confirmed every day or every second day appropriate use of the color-in puppet and spaces for parents and teachers. Experienced applicability: Identified themes were: child-friendly, easy and providing a clear guide for the daily school situation. Themes as: daily obligation, unwillingness of the child, lack of motivation or time of the parents or teachers and insufficient instruction illustrated experienced barriers for the use of the booklet. Effectiveness: Identified themes: 1) Children express themselves better about feelings of pain and fatigue, 2) Parents and teachers appreciate more insight into how the child feels and 3) Teachers feel provided with guidance in the interaction with the child 4) Children feel more secure to express itself at school and 4) Parents are more relaxed about the schoolsituation.

Likert scales showed that more than 75% of the users would advise the B&FS to other parents, teachers and therapists.

Conclusion: The Back & Forth School booklet is a feasible shared management instrument to support young children with JIA in the school situation. A less rigid daily routine and sufficient instruction can improve the experienced applicability.

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Figure 1 Educational page: Pain management

Figure 2 Diary page

Acknowledgments: Children, parents, teachers and therapists

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AB1342-HPR RHEUMATOLOGY 'HOT CLINIC' IN A TEACHING HOSPITAL - WHAT CAN BE EXPECTED?

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Background: Increased financial and bed pressures faced by the NHS have necessitated significant changes in the service provision of many inpatient medical specialties. At the Royal Derby Hospital, rheumatology has become predominantly outpatient-based and no longer has an allocated ward for inpatients. As a result, weekly rheumatology 'hot clinic' have been set up to help facilitate early hospital discharge and specialist outpatient review of patients with suspected rheumatological conditions. It was anticipated that the bulk of referrals would be for conditions requiring early intervention such as suspected giant cell arteritis (GCA) and hot swollen joints. However, there is a paucity of literature on the usefulness of such 'hot clinics' and the quality of referrals.

Objectives: This study sought to evaluate the range of conditions referred to the 'hot clinic' and early outcomes related to follow up or discharge.

Methods: The details of patients who attended the 'hot clinic' were retrospectively obtained using the hospital's electronic clinic appointments system. Electronic letters and discharge summaries were reviewed to determine the patient's presenting symptoms, suspected diagnosis and clinical outcome.

Results: A total of 40 patients who attended the 'hot clinic' from September 2018 to June 2019 were included. The average time from discharge to 'hot clinic' was 3.8 days (range 0-22 days). 27 patients (67.5%) were seen within 7 days of hospital discharge and 2 patients were seen after 18 and 22 days respectively, which spanned over the Christmas and New Year period.

87.5% (35) of patients were referred by acute medicine via the ambulatory care ward; 10% (4) by the Emergency Department and 1 by the medical ward. 5 patients were already known to rheumatology (3 with rheumatoid arthritis and 2 with psoriatic arthritis).

37.5% of referrals were made for suspected GCA, 35% for rash and possible connective tissue disease (CTD) or vasculitis except for GCA, 20% for swollen joints, and 7.5% for unexplained arthralgia or myalgia.

For the patients with suspected GCA, 3 out of 15 were treated as GCA after 'hot clinic' review - 2 of these went on to have a temporal artery biopsy and 1 had a positive biopsy for GCA. (All 3 received high dose steroids prior to their clinic appointment). 10 patients were felt to have an atypical headache and 3 of these were referred to neurology for further assessment. The remaining 2 patients were diagnosed with a sinus infection and migraine respectively.

Of the 14 patients referred with a rash and possible CTD or vasculitis except for GCA, 2 patients referred with a rash were diagnosed to have IgA vasculitis and referred to dermatology for further management. 2 patients were diagnosed with lupus and were followed up in the CTD clinic. 7 patients were felt to have a self-limiting post-viral or non-specific rash, 2 patients with possible drug-related rash and 1 patient thought to have erythema nodosum.

2 patients with swollen joints had a new diagnosis of seronegative inflammatory arthritis and 2 others were diagnosed with gout. 1 patient was diagnosed with osteoarthritis and another with post-viral arthritis and both were discharged.

The 3 patients with unexplained arthralgia or myalgia were felt to have self-limiting post-viral illnesses and were also discharged.

Conclusion: Suspected GCA is the most common referral to the rheumatology 'hot clinic'. However, the vast majority of these referrals turned out not to be GCA. The results of this study clearly suggest the need for development of better pathways e.g. for GCA and joint dermatology and rheumatology clinics.

