

CASE STUDY



MEDICAL COUNCIL OF NEW ZEALAND

The Medical Council of New Zealand (MCNZ) is charged with ensuring the country's approximately 13,000 practising doctors are registered and competent. Optimization has worked with MCNZ to design, develop and implement MedSys, its core system for handling practitioner registration and on-going certification management requirements. By automating many business processes and providing important monitoring functionality, MedSys will help improve efficiency while ensuring legal compliance and auditability. It also provides the platform for MCNZ to deliver a growing range of online services to practitioners over the web.

MCNZ's business requirements are complex, and involve making sure doctors have the necessary qualifications, training and experience to practise in their chosen speciality, as well as handling competency, health, and conduct reviews for individual doctors. MCNZ also requires on-going professional development and individual supervision arrangements for doctors wishing to gain registration in a specific area of medicine. Importantly, it must be able to ensure that all its processes and outcomes are compliant with Health Practitioners Competence Assurance Act (HPCAA) legal requirements as well as with its own audit standards.

Intuitive workflows

MedSys comprises two main elements: a central registration database that manages all elements of registration, competence, health and conduct for each individual doctor; and a workflow engine that guides users

through business rules-based processes. The system is fully integrated with MCNZ's electronic document and records management system (EDRMS).

"MedSys is designed to be intuitive for our users, guiding them through processes step-by-step. It is based around workflows rather than being simply a data recording system, and as we continue to develop it we will become more efficient and productive. It also reduces our business risk and ensures we meet legal compliance requirements, because we have to follow a process a certain way every time in order to complete our work," explains Medical Council CEO Philip Pigou.

Flexibility for business users

"MedSys has created an environment where any problems in a process – for example, a doctor hasn't completed a form correctly – are able to be picked up. The software components and

BUSINESS DRIVERS

- Effectively manage all aspects of ensuring doctors working in New Zealand are competent and fit to practise
- Automate and streamline paper-based processes
- Improve business efficiency and productivity
- Provide more services over the web

BUSINESS BENEFITS AND OUTCOMES

- Creates operational efficiencies from streamlined work processes
- Supports development and delivery of more services over the web
- Enables MCNZ to adapt to new business requirements
- Provides improved monitoring and reporting functionality
- Decreases business risk
- Ensures legislative compliance and auditability of processes
- Provides the platform to support further re-engineering of business processes

the workflow engine have been designed with a lot of in-built flexibility, so we can amend workflows to adapt to changes in our business, such as new legislation or policies.”

Improved monitoring and reporting

Improved monitoring functionality, using a single central database instead of the multiple databases MCNZ used to have, has been a major benefit and the Council has continued to develop its reporting capability through this. Planning for the implementation of a single database was an important element in the overall MedSys project, and Optimisation was able to provide specialist expertise in data analysis, cleansing, and migration strategy. This preparation meant that during the MedSys system go-live, the new core database containing more than 15 million records was smoothly implemented with only two days of scheduled downtime.

“With much greater monitoring functionality, we’re now able to track all the business we do,” says Pigou. “The implementation of MedSys has also given us the opportunity to re-engineer our business processes. Now that we have the technology platform in place, we can look at further reviewing how we do things and identify ways to continue to increase efficiencies and streamline our services to doctors.”

Online services to increase efficiencies

A key part of the vision is to greatly enhance MCNZ’s capabilities for doing business online. Optimisation drew on almost 20 years of experience developing online applications to ensure MedSys was designed from the ground up to support secure web-based self-service and online transactions.

Pigou explains, “Our business is very paper-intensive, with doctors constantly filling out forms and applications for registration, practising certificates and so on. We already provide some self-service capability through our

website, for example to self-assess eligibility for registration. We are working with Optimisation to develop advanced functionality to enable doctors to submit forms and applications securely online. That will then automatically kick off our internal processes, including managing the interface between MedSys and our EDRMS to generate any documents required for the next step in the process.”

Integration with the EDRMS and with Microsoft Office enables MedSys to generate more than 200 different types of documents, with many fields pre-filled automatically from the core database. The system has been integrated with third party software that ensures addresses are correct and comply with New Zealand Post standards. MedSys has also been integrated with MCNZ’s financial system to manage payments for registration and other functions.

A relationship for the long term

Planning for the MedSys project kicked off in 2006, and more than three years’ work has gone into design, software architecture, software development, on-going testing, and the data analysis and migration strategy.

“Optimisation worked closely with us throughout the entire development process, which meant they developed a comprehensive understanding of our business requirements and how we worked,” says Pigou.

“A key part of the overall strategy has been to test, measure and check that deliverables matched our business needs and outcomes at every stage of the process, and that has been critical to the overall success of the project. We have been very pleased with the expertise and professionalism Optimisation has been able to offer both at the technical and project management level, and in terms of the executive relationship. And, we have a good SLA in place for long-term application support and enhancements.”

WE DELIVERED

- Design and architecture consulting
- Software development and project management using agile methodologies to ensure a close fit with evolving business requirements
- Expertise in applying business rules within systems and processes
- Integration with EDRMS and other systems
- Data analysis, cleansing and migration
- On-going enhancements to functionality, including online services
- Testing and outcomes measurement throughout the development process
- Long term application support and maintenance

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