



## MKM Health – Our integration solutions

*Creating a truly seamless data exchange for optimal care delivery*

### Overview

MKM Health has significant expertise and a number of skilled resources in the areas of integration design and interface development. We also provide support for standards-based interfaces and integration solutions between complex systems, locations and health organisations.

We have proven technical systems integration capabilities as well as extensive experience working with a range of middleware platforms operating in healthcare today, including Oracle Java CAPS, Mirth Corporation Mirth Connect, Orion Rhapsody, Kestral HL7Connect, Infor Cloverleaf, CSC Viaduct, Microsoft Biztalk and iNTERFACEWARE Iguana.

MKM Health also has specific experience in the integration of patient, clinical and specialist departmental systems via HL7, FHIR and XML including CSC i.Patient Manager and WebPAS, PowerHealth Billing solutions, Intersystems Trakcare, Meditech solutions, IntraHealth Profile, Cerner Millennium, Orion Health solutions, Riskman, Merlin Pharmacy and CSC i.Pharmacy and various RIS / PACS solutions; across multiple projects in many states and territories.

We have also delivered interfaces to a number of public and private laboratory providers including Cerner PathNet, DHM, Laverty and Healthscope.

Given this expertise and experience, we are well placed to:

- Provide resources to supplement clients' existing integration teams

- Facilitate management and support of clients' integration platform
- Deliver services for specialised opportunities:
  - Integration architecture review and planning
  - Integration solution design
  - Performance testing
  - Automated test frameworks
  - Migration (legacy to new platform)

The following provides a summary of some of the applications of the MKM Health integration capability in recent years.

### Expertise & Experience...

MKM Health has worked on many projects deploying, testing and developing HL7 interfaces across the full range of applications in the healthcare sector, including provision of ongoing support. Some recent examples include:

- Managed a state-wide enterprise service bus and enterprise patient registry upgrade project. These services utilised the JCAPS integration engine and Oracle OHMPI patient index products. The two main deliverables were to provide a high availability and disaster recovery environment, as well as to deliver a number of new interfaces.
- Provided a solution architect and business analysts for a state-based PCEHR integration project. This included facilitating the discharge summary and clinical viewer projects in a JCAPS environment.

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- Supported a PAS (i.PM) implementation for a state-wide integration project using the JCAPS solution. The full range of HL7 messages were defined and implemented for communication between i.PM and the various agency departmental solutions (including emergency, nursing, financials, clinical).
- Implemented a state-based PMI solution using HL7 messaging to four 'source systems'. The project involved the design, development, testing and implementation of interfaces to PAS, emergency, mental Health and pharmacy systems.

MKM Health provides integration support and project services to a large variety of healthcare organisations. Some examples include:

- Supported a Victorian health service for their JCAPS environment during the transition period to the chosen supplier, and documentation of the subsequent test and production integration environment.
- Delivered an integration engine at a Sydney specialist hospital. Implementation and multiple interfaces included Cerner PAS/EMR, billing, document management, pharmacy and radiation oncology.
- Provided a theatre integration solution for a NSW LHD to create a consolidated store of theatre images in a DICOM archive, and return of an HL7 result message link into the Cerner EMR solution.
- Migrated HL7 and web services interfaces for a state-wide enterprise service bus which is used to service patient indexing requests across the state.

- Assisted at a state level for Electronic Medical Record (EMR) and Electronic Health Record (EHR) projects using HL7 via the JCAPS and Orion integration toolsets.

In addition to the above projects, MKM Health has developed bespoke integration solutions for a range of clients including:

- A series of API calls from a series of HL7 scheduling messages to communicate with Nexa self-check in kiosks, using a process to generate HL7 SIU scheduling messages from a Cerner file extract and to feed to multiple systems.
- An outpatient data store with appointments from multiple systems including Cerner and Aria radiation oncology.
- A solution for receipt of HL7 appointment messages from multiple source systems into a central repository, to facilitate context linking of the appointment store to the source systems (oncology, PAS, dental, radiology).
- HL7 messages to generate a DICOM work list for an endoscopy service.
- A solution to receive MIMS updates to populate the Orion clinical portal.
- HL7 ADT and laboratory result interfaces to feed a central clinical repository, which also captures nursing observations to support the introduction of sophisticated risk and alerting algorithms.

