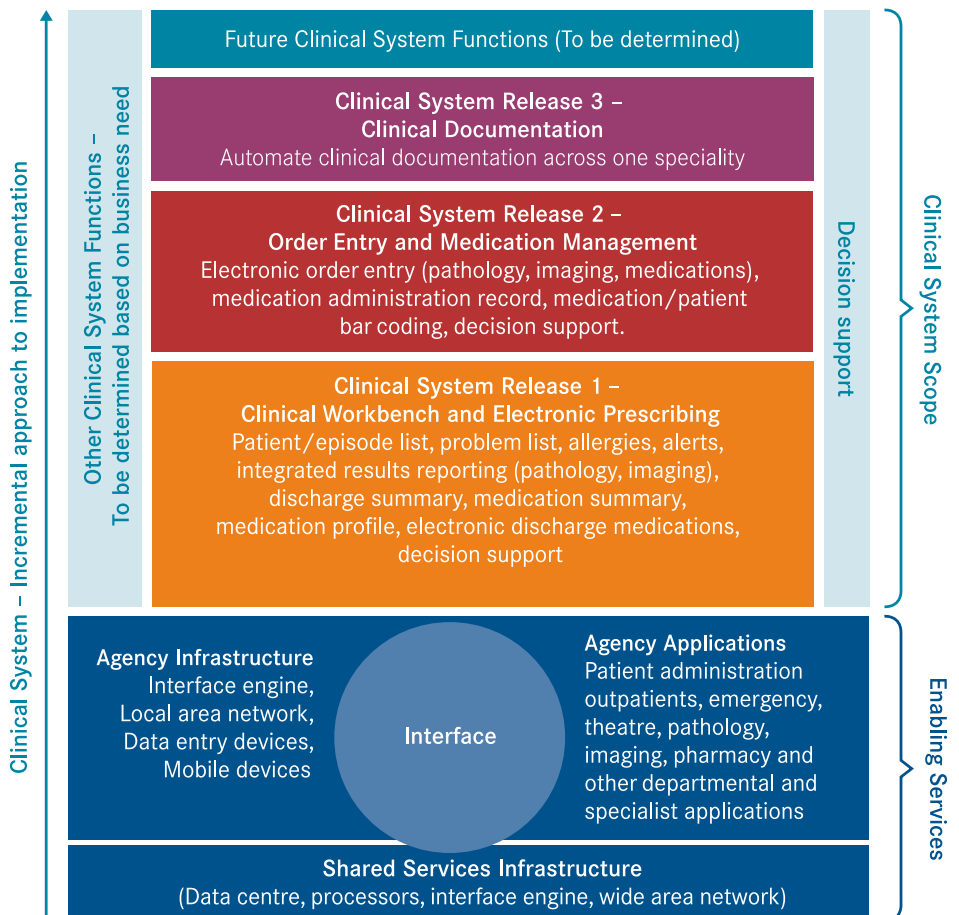
Additionally, the program is responsible for establishing and managing the shared ICT infrastructure that is required to support these applications and the agencies' use of them.

The HealthSMART Clinical System will enable improved patient care through the introduction of information systems that support clinical service delivery. Information critical to the provision of patient care will be available at the point of care and time of clinical decision making.

The Clinical System project employs a common system design foundation for all implementations. This version of the Cerner Millennium software is referred to as the Victorian state build. The Victorian state build is the product of extensive health sector consultation and system tailoring to meet Victorian clinical practice and workflow requirements.

The Victorian state build is being delivered in a series of staged functional releases as shown in the graphic below.

Each release comprises a set of functionality that together represents the full HealthSMART Clinical System scope. Releases 1 and 2 are in scope for the current implementations.



Clinical System project summary

Clinical System Release 1a – Clinical Workbench and Discharge Summary

- **Patient information:** Displays demographics, visit details, admission date and past admissions. The Clinical System receives real-time updates from the patient and client administration system
- **Discharge summary:** Standard Victorian template that automatically includes patient record data for pathology/radiology results
- **Patient lists:** Lists are displayed by location, medical specialty and as created at the user level
- **Problems and diagnoses:** Recorded utilising a catalogue of agreed, standard clinical terminology
- **Integrated results reporting:** Real-time results from pathology and imaging systems highlighting critical/abnormal values with the ability to trend and graph results
- **Allergies:** Detailed recording of allergy information (drug, food and environmental) using a catalogue of standard clinical terminology
- **Alerts:** Documentation and notification of critical and non-critical alerts
- **Inbox:** Notifications area to alert a clinician or a group of clinicians of critical, abnormal and new results. Facilitates communication using messages and reminders

For further information regarding the Clinical Systems portfolio visit

www.health.vic.gov.au/healthsmart

Clinical System Release 1b – Discharge and Outpatient – ePrescribing

- **Discharge summary:** Standard Victorian template augmented to include patient medication data
- **Discharge and outpatient prescriptions:** Medication ordering for discharge and outpatient medications with access to an Australian standard drug database and predefined medication orders
- **PBS:** Electronic discharge and outpatient medications will comply with Commonwealth and State requirements
- **Decision support:** Allergy/drug interaction checking

Clinical System Release 2 – Order Entry and Inpatient/ Emergency Medication Management

- **Order entry:** Standard catalogue of pathology and imaging services to compose orders
- **Order sets:** Best practice order sets to streamline the ordering process
- **Medication order entry:** Medication ordering for all hospital patients with access to configurable drug knowledge base and predefined medication orders
- **Decision support:** Places orders in context (past orders), alerts clinicians of duplicate medications, drug/drug interactions and allergy/drug interactions
- **Decision support:** For services ordered from the three disciplines of pathology, radiology and medication

- **Medication administration record:** Charting of all administered medications (scheduled, PRN and continuous infusions)
- **Medication/patient ID barcoding:** Supporting the achievement of the ‘five rights’ – right patient, right medication, right dosage, right form, right time
- **Medication profile:** Single location for recording and viewing medications on admission, past scripts and current medications

Clinical System Release 3 – Clinical Documentation

Automate clinical documentation across one speciality: Documentation templates specific for the speciality, that is, assessment tools using structured notes and annotated diagrams.

Implementation schedule

Lead agencies

Eastern Health and the Royal Victorian Eye and Ear Hospital are referred to as the Clinical Systems lead agencies. They are using a phased implementation approach aligned to the availability of the state-build software releases. As early adopters of the Clinical System they will provide feedback to subsequent implementations.

2010 implementations

Subsequent implementations will combine Release 1 and 2 into a single end-to-end project. Currently agencies are working to complete or about to commence implementation planning studies, which include preparation of a business case and detailed implementation project plan.