



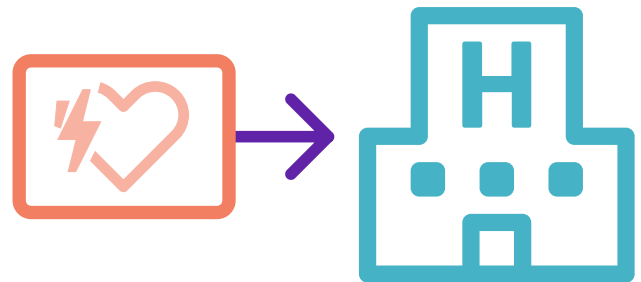
GE HealthCare



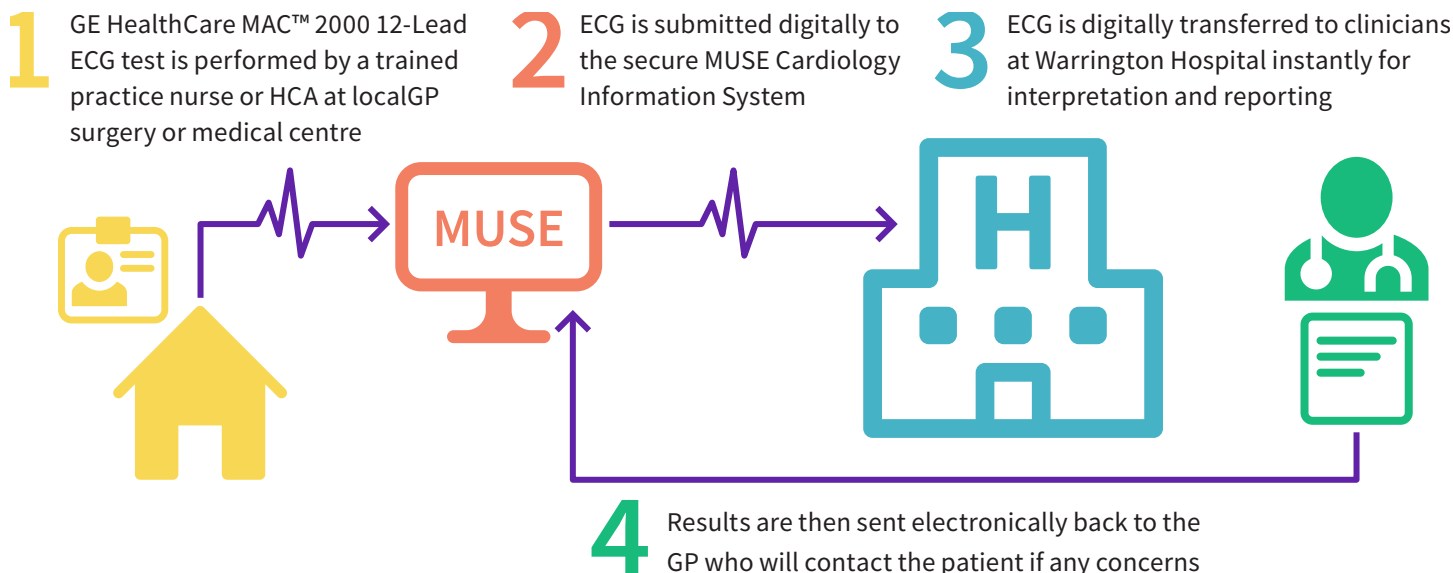
How closer to the community cardiology is alleviating pressures on acute hospitals and speeding up access to patient care

Moving healthcare services closer to the patient has long been an objective, even before the pandemic and subsequent recovery strategies were announced. Growing populations with widening chronic conditions have been putting pressure on acute hospital resources for years. Yet it is the catalyst of COVID that has presented a real and ready need to separate out patients from the traditional acute hospital setting and widen the number of clinical services that can serve a community closer to home.

In the field of cardiology, patient Electrocardiograms (ECGs) performed in a primary care setting and digitally connected to the acute hospital for reporting, have the potential to tackle growing waiting lists and alleviate diagnostic backlogs. This approach offers greater convenience for patients to avoid lengthy and, sometimes, costly journeys to city-based hospitals, plus it helps to reduce the number of people requiring hospital beds with cardiovascular concerns that could have been caught sooner and managed at home.



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The opportunity of community diagnostics

A shining example of the ‘closer to the community’ healthcare movement is at Warrington & Halton Teaching Hospitals NHS Trust in the Northwest of England. Led by its forward-looking cardio-respiratory team in partnership with the local Clinical Commissioning Group (CCG), 34 primary care GP practices have been connected to GE HealthCare’s MUSE™ Cardiology Information System to undertake ECGs in the community setting.

