# Early arthritis service is cost-effective, improves outcomes and reduces biologic use

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### **Aims**

There is good evidence that dedicated early arthritis clinics (EACs) improve referral lag time and reduce delay in establishing disease-modifying therapy. However it remains arguable whether such clinics improve relevant disease outcomes. Nationally, only 57% of units have dedicated EACs. We established an early arthritis service (EAS), centred on National Institute for Health and Care Excellence (NICE) rheumatoid arthritis (RA) quality standards, to reduce the time to diagnosis and the start of definitive therapy with an aim to accomplish good outcomes by the introduction of dedicated EACs.

# **Methods**

The department set up an early arthritis service with the introduction of six clinics (EACs) every week. An agreed treatment protocol incorporating ultrasound was developed to ensure a standardised approach to early initiation of treatment, drug education and timely review. This is a retrospective study of all patients presenting to the service in the first year.

# Results

Our catchment area covers a population of 350,000 with 40% ethnic minorities. Of 1,884 patients referred, 482 (25.5%) were triaged into EACs based on set criteria. All were reviewed within 3 weeks. Two-hundred and forty seven (51%) were confirmed to have early arthritis: mean age was 52.4 years (17–86 years); 157 (63.5%) were women; 177 (71.6%) were white, 58 (23.5%) were Asian and 12 were of other backgrounds; 159 (64.3%) had RA, 57 (23%) with psoriatic arthritis (PsA) and 31 had other inflammatory arthritides; 25 (10%) had erosions at presentation. There was median 26 weeks delay (0.4–1,043 weeks) from symptom onset to general practitioner (GP) presentation. Median time for GP referral to the department was 4.0 days (0–84 days). Mean DAS28 at first visit was 4.65 (0.6–8.0, n=166).

Ninety-five per cent commenced their disease-modifying antirheumatic drugs (DMARDs) within 3 weeks of initial review. The other 5% who missed the target was owing to patient factors. Treating to target achieved DAS28 remission for 84 (53.5%) and low disease activity (LDA) for a further 44 (34%). Median

time to achieve remission or LDA was 20 weeks (0–52 weeks, n=128). Similarly, 40/57 (70%) of PsA patients achieved good PsA response criteria response (median 24 weeks). Of 247 patients confirmed with early arthritis, only 21 (8.5%) patients required escalation to biologic therapy.

## Conclusion

Dedicated EACs help achieve good clinical outcomes in the majority of patients. Nearly 87% of our cohort attained remission or LDA in less than 6 months. This was despite a significant delay in patients presenting to their GPs and moderately high disease activity. One hundred per cent of our patients were treated to target facilitated by protocol-driven escalation of therapy in these clinics. This is in contrast to the national audit findings whereby only 68% of patients were treated with disease-modifying drugs within 6 weeks of referral and 89% had treatment to target. Patient experience also improved (94% would now recommend the service compared with 76% prior to the initiative).

The project was a financial success with total savings for the year, accounting for most generous cost estimates, of £136,973. In addition, there was a 42% reduction in biologic use in this group compared with 2015. These savings are on top of wider economic and societal benefits achieved by inducing LDA or remission. ■

# Conflict of interest statement

None declared.

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