At the time of writing, ten trainees had attended the on-call shift. All participants completed a pre- and post-session questionnaire. The on-call shift was a useful learning experience (median score 9), and significantly increased perceived preparedness for on-call work from 3/10 to 7/10 ($p < 0.001$). Confidence was significantly improved in seven domains, most markedly in seclusion reviews, prescribing and mental health act tasks.

Conclusion. The psychiatry virtual-on-call programme fills a niche in the training curriculum and is perceived by trainees to be a useful learning experience. The introductory lecture improved confidence in several domains, but not as effectively as the on-call shift. The on-call shift was well received by participants and significantly improved confidence in 7/10 domains. In summary, the virtual-on-call experience improves preparedness for out-of-hours psychiatry work. Follow-up of participants at the end of their psychiatry rotation will ascertain if they felt the programme to be useful during out-of-hours work.

An analysis of lithium requesting across three hospital trusts in the UK: many people are managed with lithium levels below the current nice guidance lower limit

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Aims. This study examined lithium results and requesting patterns over a 6-year period, and compared these to guidance.

Background. Bipolar disorder is the 4th most common mental health condition, affecting ~1% of UK adults. Lithium is an effective treatment for prevention of relapse and hospital admission, and is recommended by NICE as a first-line treatment.

We have previously shown in other areas that laboratory testing patterns are highly variable with sub-optimal conformity to guidance.

Method. Lithium requests received by Clinical Biochemistry Departments at the University Hospitals of North Midlands, Salford Royal Foundation Trust and Pennine Acute Hospitals from 2012–2018 were extracted from Laboratory Information and Management Systems (46,555 requests; 3,371 individuals). We categorised by request source, lithium concentration and re-test intervals.

Result. Many lithium results were outside the NICE therapeutic window (0.6–0.99mmol/L); 49.3% were below the window and 6.1% were above the window (median [Li]:0.61mmol/L). A small percentage were found at the extremes (3.2% at <0.1mmol/L, 1.0% at >1.4mmol/L). Findings were comparable across all sites.

For requesting interval, there was a distinct peak at 12 weeks, consistent with guidance for those stabilised on lithium therapy. There was no peak evident at 6 months, as recommended for those <65 years old on unchanging therapy. There was a peak at 0–7 days, reflecting those requiring closer monitoring (e.g. treatment initiation or results suggesting toxicity).

However, 77.6% of tests were requested outside expected testing frequencies.

Conclusion. We showed: (a) lithium levels are often maintained at the lower end of the NICE recommended therapeutic range (and the BNF range: 0.4-1.0mmol/L); (b) patterns of lithium results and testing frequency are comparable across three sites with differing models of care; (c) re-test intervals demonstrate a noticeable peak at the recommended 3-monthly interval, but not at 6-monthly intervals; (d) Many tests were repeated outside these expected frequencies (contrary to NICE guidance).

We can check serum lithium levels less often without compromising patient safety: evidence from a multi-centre study

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Aims. Lithium was first found to have an acute antimanic effect in 1948 with further corroboration in the early 1950s. It took some time for lithium to become the standard treatment for relapse prevention in bipolar affective disorder. In this study, our aims were to examine the factors associated wtih the likelihood of maintaining lithium levels within the recommended therapeutic range and to look at the stability of lithium levels between blood tests. We examined this relation using clinical laboratory serum lithium test requesting data collected from three large UK centres, where the approach to managing patients with bipolar disorder and ordering lithium testing varied.

Method. 46,555 lithium rest requests in 3,371 individuals over 7 years were included from three UK centres. Using lithium results in four categories (<0.4 mmol/L; 0.40–0.79 mmol/L; 0.80–0.99 mmol/L; ≥1.0 mmol/L), we determined the proportion of instances where, on subsequent testing, lithium results remained in the same category or switched category. We then examined the association between testing interval and proportion remaining within target, and the effect of age, duration of lithium therapy and testing history.

Result. For tests within the recommended range (0.40–0.99 mmol/L categories), 84.5% of subsequent tests remained within this range. Overall 3-monthly testing was associated with 90% of lithium results remaining within range compared with 85% at 6-monthly intervals. At all test intervals, lithium test result history in the previous 12-months was associated with the proportion of next test results on target (BNF/NICE criteria), with 90% remaining within range target after 6-months if all tests in the previous 12-months were on target. Age/duration of lithium therapy had no significant effect on lithium level stability. Levels within the 0.80–0.99 mmol/L category were linked to a higher probability of moving to the ≥1.0 mmol/L category (10%) than those in the 0.40–0.79 mmolL group (2%), irrespective of testing frequency. Thus prior history in relation to stability of lithium level in the previous 12 months is a predictor of future stability of lithium level.

Conclusion. We propose that, for those who achieve 12-months of lithium tests within the 0.40–0.79mmol/L range, it would be reasonable to increase the interval between tests to 6 months, irrespective of age, freeing up resource to focus on those less concordant with their lithium monitoring. Where lithium level is

0.80–0.99mmol/L test interval should remain at 3 months. This could reduce lithium test numbers by 15% and costs by ~$0.4 m p.a.