Earlier diagnosis reduces the impact on front-line care services

“The main motivator for ECGs in the community was to relieve the number of patients going to A&E with palpitations and reduce the number of ECGs needed in outpatient appointments,” states Carol Graham, Cardio-Respiratory Service Manager at Warrington & Halton Teaching Hospitals NHS Trust. “Before the digital cardiology project there was approximately a six week wait for ECGs, now, depending on the GP practice, patients could be seen within a few weeks or have same-day appointments.

She continues, “The project went fully live in February 2020, just before the COVID crisis, so has been invaluable in keeping proactive cardiovascular diagnostic testing services running and limiting the number of people that need to come into the acute setting.”

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Improved patient outcomes at the heart of digital cardiology

The geography of the Warrington area means that some people live outside of town locations in rural settings. A reduction in travel time and travel costs from trains, buses or parking to attend central hospital locations has numerous personal advantages to patients who may also need to take time out from work or arrange childcare for diagnostic appointments. The local and familiar GP surgery also has the benefit of being less clinically intimidating to an anxious patient cohort, potentially improving test rates and reducing appointment no-shows.

“The MUSE ECG project is underpinned by annual training to practice nurses and HCAs on performing ECGs and operating the Cardiology Information System. This has helped increase their knowledge, empowering roles and ensuring operational efficiency,” adds Carol Graham, Cardio-Respiratory Service Manager. “Within our department at the hospital, we have benefitted greatly from concentrating on our ECG interpretation skills which is a win-win for patients.”

The key potential benefits of Community Based Cardiology with MUSE



Increased convenience to patients via reduced journey times and travel costs



Improved ECG test waiting times leading to better patient outcomes



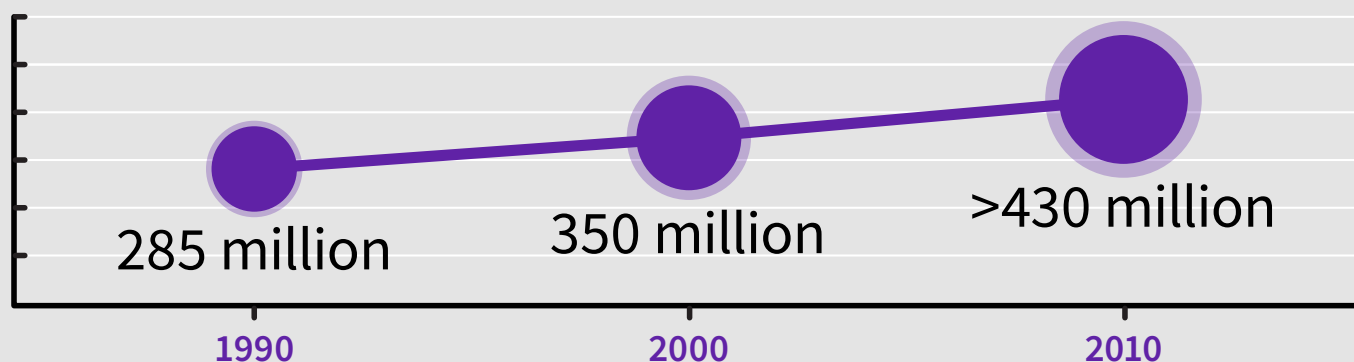
Faster decision support for GPs improving earlier diagnosis and treatment planning



Simple, secure and proven IT set up with two-way workflow to alleviate clinical workload, not create more

The benefits of quicker cardiac diagnostics on society & the health economy

Global estimates of the number of people living with heart and circulatory diseases has been rising, from **285 million** in 1990, to **350 million** in 2000 and, again, upwards to more than **430 million** in 2010.



This is due to changing lifestyles, ageing and growing global populations plus improved survival rates from heart attacks and strokes.¹

If identified earlier, the impact of heart related conditions could be reduced for individuals, their families and the health economy as a whole. For example, the diagnosis of Atrial fibrillation (AF) using ECG as a tool, has the potential for earlier treatment and lifestyle changes to improve an individual's outcomes and reduce the associated risks of stroke, heart failure and other related problems. This has long-term health economic benefits as it is estimated that the UK healthcare cost related to heart and circulatory disease is £9 billion per year, and the estimated cost to the UK economy (from premature death, disability and informal costs) is £19 billion per year.²

¹ British Heart Foundation: Global Statistics Facts, July 2021, <https://www.bhf.org.uk/what-we-do/our-research/heart-statistics>

² British Heart Foundation: UK Statistics Facts, July 2021, <https://www.bhf.org.uk/what-we-do/our-research/heart-statistics>

