SERVICE WORKS INTERNATIONAL
ADDNODE GROUP

CASE STUDY

Philips and Mackenzie Health

Project: PPP project to provide medical asset management software to assist in managing the maintenance of equipment under the performance-driven managed equipment services (MES) contract.

Results: A system that manages operational risk. P3rform software presents a real-time reporting dashboard and in-built alarms which provides PPP partners with confidence in managing equipment availability and service delivery to the specified quality and within budget.

Philips and P3rform Software: An Accountable Partnership

International health technology specialist Philips relies on Service Works International's (SWI) market-leading software platform to deliver critical managed equipment services in Canada's largest managed equipment services healthcare contract.

In 2015 Philips and Mackenzie Health, a regional healthcare provider serving the Southwest York Region in Ontario, Canada, signed a CAD $300 million, 18-year public-private partnership (PPP) contract that will advance Mackenzie Health's medical technology procurement and maintenance programmes for the existing Mackenzie Richmond Hill Hospital and the future Mackenzie Vaughan Hospital, which will be completed in 2020.

The collaboration is based on a managed equipment services (MES) model through which Mackenzie Health will have access to state-of-the art equipment and services for the contract term under a single payment structure. This includes procurement, installation, systems integration, maintenance, and timely updates to ensure that the hospitals will be provided with the medical technologies that their departments require for the optimal delivery of care.

The collaboration further includes a broad range of services including room design, cloud-based predictive analytics and diagnostic technologies. The largest of its kind in Canada, this managed equipment services agreement aims to transform and improve healthcare for over half a million patients in the area.

‘Smart’ Vision

Mackenzie Health and Philips are working together to advance Mackenzie Health’s ‘smart hospital’ vision. The multi-year, large-scale alliance is structured to support Mackenzie Health’s transformation into a two-hospital regional provider of best-in-class care through medical technology optimisation and a concerted focus on the patient experience.

Opened in 1963, the existing Mackenzie Richmond Hill Hospital currently has 350 acute, complex and rehabilitation beds and serves more than 500,000 residents in Southwest York Region, one of the fastest growing communities in Canada.

The new 350-bed ‘smart hospital’ in Vaughan will be the first new hospital to be built in the region in more than 50 years. Mackenzie Vaughan Hospital will embrace connected health technologies, or the ‘Internet of Healthcare Things’, to offer a state-of-the art emergency department, modern surgical services and operating rooms, access to acute inpatient and intensive care beds, technologically-advanced medical imaging, specialised ambulatory clinics, and a flexible design enabling it to evolve as new thinking and best practices emerge.

Partnership Working

Describing the strategy underpinning these landmark projects, Mackenzie Health President and CEO Altaf Stationwala said: “To bring our ‘smart hospital’ vision to life, we are partnering with industry leaders like Philips who are at the forefront of innovation. We chose Philips not only for their products, but also for their expertise and solutions. Mackenzie Health is committed to working with our healthcare partners to deliver a state-of-the-art hospital as part of our vision to create a world-class health experience for the people of Southwest York Region and beyond.”

In turn, Philips is partnering with Service Works International (SWI) for the crucial support essential to making the managed equipment service model a success.

SWI was awarded the contract to provide medical asset management software to assist in managing the maintenance of equipment under the performance-driven MES contract. SWI’s market-leading software, P3rform, has been deployed to allow Philips the visibility needed to ensure that medical equipment is effectively maintained to specific standards during the required hours, currently at Richmond Hill and soon at Vaughan. This will enable both hospitals to optimise patient throughput and improve service levels.

P3rform software supports an availability framework for a wide range of medical equipment, including, but not limited to, bed side ventilators, x-ray machines, and MRI scanners. The monitored framework allows Philips to track and report on service events and required deliverables based on the complex and unique Mackenzie contract requirements. With the prospect of deductions for any equipment downtime, the software’s customized penalty calculation reporting incorporated directly into the system provide oversite to manage resources.

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In addition, the effective maintenance of the equipment supports compliance, improved health and safety, and adds value through asset lifecycle management.

P3rform's user-friendly dashboard gives Philips complete visibility of maintenance and equipment availability, enabling them to prioritise resources based on accurate, real-time information, and forewarning of any potential performance failure. This allows remedial action to be taken before deductions are incurred, resulting in a quality-assured service.

Commenting on the contract, Gary Watkins, CEO of Service Works Global, notes: "The aim is to ensure that the medical equipment is maintained to a high standard and readily available. We are delighted to be able to support our partner in providing a first-class service, enabling hospital staff to focus on patient care."

