

finding was made that significantly fewer patients received ECGs during the changeover period (Group 3), with only 6/18 (33%) of patients receiving ECGs. The percentage of patients who were not offered ECGs also increased during the changeover period, with 2/50 (4%) in Group 1, and 3/18 (17%) in Group 3 not being offered.

**Conclusion.** This incidental finding highlights the challenges associated with the junior doctor changeover period. Much time is needed for doctors to adjust to their new surroundings and methods of working, and this may result in basic elements of patient care being overlooked. We surmise that other elements, such as ensuring all patients having regular blood tests and physical examinations, may also be of a lower standard during this period. There is scope for future audits to address this, and for future quality improvement projects to implement changes ensuring medical care remains at a high standard during junior doctor changeover periods.

### Investigation and management of vitamin D insufficiency and deficiency in acute adult psychiatric admissions: a clinical audit

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**Aims.** Growing evidence suggests vitamin D as a contributing factor in psychiatric illness, particularly depression. Leeds and York Partnership NHS Foundation Trust (LYPFT) has a policy recommending that vitamin D levels are checked in all inpatients. The principal aims of this audit were to establish whether vitamin D levels were checked in inpatients and whether oral supplementation was commenced where appropriate, with a pre-determined target of 90% for both. The secondary aims were to assess whether rates of checking and replacing vitamin D, and mean vitamin D levels, differed between Caucasian and non-Caucasian populations.

**Method.** We investigated adults aged 18–65 years newly admitted to the Becklin Centre, an acute psychiatric inpatient unit of four wards, between 1st December 2019 and 29th February 2020. 140 patients met eligibility criteria and were included in this study, of which 86 (61.4%) were Caucasian. Data were collected between 25th and 28th February 2021 by retrospectively reviewing two electronic patient record systems, Care Director and PPM, and the electronic prescribing platform EPMA. Results were compiled on a pre-determined data collection tool and analysed using Microsoft Excel. We defined insufficiency as serum 25-hydroxyvitamin D levels below 75nmol/l and deficiency as below 30nmol/l.

**Result.** Vitamin D levels were checked in 79 (56.4%) inpatients, and the proportion checked differed significantly according to ethnicity (Caucasian = 64.0%, non-Caucasian = 44.4%;  $\chi^2 = 4.59$ ,  $p = 0.032$ ). Of these, 1 (1.3%) had an insufficient sample, 5 (6.3%) had normal levels, 41 (51.9%) had insufficient levels and 32 (40.5%) were deficient. Colecalciferol was commenced for 61 (83.6%) of those with insufficient or deficient vitamin D levels. Rates of colecalciferol prescribing did not differ between ethnic groups (Caucasian = 82.0%, non-Caucasian = 85.0%;  $\chi^2 = 0.091$ ,  $p = 0.76$ ). Mean vitamin D levels did not significantly differ

( $p = 0.77$ ) between Caucasians (38.3nmol/l) and non-Caucasians (36.2nmol/l).

**Conclusion.** LYPFT did not meet the target for testing for and treating vitamin D insufficiency and deficiency in psychiatric inpatients. Other blood results were often available when vitamin D levels were not, suggesting a lack of awareness of the guidance. Ethnicity influenced rates of vitamin D analysis but not replacement or mean serum levels. We aim to present our findings to the Trust's medical workforce to raise awareness of the relevant guidance. Given the paucity of psychiatric inpatients with normal vitamin D levels, further research into the role of vitamin D in psychopathology is warranted.

### Clinical audit investigating the recognition of tardive dyskinesia in an acute inpatient setting

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**Aims.** Tardive dyskinesia (TD) is a disabling extra-pyramidal side effect (EPSE) associated with long-term antipsychotic medication, with an incidence rate of 5% per year of typical antipsychotic exposure. The Abnormal Involuntary Movement Scale (AIMS) is a validated tool for screening for TD and its use is recommended every 3–6 months in those taking antipsychotics. Atypical antipsychotics present a lower risk and have contributed to complacency in monitoring and treatment. The primary aim of this audit was to establish whether AIMS was completed for all patients taking regular antipsychotic medication for three months or more. Secondary aims were to investigate whether patients were informed about EPSEs on initiation, titration and change of antipsychotics, and whether they were assessed for the emergence of side effects during subsequent clinical reviews.

**Method.** This single-site audit examined the care of inpatients on Ward 4 of the Becklin Centre, a male working-age acute psychiatric ward, between 1st November 2020 and 31st January 2021. Patients aged 18–65 years who were prescribed regular antipsychotics were eligible for inclusion. Exclusion criteria included the presence of other neurological movement disorders. 50 patients were included. Data collection took place between 8th February and 6th March 2021; this involved reviewing patient records throughout their inpatient stay on Care Director, an electronic patient record system. Results were compiled using a pre-determined data collection tool and analysed using Microsoft Excel.

**Result.** For 14 (28.0%) patients there was documented evidence of the provision of verbal information surrounding EPSEs during initiation or change of antipsychotics, and 12 (24.0%) received written or verbal information about wider side effects. For 19 (38.0%) there was a documented assessment of side effects during clinical review following the initiation or change of antipsychotic medication. Of the 33 patients who took antipsychotics for over three months, 3 (9.1%) received an AIMS assessment.

**Conclusion.** An inadequate proportion of inpatients prescribed long-term antipsychotics were assessed for TD, likely due to a lack of awareness of the relevant guidance. A substantial number of patients were not informed about side effects, suggesting an element of medical paternalism. This study provides opportunity to improve practice by educating the medical workforce and raising awareness of TD symptoms amongst the wider team.