**Summary**

The Luton and Dunstable University Hospital NHS Foundation Trust rheumatology department established a centralised, patient-focused multidisciplinary Early Arthritis Service (EAS). The service is cost effective, improves outcomes and reduces biologic use, increasing the efficiency and effectiveness of the care provided by the Trust.

**The Challenge**

- Prior to the introduction of the EAS, the rheumatology department at Luton and Dunstable University Hospital was facing a number of key outcomes:
  - The capacity of the department was at 42.8% of the national average.
  - Newly referred early arthritis (EA) patients were having to wait >45 days for their first appointment, double the waiting time recommended by the National Institute for Health and Care Excellence (NICE)1.
  - Only 9% (14/157) of patients met the Best Practice Tariff – leading to a 29% loss of referrals from both the Luton and Bedford Clinical Commissioning Groups (CCGs).
  - The poor service negatively impacted patient experience with 26% of patients stating that they would not recommend the service.

**The Solution**

- After establishment of the EAS in January 2016, patients referred to the hospital could be triaged into the EA clinic (EAC) (Figure 1), and then follow one of three avenues: the EA treatment pathway (Figure 2), transfer to general clinic or discharge.
- The EA was aimed to overcome the challenges faced by the Trust by:
  - Increasing the department’s capacity to accommodate referrals.
  - Reducing the time from diagnosis to the start of definitive therapy.
  - Improving clinical outcomes, satisfaction and safety assurance for EA patients.
  - To achieve this, a number of changes were made within the rheumatology department:
    - New EACs/week were established, including dedicated in/outpatient clinic and a pathway coordinator was recruited.
    - A dedicated telephone helpline was established to ensure that patients could obtain advice from a nurse or doctor within 24 hours (a departmental centralised email address is also available).
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**Service and Financial Performance Outcomes**

**Service and Clinical Outcomes**

- Table 1 summarises the outcomes associated with the establishment of the EAS in 2016.

**Financial Outcomes**

- The direct and indirect costs associated with the entire rheumatology service in 2016, after the establishment of the EAS, were £644,216 and the total costs associated with the EAC were £201,562.
- Initial cost savings associated with the EAS in 2016 resulted from:
  - Reduced prescription of biologics in 2016 (EPA, $42).
  - Reductions in the average cost/units of capacity ($74.98/patient).
  - Non-regular patient initiatives ($26,500).
- There is also potential for longer-term cost savings due to the improvements observed in patient outcomes and evidence that suggests earlier control of rheumatic diseases translates to better long-term outcomes.

**Innovative Approach and Scalability**

- The EAS was distinctive in that the service’s focus was not on process delivery but on achieving improvements in clinical outcomes using a centralised, patient-focused and multidisciplinary service.
- Other dedicated EACs have focused on reducing the delay in referral to a specialist and initiation of disease-modifying GPs was established for patients with suspected EA.
- A dedicated Clinical Nurse Specialist to prescribe status so that they can issue disease-modifying anti-rheumatic drug (DMARD) prescriptions, and training four extended scope physiotherapists to identify potential EA patients.
- Incorporating ultrasonography throughout all EACs and providing longer appointments to improve diagnostic accuracy.
- Obtaining a new database (InfoFlex) that enables the modelling of clinical information and workflow processes across the rheumatology department.
- Key improvements in patient satisfaction and outcomes for patients with early arthritis.

**Patient Focus and Satisfaction**

- Patient feedback was used to improve the service. For example, a dedicated outpatients and flare clinic was established to reduce waiting times to see a specialist.
- A dedicated telephone helpline was established to ensure that patients could obtain advice from a nurse or doctor within 24 hours (a departmental centralised email address is also available).
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**Feedback from Patients since the Establishment of the EAS has been extremely positive:**

- "She assisted greatly in getting my prescription sorted.
- "On time excellent service.
- "Prompt and appropriate treatment.
- "Friendly and effective.

**References**