SUMMARY

The Leeds Specialist Spondyloarthritis Service at Chapel Allerton Hospital has built a cost-effective and sustainable practice through collaboration between patients and care providers. The service avoids drug wastage by using an educational patient information letter and maximises the efficiency of biologic drug prescribing in spondyloarthritis (SpA) patients by personalising treatment decisions based on patients’ serum drug and anti-drug antibody levels.

THE CHALLENGE

- Cost data collected at Chapel Allerton Hospital identified that £14,635,534 was spent on biologic therapies in the 2016/17 financial year for patients with rheumatological conditions (n=4,000).
- In recent years, biosimilar drugs have entered the market at a reduced cost compared to the originator biologic medicines.1,2
- There is a large financial incentive for NHS Trusts to minimise wastage of biologic medicines and to switch to less expensive biologics where possible.

THE SOLUTION

- The Leeds Specialist Spondyloarthritis Service have developed a two-part solution:
  - A leaflet was developed to educate rheumatology patients on the cost implication of biologic drugs and how to reduce biologic wastage.
  - The leaflet was drafted with input from multidisciplinary teams within the rheumatology department at Leeds Teaching Hospitals NHS Trust, the medicine home delivery companies operating in the Leeds area, and patient and public involvement groups.
- The letter was sent to the homes of all rheumatology patients receiving biologic medicines under the Leeds Teaching Hospitals Trust in May 2017.
- Maximise the efficiency of biologic drugs prescribed to SpA patients by using patients’ serum drug and anti-drug antibody levels to personalise treatment.
  - Axial SpA (axSpA) or psoriatic arthritis (PsA) patients treated with originator infliximab (Remicade) underwent serum drug and anti-drug antibody level testing (Figure 1).
  - A meeting between the biologics specialist nurse and rheumatology consultant was held to discuss each patient’s ongoing treatment (Figure 1).
  - Treatment decisions were informed through use of one of two algorithms for “Active Disease” or “Remission” (Figure 2).

FINANCIAL OUTCOMES

- A cost-saving of £32,186/year is projected following the introduction of the patient information letter, which includes £5,649.46/year through SpA patients’ non-acceptance of unneeded medicines (for this particular set of biologics).
- Projected annual cost savings associated with treatment regimen changes as a result of serum drug and anti-drug antibody testing in 33 patients amounted to £72,000/year.

PATIENT FOCUS AND SATISFACTION

- A helpline manned by a specialist nurse was available for patients who were concerned about knowing when to refuse the drug.
- The results from a patient survey showed that 90% of patients believed that they should take on at least some of the responsibility for avoiding drug wastage. A survey of patients who received serum drug and anti-drug antibody testing prior to being switched to Inflectra indicated that they thought this was important (94% [36/37]), even given enough information (88% [33/37]) and felt fully involved in decision-making with regard to their treatment (76% [28/37]).
- The serum drug and anti-drug antibody level monitoring initiative provides a personalised approach to treatment for SpA patients based on individual blood test results.
- A follow-up “thank you” letter was sent to patients to communicate cost-savings achieved as a result of their efforts and thanking them for their support.

REFERENCES