



Case Study: Middlemore Clinical Trials

Clinically Deployed

To deliver the best patient outcomes, healthcare providers must keep up with evolutions in medicine. The pharmaceuticals, technologies and techniques used in the diagnosis, treatment and recovery of patients must go through meticulous testing and rigorous analysis before being approved for medical use.

Clinical trials that prove the safety and efficacy of new medical approaches, can be lengthy, costly and involve numerous stakeholders, from the suppliers and manufacturers, doctors and investigators to the clinical trial participants, research nurses and support staff.

District health boards and private research sites throughout New Zealand manage clinical trials in various ways but one organisation has established a reputation for delivering a successful end-to-end approach.

World-class research

Middlemore Clinical Trials (MMCT) is an independent organisation located on the Middlemore Hospital campus in Auckland, New Zealand and is aligned with the local district health board, Counties Manukau Health (CM Health). Though MMCT is run independently of CM Health, the two organisations collaborate closely and effectively to provide an alternative treatment pathway for patients.

Established in 2001, MMCT has experienced significant growth and is recognised as one of Australasia's leading clinical trial sites. In 2018 over 500 participants participated in clinical trials that involved twenty-two different hospital departments and a number of Middlemore's senior consultants and allied health practitioners performing the duties of Principal Investigators.

MMCT Business Manager, Kate Msiska says that being an independently operated clinical trial site delivers numerous advantages for participants and healthcare providers.

"We're able to provide a single point of contact for research and manage the whole trial process from end to end. This avoids

disruptions and delays that may be encountered when managing routine care requirements of patients, as well as providing the hospital with valuable third-party expertise.

"We manage everything from establishing the feasibility of the trial at Middlemore, engaging with the Principal Investigator, ensuring the trial has been ethically approved, is culturally considerate and overseeing the contractual requirements and financial aspects of each trial through to the sourcing of participants and managing the strict trial visit protocols throughout the lifetime of the trial.

"In essence we make trial easy for the Principal Investigator," she says.

"Our strong alliance with CM Health and our close relationship with Middlemore Hospital provides us good working relationships with senior medical personnel and leading facilities that enhance the effectiveness and scale of our trials. The work we do has an enormous positive impact on the health of our local community as the CM Health catchment population has a high prevalence of long-term health conditions, as well as contributing to the overall medical advances both nationally and internationally," says Msiska.

In addition to pharmaceutical trials, MMCT manages trials of medical devices such as equipment in the neonatal department and cardiac stents.

With around seventy commercial trials operating simultaneously, some that span several years and thousands of participants worldwide, MMCT's forty staff are committed to supplying high-quality data for their customers that supports global research outcomes.

Future proof – Future capable

With a vast and varied body of work and multiple factors to manage, it's crucial that MMCT's operation is underpinned by robust and capable software solutions. Besides having its own standard operating procedures and systems, MMCT must also have a platform synergy with Middlemore Hospital in order to ensure effectiveness.

Alan Smith, MMCT's Information Systems Manager, says that

the company's growth strategy and ability to deploy superior technology and tools in future, needed improved infrastructure.

"We chose to migrate our ERP platform to Microsoft Dynamics 365 Business Central to position the organisation for future Microsoft Cloud products. With a growing need for reporting and data management, our strategy is to use cloud-based software-as-a-service (SaaS) to support current business operations and pave the way for future deployments such as PowerBI business intelligence and Customer Relationship Management."

The existing platform was a hybrid SaaS instance of Dynamics NAV software which performed but introduced growing costs and challenges in integrating with MMCT's other cloud-based applications and future planned implementations. This was particularly evident when accommodating the CM Health Healthcare Alliance Network which provides administration and IT support for the hospital.

Smith says that it was clear the platform had become cumbersome and a more scalable cloud solution was required.

"The move to the cloud was about us as an organisation having the flexibility to do what we needed, while acknowledging the requirements of other organisations. Because of this, we needed to partner with a provider that understood our unique requirements and operating environment and offered us customisation as opposed to a one-size-fits-all solution," he says.

Choosing the right partner

Having used the Microsoft Dynamics NAV platform since 2015, there was familiarity with its operation and value to the organisation, however the hybrid nature of the existing deployment made the launch of Microsoft Dynamics 365 Business Central and its pure cloud-based services very appealing says Smith.

"We had no fear of the cloud and knew it was the logical next step to enhancing our IT operations. Where we did encounter challenges was the proposed approach to migration. Our existing Microsoft provider stressed that we'd need to start from scratch with a new implementation which would have been extremely costly and exceed our timeline. This was not a unique response, and somewhat understandable as Microsoft Dynamics 365 Business Central was a relatively new product. We encountered the same suggestion to start over from numerous providers until we spoke with Acumen Consulting," he says.

Acumen found a migration path that would avoid the need to start a new deployment using Microsoft tools. In this way all MMCT's data could be migrated in two stages removing much of the cost and delivering the full transition, well within the necessary timeframe.

"Working with Acumen is great. The project team-leaders are business people who understand business processes and challenges and can relate effectively with business leaders. Technical people are in the background and available when necessary. Frequently with projects like this, vendors place technical IT people in front of accountants which leads to confusion and frustration. Acumen thought outside the box and saw an approach that no one else could. In the end they performed a seamless data migration at the first attempt.



"This tailored approach was exactly what we required and after some light training on the new system for our staff - we were good to go and confident in the ongoing support we'd receive," says Smith.

Now some months after choosing Acumen Consulting to manage the migration and ongoing support of the new cloud-based solution, Smith and his team at MMCT are delighted with the outcome.

"The team at Acumen understood what we needed straight away. They were able to seamlessly migrate the solution and all data, perform reconfiguration work and fit to our tight timeline. The whole project was delivered in six weeks, on time and on budget.

"The new SaaS licence fee is significantly less expensive than the old solution and it offers us more because it is truly a SaaS shared environment. It also operates seamlessly with the hospital's IT infrastructure. We went live in our first planned window because Acumen staff were on-hand and physically attended the site when needed, or when it would expedite the project. We believe in being future proof and future capable, Acumen showed us a clear pathway to get there," says Smith.