Disclosure of Interests: None declared

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AB1343-HPR A QUALITATIVE REVIEW ASSESSING THEMATIC OUTCOMES FROM THE PHARMACY-LED ADALIMUMAB BIOSIMILAR SWITCH PLAN ACROSS 3 SPECIALITIES; RHEUMATOLOGY, GASTROENTEROLOGY AND DERMATOLOGY AT UNIVERSITY HOSPITALS OF COVENTRY AND WARWICKSHIRE (UHCW)

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Background: The advent of biosimilars has heralded a new era for cost effective biologic prescribing in the NHS. As patents expire for originator biologics, less expensive versions are now widely available as biosimilars. Non-medical switches (for reasons unrelated to a patient's health) ensure prescribing of best value medicines, and cost savings can be redirected to patient care.¹ This practice resonates with recommendations from Lord Carter's 2016 report regarding reducing unwarranted variation in the NHS and adopting cost saving opportunities.² In 2018/19, following loss of patent exclusivity for the expensive adalimumab originator biologic, UHCW worked in accordance with national directives to drive forward one of the largest non-medical biosimilar switches.

Objectives: This qualitative review aims to explore the success of the adalimumab biosimilar switch and key themes associated with switch backs/refusals across the Rheumatology (R), Gastroenterology (G) and Dermatology (D) specialities at UHCW.

Methods: The switch plan occurred between April-December 2019. 403 patients (R;189, G;176, D; 38) were eligible for switch. Patients were informed of the plan in advance via a patient information leaflet/hospital clinic visits. Switch refusals, withheld treatments and cancellations were documented and patients were advised to contact the hospital pharmacy/clinical teams if they encountered any concerns, adverse effects or lack of efficacy post switch. The clinician would then advise on subsequent management.

Results: During April-December 2019, 264/403 patients had been successfully switched (R;122, G;109, D;33). 33/403 patients switched back to the originator biologic (R;22, G;10; D;1). Of the 22 rheumatology switch back patients; 6 patients reported injection site pain and variably headache, fatigue, disease relapse, gastrointestinal (GI) upset, erythema; 10=reported lack of efficacy and variably influenza-type symptoms, relapse in associated psoriasis, difficulty in walking/sleeping, hair loss, excessive perspiration, facial cellulitis, foot drop and GI upset; 1=blepharitis;1=latex allergy before injection; 3=later declined switch; 1=damaged two devices and did not wish to continue biosimilar. Of the 10 gastroenterology switch back patients; 1=injection site pain; 2=lack of efficacy; 1=developed needle phobia; 1=latex allergy before injection; 1=switch detrimental to health; 2=unstable disease; 1=insomnia; 1=pregnancy. The 1 dermatology switch back patient reported injection site pain and bleeding.

38/403 patients refused the switch and remained on the originator biologic (R;11, G;27, D;0). 29/403 patients had treatment cancellations and were switched to an alternative biologic (R;17, G;9, D;3). 32/403 patients stopped treatment (R;13, G;19, D;0). Treatment was withheld for 7/403 patients (R;4, G;2, D;1).

Conclusion: The UHCW adalimumab biosimilar switch plan succeeded in switching a total of 66% of patients; thus an annual cost saving of £73,020. Injection site pain, most likely due to the biosimilar citrate content, and lack of efficacy according to patient perception and subsequent clinical review, were the most predominant causative themes for switch backs. Gastroenterology patients accounted for 71% (27/38) of the total switch refusals. Additional data regarding patient refusals, identifies future opportunities to improve patient counselling and drive further cost savings.

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AB1344-HPR

POOLED ANALYSIS OF ASSOCIATION BETWEEN ABATACEPT OR OTHER TARGET DISEASE-MODIFYING ANTI-RHEUMATIC DRUGS (tDMARD) AND TYPE 2 DIABETES MELLITUS (T2DM)-RELATED HEALTHCARE RESOURCE UTILIZATION (HCRU) AND COSTS IN TNFI-NAÏVE RHEUMATOID ARTHRITIS (RA) PATIENTS WITH T2DM

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Background: Limited information is available on the impact of target disease-modifying anti-rheumatic drugs (tDMARD) on patients with rheumatoid arthritis (RA) and type 2 diabetes mellitus (T2DM).

Objectives: The objective was to compare T2DM-related healthcare resource utilization (HCRU) and cost for TNFi-naïve patients pooled from two commercial databases with RA and T2DM receiving abatacept, other non-TNFi, or TNFi.

Methods: A retrospective, observational study was conducted with MarketScan and PharMetrics (January 2008-September 2018). The study population included TNFi-naïve adult patients with RA and T2DM newly initiating abatacept, TNFi (adalimumab, certolizumab pegol, etanercept, golimumab, infliximab) or other non-TNFi (tocilizumab, anakinra, sarilumab, rituximab, tofacitinib). Date of tDMARD initiation was the index date. Patients had ≥2 RA diagnoses separated by ≥7 days, ≥1 T2DM diagnosis, and had ≥12 months of pre-index continuous enrollment. Follow-up ended at the end of patient insurance enrollment, study period or index treatment. T2DM-related HCRU and costs including inpatient stay, outpatient visits, ER visits, and pharmacy use were measured on a per-patient-per-month (PPPM) basis (2018 USD). Patients treated with abatacept were matched to TNFi and non-TNFi cohorts separately by propensity score adjusted with patients baseline comorbidities, HCRU, and costs.

