Evaluating Over a Decade of Juvenile Idiopathic Arthritis (JIA)-Associated Uveitis Screening: The Sheffield Experience

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Introduction

Before 2009, Sheffield lacked a formal screening service for JIA-associated uveitis, resulting in inconsistent practices across clinicians. In 2009, a multidisciplinary team service was established and conducted screening according to British Society for Paediatric and Adolescent Rheumatology (BSPAR) and The Royal College of Ophthalmologists (RCOphth) 2006 screening guidelines[1]. Regular audits have since been carried out periodically.

Objectives

To present a 15-year longitudinal audit of JIA-uveitis screening within a large regional service.

Methods

- This retrospective compilation includes previous clinical audits conducted from 2009 to 2024. Consecutive JIA referrals were reviewed, with data extracted from paper and electronic medical records.
- From 2017 onwards, logistic regression was used to analyse associations between socio-demographic factors (gender, age, area deprivation, rurality and regional variation) and screening outcomes.

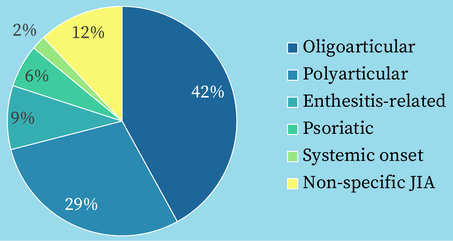
Results: Demographics

A total of **656** children and young people, CYP

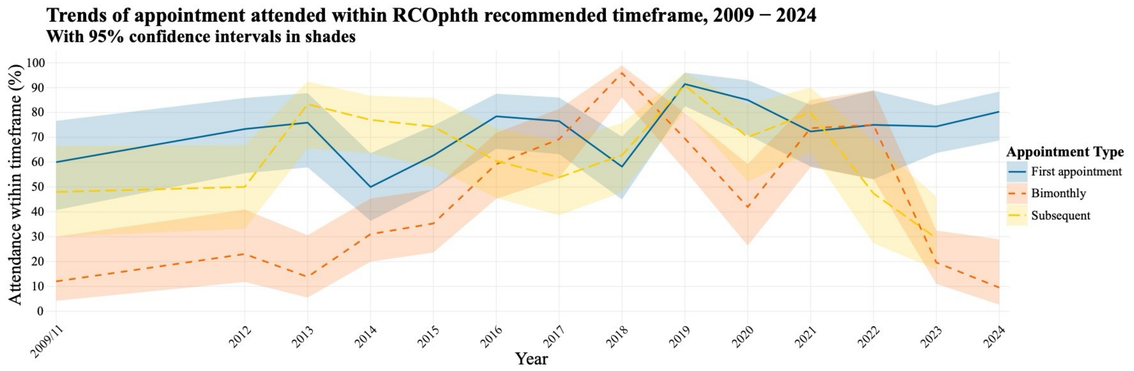
Mean age: 9.2 ± 4.2 years

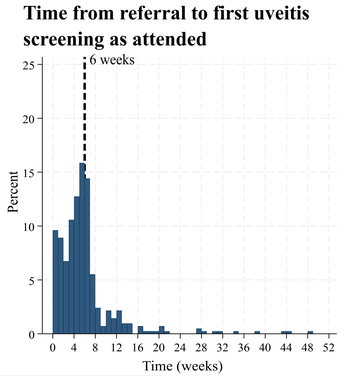
Gender: 56% Female

JIA-subtypes:



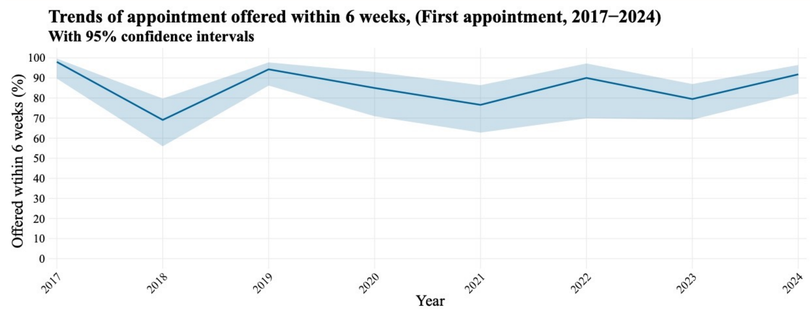
Results: Trends of attended appointments

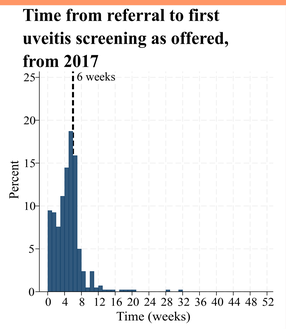




- First appointments show a steady increase in attendance from 60% in 2009 to a peak near 90% in 2019.
- A dip in attendance in 2020 is seen across all appointment types – likely related to the COVID-19 pandemic.
- First appointments consistently maintain higher attendance rates compared to bimonthly (for first 6 months) and subsequent ones.

Results: Trends of offered appointments

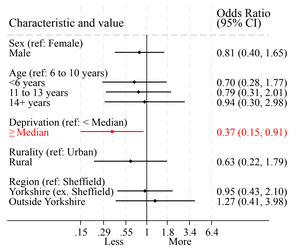




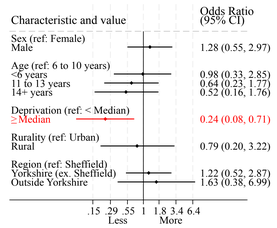
The trends of hospital offering first screening visit within 6 weeks, range from 70% to 98%. This reflects fluctuations in staffing and service capacity, and administrative delay in receiving referral.

Results: Socio-demographic – covariate adjusted associations (2017-2024)

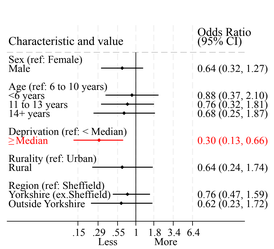
First appointment attended



Bimonthly (first 6 months) appointment attended



Subsequent appointment attended



- All socio-demographic factors showed no significant association with attendance, **except index of multiple deprivation**.
- CYP from more deprived areas were less likely to attend within the recommended timeframe across all screening stages.

Uveitis outcome

All patients screened outside the recommended timeframe were individually reviewed and none developed uveitis at subsequent visit.

Conclusion

- Despite ongoing efforts to fully adhere to screening recommendations, fluctuations in service delivery and attendance persist.
- All patients screened outside the timeframes were investigated and did not develop uveitis, suggesting a low short-term risk but stressing the importance of achieving timely screening.
- Higher levels of deprivation were consistently associated with parents/carers more likely to defer appointment offered and lower compliance with attendance within the recommended time frame.

Acknowledgement:

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Reference:

1. British Society for Paediatric and Adolescent Rheumatology, The Royal College of Ophthalmologists. Guidelines for Screening for Uveitis in Juvenile Idiopathic Arthritis (JIA) produced jointly by BSPAR and RCOphth 2006. 2006.