Methods Close contacts of MDR-TB patients were traced in the cross-sectional study. Different clinical, radiological and bacteriological were performed to rule out the evidence of TB/MDR-TB.
Results Between January 2012 and December 2012, a total of 200 index MDR-TB patients were initiated on MDR-TB treatment, out of which home visit and contacts screening were conducted for 154 index cases. Of 610 contacts who could be studied, 41 (17.4%) were diagnosed with MDR-TB and 10 (4.2%) had TB. The most common symptoms observed were cough, chest pain and fever.
Conclusions The high incidence of MDR-TB among close contacts emphasise the need for effective contact screening programme of index MDR-TB cases in order to cut the chain of transmission of this disease.

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P116 MULTIDRUG-RESISTANT TUBERCULOSIS (MDR-TB) MONITORING IN SOUTHEAST LONDON USING CURRENT RECOMMENDATIONS; DOES IT PREVENT COMPLICATIONS?

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Background MDR-TB requires an intense treatment course with multiple drugs, many of which have significant recognised side effects. Frequency of monitoring to prevent long term complications is not fully established, but recent guidelines have gone some way to addressing this. In light of this we wanted to review the side effects of MDR-TB treatment in our population to identify whether our previous practice was in line with the current recommendations and if not, whether the currently recommended frequency could have identified these complications sooner.
Methods 26 patients referred to our trust over 13 years (between 2002 and 2015) had a diagnosis of MDR-TB on a basis of isoniazid and rifampicin resistance on culture and/or PCR. Medical records were reviewed; diagnostic tests, resistance profiles, baseline investigations, treatment, drug monitoring tests and side effects were recorded on 21 of these patients. These were compared with current European Respiratory Society guidelines for MDR-TB management.
Results All baseline tests were completed except for magnesium and electrocardiogram. 6 patients had care transferred elsewhere. Amikacin/cycloserine levels were performed in line with recommendations. Interval blood testing was not always undertaken as recommended, particularly near the end of treatment. 11/15 (73%) of patients experienced at least 1 complication to treatment. Most frequent were: amikacin induced ototoxicity in 5/15 (33%), PAS/prothionamide induced hypothyroidism in 3/15 (20%). Other complications included photosensitivity with pyrazinamide, clofazimine associated erythema, peripheral neuropathy secondary to linezolid/cycloserine, amikacin induced renal impairment and ureteric colic secondary to calculi. Audiometry revealed high frequency hearing loss prior to development of symptoms. One patient developed ototoxicity despite monthly audiometry testing. Hypothyroidism developed despite monthly thyroid function.
Conclusions In our population there was a high incidence of significant side effects to MDR-TB regimes. Ototoxicity with amikacin is a significant concern. While frequent testing is advocated we found that complications were not necessarily negated by this. Frequency of testing was easier to achieve whilst an inpatient than an outpatient. With the advent of the World Health Organisation shorter MDR-TB regimen, the need for regular monitoring remains crucial, but the shorter duration of injectable drugs may also help decrease complication rates in the future.

P117 PHARMACY-LED LATENT TB INFECTION SERVICE: A SUCCESS STORY

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Introduction Previously we have reported good outcomes following a pilot study of latent TB infection (LTBI) assessment and treatment by a dedicated TB Pharmacist.[1] Since that time, the service has been imbedded within our local practice to reduce waiting times, improve chemoprophylaxis adherence, enhance treatment outcomes, and minimise adverse drug reactions whilst maintaining a high standard of care. In addition, patients with more complex medical needs requiring biological therapy are now not excluded from this service.
Aim to review the safety and effectiveness of the Pharmacy-led Clinic
Methods Medical records of all cases of LTBI seen by the TB Pharmacist were reviewed retrospectively. Data obtained included patient demographics, treatment ± side-effects and clinical outcomes.
Results 206 patients with LTBI seen between Jan 2012 and December 2015 were identified (see Table 1). Contact tracing and the requirement for biological therapy were the commonest reasons for referral. 185 (89.8%) successfully completed treatment: 3 declined; 8 lost to follow up; 10 stopped due to side-effects. Significant drug side-effects included hepatitis, peripheral neuropathy, nausea and vomiting and only resulted in 2 non-completion, the rest were due to fatigue and headache. Of the 8 who stopped 1 developed active TB whilst on biological therapy. Patient satisfaction was good and patients would recommend this service to a friend or family member.
Conclusion The LTBI Pharmacy-led clinic has been successfully implemented and incorporated into our local TB practice with good outcomes. Keeping with the Carter Review,[2] it is important to utilise the skills and knowledge of previously unrecognised clinical partners to deliver high quality care. Patients were happy to be seen by the pharmacists. Poly pharmacy patients appreciated time spent to simplify regime and manage potential interaction.