Critical Accountability

The strategic partnership between Mackenzie Health and Philips ensures that both hospitals will have early and ongoing access to the latest healthcare technology innovations, including access to the supplier's expertise in areas such as systems interoperability, diagnostic imaging equipment utilisation, radiology practice management, patient-centric design and alarm management. Moreover, both Philips and Mackenzie Health will look at ways that patient informatics can be presented as actionable data that will enable predictive, preventative and population health interventions. This will not only help ensure continuity of patient care, it will help to effectively improve clinical outcomes for patients, reduce costs and make healthcare more sustainable both inside the hospital network and into the communities that Mackenzie Health serves.

Iain Burns, CEO of Philips Canada, observes: "You need to have a deep understanding of the consumer and the healthcare industry to apply best practices for effective patient-centric care. And with this type of large-scale partnership, we are an accountable partner, which will ultimately allow Mackenzie Health to focus on doing what they do best: caring for the people in their fast growing community."

Picking up on the theme of being an 'accountable partner', Philips Operations Analyst Oak Davis, who oversees the day-to-day management of P3rform software for Mackenzie Health, explains the reasons behind the decision to deploy the SWI platform: "We needed a product, and a supply partner, that could be flexible in the face of change, one that would grow and improve with evolving needs."

Oak continues: "Healthcare is a highly regulated industry, of course. In that context, medical equipment also involves the requirement to provide key metrics, each of which involves specific data capture and often quite complex performance calculations. P3rform eliminates any worries about human error." A vital feature when, as in this case, the company is being paid to deliver a critical service.

As a business concept, managed equipment services is still new and certainly still evolving in Canada, especially in the highly specialised healthcare sector. But partnerships like this one are a growing trend globally; and managed equipment services is definitely proving its benefits – both for the service providers and for the clinical experts providing healthcare.

Philips has been a pioneer in this area, with several major contracts in place. But the challenges in this

particular contract are significant: in addition to being a relatively new market, this is Canada's largest managed equipment services deal.

But, as Oak explains, there's plenty of broader experience to draw upon: "In many ways, applying a computerised platform to managed equipment services is similar to applying it to FM. One big difference, however, is that though the number of assets taken into the system in a healthcare setting may be much smaller, each is critical to the customer's service delivery role."

In any case, the purpose driving the whole contract is clear, Oak notes: "Our goal is to provide clinical staff with the support they need to deliver the best possible service to patients. Our job is to facilitate best practice – specifically, to ensure that all equipment is ready to go where and when needed."

Flexible and Responsive

So how does Oak rate the managed equipment services implementation experience at this point, about a year after go live?

"The system is working well," he says, adding: "It's all new – there has been a significant learning curve. We have needed to be fast on our feet to respond to client needs, but SWI has provided a sound foundation for that. The P3rform system offers extensive flexibility, essential when we've needed to react to the small issues that arise in every new and complex contract.

For example, when more information about staff availability was requested we wanted to address this by adding a calendar to the system – SWI was already prepared, immediately deploying the calendar built into the wider P3rform offering."

Summing up the decision to select and deploy P3rform software, Oak adds: "P3rform is a bespoke solution – that's a key benefit. Also valuable is SWI's established Canadian presence: the local office provides essential support and is very responsive."

Oak continues:

> **The product meets our operational needs; it's easy to use; it is highly configurable; it has been easy to integrate into our work streams; and it provides the outputs we're looking for. All in all, the implementation of P3rform has been a considerable success."**

Future Focus

With the joint Philips and SWI experience of running the complex managed equipment services system at Richmond Hill Hospital proving to be a success, it is also providing a solid foundation for the introduction of the system at the larger and inevitably more demanding Vaughan Hospital. With that facility due to open in 2020, Philips and SWI will join the planning and mobilisation team soon to begin preparing for the next go-live date.

In the meantime, Philips is looking at several other products from SWI which could be introduced over the near to mid-term to support and extend the benefits already offered to Mackenzie Health and its clinical teams.

The fundamental driver in the implementation of this contract is captured in the term 'accountable partner' – P3rform software successfully facilitates that role for Philips. With its proven ability to support users in managing operational risk, coupled with the visibility offered by its real-time reporting dashboard and in-built alarms, P3rform enables PPP contract partners, even in complex healthcare environments, to be completely confident about managing performance and service delivery to the specified quality and within budget, offering clear accountability and underpinning true partnership.