A closed audit reviewing the electrocardiograms of patients presenting to the memory assessment team

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Aims. To review the ECGs of all patients referred to MAT services over the preceding 5 year period.
Background. Neurodegenerative conditions such as Alzheimer's Disease can be treated with Acetylcholinesterase Inhibitors (AChEI) to slow down cognitive decline. Side effects of AChEIs include bradycardia, syncope and cardiac conduction disorders. An electrocardiograms (ECG) is completed prior to memory assessment team (MAT) medical assessments to screen for those who may be at risk of the cardiac side effects of AChEIs. ECGs may be included in the initial referral to the service or completed by the MAT. Given the predominantly elderly population referred to the MATs service, other incidental abnormalities are to be expected. Not all MAT referrals that are screened by memory nurses reach the threshold to be reviewed by the medical team and therefore not all ECGs are routinely reviewed, potentially missing clinically significant abnormalities.
Result. A total of 1795 patients were identified as being referred to a single mental health unit in the North West on England over a five-year period. 781 (44%) of the patients had an ECG completed by the MAT, of which 452 (58%) showed an abnormality. Significant abnormalities that were previously unknown to the patients' primary care provider include eight cases of Atrial Fibrillation (AF), four cases of Trifasciular Block, and 19 cases of Left Ventricular Hypertrophy (LVH). 64 (8%) of patients who had an ECG by the MAT had a bradycardia.
Conclusion. In addition to identifying abnormalities that could interfere with memory medication, this audit showed that over half of the ECGs completed by the MAT had an atypical trace. Cardiology was consulted to identify which abnormalities were considered clinically significant and if not already known, the general practitioner (GP) was informed. A change in the local service means that all ECGs completed by the MAT are now screened at point of filling into the notes, so any future abnormalities are identified and followed up immediately.

Obsessive compulsive disorder in treatment seeking children & adolescents during the COVID-19 pandemic

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Aims. Few studies have investigated the COVID-19 pandemic's effect on children and adolescents with obsessive compulsive disorder (OCD), who are thought to be particularly vulnerable. This study aims to investigate whether the COVID-19 pandemic is associated with increased referral of young people with OCD in one area of London and determine if COVID-19 has been associated with change in symptom severity and treatment offered in recent years.
Method. A retrospective study was conducted using clinical service data investigating 58 young people (8–17 years) referred and assessed in CNWL NHS Foundation Trust CAMHS, before and during the COVID-19 pandemic in 2020 (months March–October 2018–2020). Changes in symptom severity were measured using the health of the nation outcome scale for children and adolescents (HoNOSCA). Total HoNOSCA and three HoNOSCA items were used; emotional symptoms, family relationships and school attendance. Patient clinical records were reviewed to assess if COVID-19 had exacerbated OCD symptoms. The type of treatment offered (cognitive behavioural therapy -CBT- only vs combined CBT and medication) was also compared. Analysis was carried out using Chi-square, Kruskal–Wallis and Mann–Whitney U tests.
Result. 26 (5.62%) initial assessments to CAMHS were related to OCD in 2020, compared to 12 (1.30%) and 20 (2.27%) assessments pre-pandemic (2018 and 2019), showing a significant increase in the proportion of OCD cases ($X2$ (1, $N = 58$) = 20.3, $p < .001$). There was no significant difference in total HoNOSCA, emotional, family relationships, or school attendance scores on initial assessment. However, 69.2% of clinical records in 2020 showed symptom worsening over the COVID-period, compared to 30.8% of cases assessed pre-pandemic.There was a significant difference between the type of treatment offered before and during COVID-19 ($X2$ (2, $N = 58$) = 12.7, $p = .002$), with a higher proportion of patients who were referred to CAMHS for OCD but discharged without treatment before the pandemic (37.5% vs 0%). While CBT only remains the most frequent treatment offered, combined treatment was more frequent during the pandemic, although this difference was not significant.
Conclusion. The proportion of OCD-related initial assessments in CAMHS increased during the pandemic despite the overall number of referrals falling. Furthermore, fewer cases were discharged without treatment in CAMHS during this period. Given this, and that many were reported to have deteriorated during the pandemic, services will likely need to address the increased burden of more severe cases. Further research is warranted to assess the generalisability of our findings.

An evaluation of barriers to the initiation of clozapine in patients with treatment-resistant schizophrenia

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Aims. This evaluation aimed to identify patient, practitioner and infrastructural barriers to initiation of clozapine treatment in patients with treatment-resistant schizophrenia (TRS). In response to recent research supporting use of clozapine as the most effective treatment for patients with TRS, concerted efforts have been made to establish why clozapine is underutilised in the NHS. Following a study conducted by South London and Maudsley NHS Foundation Trust, which identified barriers and made recommendations, this evaluation aimed to identify barriers to initiation of clozapine in patients under the care of Mersey Care NHS Foundation Trust.