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Abstract P117 Table 1

	Number	(%) Declined treatment	Lost to follow-up	Stopped due to side-effects
Contact screening	105 (50.9)	1	8	8
Biological therapy	71 (34.4)	1	0	2
New entrant screening 18(8.7)	1	0	0	
Occupational health	12(5.8)	0	0	0
Total number of patients seen	206	3	8	10

P118 HOW DO FOREIGN-BORN PATIENTS WITH TUBERCULOSIS ACCESS HEALTHCARE? A COHORT ANALYSIS OF REFERRALS FROM GENERAL PRACTICE AND THE EMERGENCY DEPARTMENT TO A TERTIARY TUBERCULOSIS SERVICE

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Introduction More than Seventy percent of active Tuberculosis (TB) cases in England are in patients born outside the United Kingdom (UK). Lack of access to primary healthcare is often cited as a barrier to TB control. We considered how patients with TB referred directly to outpatient services initially access healthcare.

Method A retrospective cohort analysis of all patients with active TB on the London TB register (LTBR) between April 2014 and April 2015 at a large urban tertiary referral centre. The route of referral to TB services was confirmed by a review of electronic patient records. We compared demographic, disease and outcome variables between groups as recorded in the LTBR. We excluded those requiring admission; identified through contact tracing; referrals from other secondary care outpatient services and those with inadequate data. Chi squared or Exact tests were used in the analysis.

Results We compared patients diagnosed with TB who were referred directly to outpatient services from General Practice (GP) (97 patients) and the Emergency Department (ED) (35 patients). There was no significant difference in age or sex between groups.

Of those patients born outside the UK (105), 78 percent (82/105) were referred to clinic from their GP compared to only 56 percent (15/27) of those born within the UK (15/27). This difference was statistically significant ($p < 0.05$). There was no statistically significant difference between the mean length of stay in the UK amongst migrants that presented via ED or GP (MD 2.33 years, 95% CI: −2 to 7, $p < 0.4$). There was no statistically significant difference in the number of patients who had at least one social risk factor between groups.

Comparing disease between the groups, there was a higher proportion of multisite disease amongst those referred from ED compared to GP (23% [8/35] vs 14% [14/97], $p < 0.025$), there was no statistical difference between the numbers of pulmonary cases identified or smear status between the groups.

Conclusion Amongst patients with active TB referred directly to outpatient services, those born outside the UK were more likely to have been referred by their GP than UK-born patients.

P119 USING ADVERSE EVENTS IN A TUBERCULOSIS TRIAL TO DESCRIBE THE TOLERABILITY OF STANDARD THERAPY

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Introduction and objectives The current standard treatment for pulmonary tuberculosis (TB) has been in use for several decades and the major risks associated with each of the four drugs (HRZE) are well recognised. However, large prospective trials with regular review and documentation of adverse events while taking HRZE are lacking.

We used the incidence of grade 3 and 4 adverse events (AEs) and serious adverse events (SAEs) in patients taking HRZE in the REMoxTB trial to investigate the overall tolerability of the regimen.

Methods Grade 3 or 4 AEs and SAEs (of any grade) for patients taking standard TB therapy were analysed. Events were labelled as occurring in the intensive phase, continuation phase or in follow-up (up to 18 months after enrolment). ANOVA and chi-

Abstract P119 Table 1

	Intensive Phase (Month 0–2) n = 639	Continuation Phase (Month 3–6) n = 596	Follow Up Phase (Month 7–18) n = 569	P value
No of Grade 3 AEs Reported	66	31	19	***
No. Grade 4 AEs Reported	19	6	3	***
System Organ Class of Reported Grade 3 & 4 AEs				
Musculoskeletal	14	7	0	0.102
Metabolism & Nutrition	11	0	6	0.006
General Disorders	7	3	1	0.838
No of Grade 3 or 4 AEs per Patient				
0	578	574	554	<0.001
1	49	18	9	
2	9	2	4	
≥3	3	2	2	
No of Patients with ≥1 SAE (Considered Related)	32 (21)	18 (6)	20 (2)	0.168
Mean No of SAEs per Patient	1.78	1.39	1.60	0.092
No of Withdrawals	38	26	1	<0.001
No of Deaths	5	1	10	0.014