This is a peer-reviewed, author's accepted manuscript of the following conference abstract: Kurdi, A., Proud, E., Jarvis, L., & Bennie, M. (Accepted/In press). *Utilisation and prescribing pattern of disease-modifying antirheumatic drugs (DMARDs) in Scotland supplied through homecare services: a population-based study*. Abstract from European Drug Utilization Research Group conference 2023, Bologna, Italy.

## Background

Disease-modifying antirheumatic drugs (DMARDs) are the key in treating inflammatory rheumatogical disorders; these include biological DMARD (bDMARDs), targeted-synthetic DMARDs (tsDMARDs) and conventional DMARDs (cDMARDs). In Scotland, these complex medications are mostly prescribed in hospitals but delivered via Homecare services. We evaluated the utilisation and prescribing patterns of these medications because there is lack of such data, to quantify and assess their quality of use.

## Methods

A retrospective cohort study of all patients with an inflammatory rheumatogical disorder prescribed one of these DMARDs between January-2019 and September-2022, using data from two Homecare companies (~90% of Scottish homecare prescribing coverage). Prescribing patterns were quantified using monthly number of prescriptions, stratified by DMARDs class, patient's characteristics (age, sex, deprivation) and indication. Data were analysed using descriptive statistics.

## Results

Overall, 241,323 prescriptions were included for 17,761 patients (mean age 52.0 [±16.5], 63% female, 87% received a single drug, equally distributed by deprivation). Rheumatoid arthritis (RA) was the most common treated indication (53.4%) [treated mostly with adalimumab (29.8%) and etanercept (29%)], followed by psoriatic arthritis (27.5%) [treated mainly with adalimumab (38%) and secukinumab (25.5%)]. Overall, bDMARDs accounted for ~90% of the 19 homecare DMARD prescribing; principally adalimumab (37%) followed by etanercept (25.7%). There was a consistent pattern in utilisation trends over time across age groups, sex, DMARD class.

## Conclusions

RA was the most common rheumatological indication for DMARDs and bDMARDs accounted for the majority of prescribing. No significant variations in the utilisation pattern overtime were observed across patients demographics and types of DMARDs.