

Liverpool Heart and Chest Hospital

NHS Foundation Trust

ADVANTICS™ Solutions Improve Productivity and Access to Cardiac Services

The Liverpool Heart and Chest Hospital (LHCH) has been working with Boston Scientific since 2014 when they first faced outpatient department capacity and workflow challenges. The hospital has engaged with the ADVANTICS team to collaborate on an improvement programme.

Working with hospital stakeholders, the team helped improve efficiency and reduce wait times. Cardiac services were expanded to accommodate new patients and therapies while maintaining a positive patient experience and high professional standards.

Challenge

The hospital's uneven workflow and growing outpatient demand limited capacity for new patients, causing long wait times and staff frustration. Access time for echo diagnostic services was under pressure, with demand growing 15 – 20% annually. In addition, aortic clinic patients with suspected aortic aneurysms often had to return to the hospital several times for multiple diagnostic tests.

The hospital needed tools to better understand and forecast demand and improve efficiency.

Action

The *Service Development* Programme enables appropriate growth by improving patient engagement, referral management, and patient access into specialist care.

The project began with an assessment and implementation of a lean six sigma operational excellence programme to identify the root causes of the outpatient department's inefficiencies. A tailored, data-driven solution was then provided for each.

What will we do to effect change?

In close collaboration with the hospital management and staff, a roadmap for change was rolled out followed by a phased approach of continuous improvement initiatives.

The hospital's programme was designed to:

- Standardise and optimise clinic templates
- Level-load clinic appointments and enhance teamwork
- Improve visuals and monitor processes
- Remove barriers and eliminate waste

About the Hospital

Liverpool Heart and Chest Hospital (LHCH) is one of the largest single-site cardio-thoracic specialty services hospitals in the UK. Located in the north west of England, LHCH is a public hospital with a vision to be "the best, leading and delivering outstanding heart and chest care and research." Serving a catchment area of 2.8 million people, the site handles over 13,000 inpatient procedures and 100,000 outpatient procedures annually. It is also rated #1 in the UK NHS for overall patient and relatives' satisfaction.

Generated over
€400k
in new revenue

Patient
wait time
reduced by
60%

Increased
diagnostic
capacity by
40%



ADVANTICS™
Innovative Healthcare Solutions

To address the growing echo clinic demand, the team facilitated multiple clinic redesign workshops. As inefficiencies were identified and quantified, they worked with the clinical team to formalize standard procedures in the clinic's day-to-day operations and booking practices. A demand and capacity modeling tool was developed for the echo service to use in planning future resource allocation as new services are incorporated into their current activity.

In the aortic clinic, special attention was given to identifying ways to reduce the multiple visits and unplanned diagnostic events.

Outcomes¹

The ongoing initiatives have helped LHCH achieve the following outcomes:

Improved productivity and experience in outpatient department (2014 - 2015)	Improved aortic clinic flow and patient experience (2016)	Maximised/improved echo diagnostic clinic flow and patient experience (2016)
<ul style="list-style-type: none"> • Reduced patient waiting time by 60% • Increased productivity by 18% • Generated new revenue sources of over €400k 	<ul style="list-style-type: none"> • Optimized referral to treatment performance for suspected aortic aneurysms • Reduced pre-procedure visits and shortened "decision-to-treat" time • Improved patient experience 	<ul style="list-style-type: none"> • Reduced waiting lists to 2 weeks • Improved patient and staff satisfaction by introducing a 40-minute slot aligned with national clinical guidelines² • Early results show relevant capacity increase³ • Adopted lean referral process with standardised protocols

1. Real results from programmes. Actual results may vary. Source data written validation by LHCH on January 30, 2018 - Results from case studies are not necessarily predictive of results in other cases. Results in other cases may vary.

2. Transthoracic Echocardiography Standards. British Society of Echocardiography Accredited Department. URL: <http://www.accredityourdepartment.org/eligibility/standardstte.aspx>. Accessed December 12, 2017.

3. Patients treated increased by 6% while increasing time slots by 10 minutes, which represented an overall capacity increase of 40% over 7 months after echo diagnostic initiative implementation. - Early results from April to October 2017.

"The Boston Scientific team took great care to understand our challenges and make thoughtful recommendations for a solution that would truly work for us."

- **Ulrike Cope**, Deputy Divisional Head of Operations, Surgery

ADVANTICS™ Innovative Healthcare Solutions

Boston Scientific's ADVANTICS solutions are tailored to accelerate and sustain cost, quality and growth transformation in hospitals. Using a data-driven approach, your ADVANTICS team collaborates with you to create lasting impact across your organisation.



Improve
Financial
Health



Enhance
Patient
Experience



Build
Staff
Engagement



Strengthen
Quality
Outcomes



Increase
Operational
Efficiencies

**Boston
Scientific**
Advancing science for life™

BostonScientific.eu

Copyright © 2018 by Boston Scientific Corporation or its affiliates. All rights reserved. CORP-517402-AA-JAN2018

Learn more at **BostonScientific.eu/ADVANTICS**