Leeds Teaching Hospitals NHS Trust Renews Collaboration with AstraZeneca

Key Facts at a Glance

- It is estimated that 1,000 patients per year will be seen in Post Myocardial Infarction (MI) Optimisation Clinic
- Training for healthcare professionals to share good practices
- Electronic data collection system which will automatically update with Post-MI patient details and will encourage dissemination of information regionally and nationally

After the success of the initial 12-month project, Leeds Teaching Hospitals NHS Trust renewed its collaboration with AstraZeneca to expand the Post Myocardial Infarction (MI) Medicines Optimisation Clinic, a service aimed at optimising medication for patients who have been discharged from hospital following a myocardial infarction (MI). As of May 2017, the clinic has been expanded to include more patients, train up more healthcare professionals and to encourage information sharing and good practice at a regional and national level.

The Challenge

Recent research has shown that more than 25% of patients with pre-existing coronary heart disease (CHD) who were re-admitted to hospital with acute coronary syndrome (ACS) were on suboptimal drug therapies.1 A large proportion of those patients were also not achieving adequate cholesterol and blood pressure targets, which, in turn, may have been a major contributing factor for their re-presentation to hospital.2

Leeds Teaching Hospitals NHS Trust collaborated with AstraZeneca to provide a 12-month trial of a Post-MI Optimisation Clinic.

Following this success, Leeds Teaching Hospitals NHS Trust decided to renew their collaboration with AstraZeneca to initiate phase two of the project, focused on sharing and disseminating good practice within the Trust, regionally and nationally. The second phase of the project built on the principles of phase one of the Post-MI Optimisation Clinic, with an aim to establish an electronic system populating details of patients admitted with MIs to Leeds Teaching Hospitals. This would then be used to analyse the records of patients 10–12 months post-MI discharge with review of the following:

- Level of medicine optimisation
- Review of modifiable risk factors such as lipid profile, HbA1c and anaemia
- Assessing risk of bleeding
- Assessing suitability for long-term (three years or more) dual antiplatelet therapy
- Reviewing the impact of the Cardiology Medicines Optimisation Project intervention

---

The Challenge
Recent research has shown that more than 25% of patients with pre-existing coronary heart disease (CHD) who were re-admitted to hospital with acute coronary syndrome (ACS) were on suboptimal drug therapies.1 A large proportion of those patients were also not achieving adequate cholesterol and blood pressure targets, which, in turn, may have been a major contributing factor for their re-presentation to hospital.2

Leeds Teaching Hospitals NHS Trust collaborated with AstraZeneca to provide a 12-month trial of a Post-MI Optimisation Clinic.

Following this success, Leeds Teaching Hospitals NHS Trust decided to renew their collaboration with AstraZeneca to initiate phase two of the project, focused on sharing and disseminating good practice within the Trust, regionally and nationally. The second phase of the project built on the principles of phase one of the Post-MI Optimisation Clinic, with an aim to establish an electronic system populating details of patients admitted with MIs to Leeds Teaching Hospitals. This would then be used to analyse the records of patients 10–12 months post-discharge with review of the following:

• Level of medicine optimisation
• Review of modifiable risk factors such as lipid profile, HbA1c and anaemia
• Assessing risk of bleeding
• Assessing suitability for long-term (three years or more) dual antiplatelet therapy
• Reviewing the impact of the Cardiology Medicines Optimisation Project intervention

The Steps Taken
Advance data linkage techniques will be used to automatically pull relevant data from primary clinical systems, allowing the efficient identification of the patient cohort. This data will be used to conduct virtual medicines and risk optimisation reviews for follow-up with patients 12 months post-MI. These virtual or face to face clinics will be operated by a consultant cardiology pharmacist with the help of IT and a cardiology research nurse.

The findings and the recommendations of the review will be analysed to inform practice and the design of care pathways which better meet the needs of patients with MI and reduce their risk of admissions and further events.

Education and training study days will be developed for healthcare professionals providing care for patients with MIs to disseminate findings and share our good practice. Initially, this will be aimed at healthcare professionals within Leeds Teaching Hospitals NHS Trust and will expand to regional and national levels.

Training will also be provided to support an advanced pharmacist to conduct clinics in conjunction with the consultant pharmacist in order to enable all 1,000 post-MI patients to be seen for 12-month follow up.

In order to facilitate this project, AstraZeneca provided dedicated project and support for data and statistical analysis of the project, whilst funding 30% of the costs for a consultant cardiology pharmacist and 50% of the costs for a cardiology research nurse and advanced pharmacist. AstraZeneca also provided additional funding for IT support and system development, as well as consumables, such as laptops and software. Leeds Teaching Hospitals NHS Trust provided the clinical governance, clinical consultancy and editorial input into publications/reports, pathway re-design within the trust. The remaining costs for the consultant cardiology pharmacist, cardiology research nurse and advanced pharmacist were also supplied by Leeds Teaching Hospitals NHS Trust.

What We Expect to Achieve
It is planned that phase two of the Post-MI Optimisation Clinic will build on the achievements of phase one by further improving patient outcomes and ensuring continuity of care by utilising electronic resources. Phase two is expected to be completed in October 2018, after which we expect the following outcomes to be measured:

Patient benefits
Phase two will continue implementing the benefits from phase 1 of the project to include all patients who have suffered MI from within the Leeds Teaching Hospitals NHS Trust catchment area, with each patient supported at 10–12 months post-MI to address concerns, optimise secondary prevention medicines and risk factors.

Expanded service
The expanded service will bring benefits to even more patients, with an estimated total of 1,000 patients to be seen in clinic each year. The service will also be better supported with a team leading the delivery as opposed to relying on one individual.

Benefit to the Trust
Virtual review of patients should ensure better optimisation of medicines and risk factors which could see a reduction number of admissions. The use of electronic resources should provide continuity of care whilst an investment into training should upskill staff to better serve patient needs.