Results: A total of 16,236 patients meeting criteria were identified. Most patients were female (74.3%), and the overall average age of 55.4 years (Table 1). After matching, 850 pairs of abatacept vs non-TNFi patients, and 1,096 pairs of abatacept vs TNFi patients were included in the adjusted results. Patients initiating

abatacept had \$144 lower adjusted T2DM-related costs as compared to non-TNFi and \$79 lower costs than TNFi cohorts (Table 2).

Table 1. Patient Characteristics

	Abatacept n=1,134	Non-TNFi n=1,353	TNFi n=13,749	Total N=16,236
Age, mean years (SD)	58.5 (11.3)	57.7 (11.2)	54.9 (10.6)	55.41 (10.7)
Gender, female, n (%)	936 (82.5)	993 (73.4)	10,142 (73.8)	12,071 (74.3)
CCI, mean (SD)	2.2 (1.4)	2.3 (1.4)	1.8 (1.1)	1.89 (1.14)
DCSI, n (%)				
Cardiovascular	361 (31.8)	406 (30.0)	2,500 (18.2)	3,267 (20.1)
Neuropathy	294 (25.9)	374 (27.6)	3,161 (23.0)	3,829 (23.6)
Nephropathy	146 (12.9)	193 (14.3)	1,151 (8.4)	1,490 (9.2)
PVD	131 (11.6)	155 (11.5)	874 (6.4)	1,160 (7.1)
Retinopathy	103 (9.1)	119 (8.8)	922 (6.7)	1,144 (7.0)
Cerebrovascular	74 (6.5)	102 (7.5)	620 (4.5)	796 (4.9)
Metabolic	9 (0.8)	20 (1.5)	141 (1.0)	170 (1.0)

CCI: Charlson comorbidity index; DCSI: diabetes complications severity index; PVD: peripheral vascular disease.

Table 2. Adjusted T2DM-related HCRU and Costs after Propensity Score Matching

	Abatacept n=850	Non-TNFi n=850	Diff (ABA- Non- TNF)	Abatacept n=1,096	TNFi n=1,096	Diff (ABA- TNF)
T2DM-related HCRU (per 1000 Patients per Month)						
Number of Hospitalizations	13.9	20.4	-6.5*	12.6	14.9	-2.3*
Number of ER Visits	22.0	16.1	5.9*	18.4	16.3	2.0*
Number of Outpatient Visits	311	334.8	-23.7*	299.3	286.9	12.4
T2DM-related Costs (PPPM \$)						
Inpatient Costs	507	535	-28	413	475	-62
ER Costs	27	17	10*	22	25	-3
Outpatient Costs	190	323	-133	186	170	16*
Pharmacy Costs	107	100	7*	97	128	-31
Total Costs	831	975	-144	719	798	-79*

*P<0.05

Conclusion: TNFi-naïve RA patients with T2DM newly initiating abatacept had lower adjusted rates of T2DM-related hospitalizations compared to patients who initiated a non-TNFi or a TNFi. Total costs were lower among patients initiating abatacept vs. patients who initiated a non-TNFi or a TNFi. Findings suggest that initial abatacept among TNFi-naïve patients may be able to reduce healthcare utilization arising from T2DM complications and reduce T2DM-related costs in RA patients.

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AB1345-HPR

THE MULTIDISCIPLINARY FOOT CLINIC: A SERVICE EVALUATION PROJECT

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Background: Patients with rheumatological foot disease are an overlooked population, and it was noted locally that these patients received a fragmented service; attending multiple appointments for the management of one clinical issue. This led to delays in treatment; significant inter-departmental correspondence and variations in the peri-operative management of disease modifying anti-rheumatic drug (DMARD) and biologic therapies. To remedy this a foot multidisciplinary (MDT) clinic was established, including input from rheumatology, orthopaedic surgery, specialist rheumatology podiatry and physiotherapy. The outcomes from the foot MDT clinic have been analysed in this service evaluation project.

Objectives: To evaluate the outcomes of the multidisciplinary foot MDT clinic, with particular reference to concordance to the British Rheumatology Society (BSR) guidelines on peri-operative medicine guidelines.

Methods: Data was collected retrospectively across all clinics from January 2017 to February 2019. Clinic letters were obtained, and data was collected using a standardised data collection sheet. Data was collected on patient demographics, rheumatological diagnoses, treatment outcomes from the foot MDT,