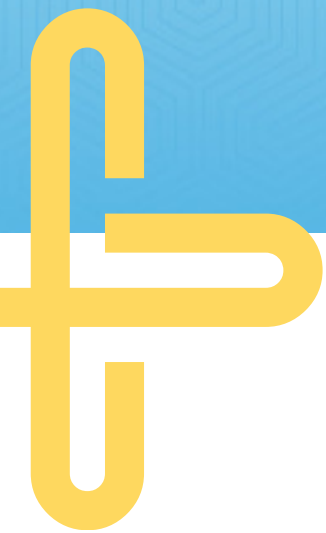




CLIENT SUCCESS

Mater Private Network

Transforming Healthcare Operations: Supporting the Implementation of an Electronic Cardiac Rehab Programme



The Client

Mater Private Network is one of Ireland's leading private healthcare providers, known for delivering world-class services in medical and surgical care. The network operates a multi-faceted organisation, including acute care, diagnostics, and specialist services across multiple sites. With a number of outpatient clinics across regional locations, Mater Private Network has become a national leader in heart and cancer care, consistently recognised for its medical innovation and provision of high-acuity care.

The Challenge <

As part of their second wave roll out of the MEDITECH Expanse EPR (white-labelled as PERL), Mater Private Network reached out to CereCore International with an exciting new challenge: Replicating their paper based Cardiac Rehabilitation Programme into the new electronic record.

Digitising a complex programme like Cardiac Rehab needed to be handled with careful precision as this 6+ week programme required the development of complex clinical calculators and risk stratification tools, longitudinal care planning, measuring and monitoring of improvements, milestones and setbacks, and creating clear and easy to follow discharge instructions, follow up plans, and exercise prescriptions to keep at risk patients out of trouble.

Having collaborated with CereCore International's experienced consultants during the initial EPR Implementation in Dublin, MPN knew we would rise to the challenge in County Cork.

How We Helped <

CereCore International worked closely with the Mater Private Network to develop and deliver the tools they need to guide Cardiac Rehab patients improve their quality of life.

Elbow to Elbow Collaboration

Working with the Cardiac Rehabilitation team, we helped create a comprehensive set of documentation tools to support their complex six-week programme. These tools were designed to streamline patient progress tracking, offering insights into strength, fitness, and overall health improvement. This was not an easy task as the outpatient programme had to be configured to have data flow from visit to visit to manage patient progression yet separate visits uniquely to support finance and billing components.

Coding Complex Clinical Calculators

We worked to create online versions of the following clinical calculators used to identify at risk patients. Digitising clinical calculators helps to reduce human error and save time as many of the calculator inputs flow from other areas of the electronic record:

- ✔ **Chester Step Test** - It is a submaximal multistage aerobic capacity test, designed to measure cardiovascular efficiency. Given in MET's (metabolic equivalent of task) calculated using proportions and averages depending on the level of intensity.
- ✔ **Physical Functioning Tests** including Timed up and go, Functional grip strength test, Single leg stand, 30 second sit, heel rise test, that assess different aspects of mobility, strength and balance.
- ✔ **PAR-Q Assessment** - A screening tool used in physiotherapy to assess patients' readiness to engage in physical activity and helps identify potential health risk that may require medical consultation.
- ✔ **Post Thorax Sternal Vest Assessment** - Helps evaluate the suitability and determine the appropriate size and type of vest (device) following cardio-thoracic surgery.
- ✔ **RAND-36 Assessment** - It is a tool to used to assess HrQoL Health related Quality of life. 8 domains are being evaluated: physical functioning, bodily pain, role limitations due to physical health problems, role limitations due to personal or emotional problems, emotional well-being, social functioning, energy/fatigue, and general health perceptions. It helps to determine patient physical and mental status.
- ✔ **SARC-F Assessment** - A screening tool that can be rapidly implemented by clinicians to identify probable sarcopenic patients.
- ✔ **Kansas City Cardiomyopathy Questionnaire** - used to assess the health status of patients with heart failure.
- ✔ **Cardiac Surgery Assessment** - Helps evaluate a patient's physical and respiratory status before and after cardiothoracic surgery.

Comprehensive Post Care Follow-up Plans

The aggregation of data across the six week course aids in creating patient centric and tailored care plans for each unique participant. CereCore International helped to create clear to follow instructions, goals, barriers and limitations in patient progress notes and discharge plans which is key to reducing hospital re-admissions, fatal heart events and improving each patient's quality of life.

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Kelly, our consultant from CereCore International, has been invaluable to the success of this project. It is worth noting that this platform was built from scratch as none of the hospitals have it digitised. The building of our clinical calculators involved a significant amount of mathematics, calculations and intensive work; Kelly worked with us every step of the way to ensure the algorithms were calculating correctly and everything was flowing to track our patient's progression.

This platform has been carefully designed to be reusable in the future which was always my goal. It makes this investment in additional support even more valuable.”

Alexandra Wlazlik – Supernak

MISCP BSc (Hons) Phys MSc OPR,
Senior Cardiac Physiotherapist, Mater
Private Network

Key Achievements

✓ Pioneering Digital Cardiac Rehab

Having scouring the internet for articles, case studies or publications and coming up nearly empty, we believe that Mater Private Network is developing the gold standard for digitising Cardiac Rehab in Ireland and the UK. This makes the work we have done to support their efforts so important as they are laying the ground work for future success stories in Ireland and surrounding countries.

✓ Identified Risk

By integrating complex calculators into the patient tracking system, we helped Mater Private ensure patients' rehabilitation progress was accurately monitored and documented throughout the six-week programme.

✓ Happy Patients = Healthy Patients

Research shows that only one third of participants will actually finish a cardiac rehab programme so being able to show care progression and schedule appointments with digital reminders is important making sure patients are taking a active stake in their rehabilitation journey.

✓ Leveraging Data

One of the benefits of digitising care is being able to aggregate and leverage that data for future advancements in medicine. Being one of the first, (if not the only) EPR integrated programme in the country puts Mater Private Network in the unique position of leading this space for years to come.

Future Considerations

CereCore International remains committed to supporting Mater Private Network as they continue to optimise and enhance their MEDITECH Expanse system. We look forward to further collaboration, providing ongoing expertise and resources to help them achieve even greater efficiencies in their operations and patient care.

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The Cardiac Rehab project was one of the most challenging and rewarding projects I've had the pleasure of being a part of. The calculator algorithms alone had me reaching back to the far corners of my brain for math I haven't thought about in over a decade, and the complex system configuration of pushing the right data elements from visit to visit to paint a full picture of the patient journey across six weeks of care was much different from the normal inpatient workflows I've been designing for clients my entire career.

The most rewarding part of all of this was seeing how my team would light up when I showed them how easy it could be to run the calculators, pull in discrete data elements from other documents and collaborate in the EPR as a team. I have no doubt that Mater Private Network is going to revolutionise and transform Cardiac Rehab in Ireland and I am so happy to have been part of such a significant piece of work.”

Kelly Del Gaudio

Managing Consultant, MEDITECH,
CereCore International



CereCore® International provides IT services that make it easier for you to focus on supporting hospital operations and transforming healthcare through technology. With a heritage rooted in top-performing hospitals, we serve as leaders and experts in technology, operations, data security, and clinical applications. We partner with clients to become an extension of the team through comprehensive IT and application support, technical professional and managed services, IT advisory services, and EPR consulting, because we know first-hand the power that integrated technology has on patient care and communities.