Improving quality of physical health monitoring of adolescents on anti-psychotic medication within a Tier 3 Adolescent Mental Health Team (AMHT)

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Introduction

Young people prescribed antipsychotics are particularly vulnerable to the side effects of this group of medications such as metabolic disturbance and rapid weight gain. NICE guidelines advocate clinical review at least once every six months to establish therapeutic response and monitor adverse effects[1]. This should include a full physical assessment comprising of clinical parameters (height, weight, body mass index, waist/hip circumference, pulse, blood pressure), blood tests (lipid profile, fasting glucose, HbA1c, prolactin) and examination (nutritional status, extrapyramidal side effects).

At City & Hackney CAMHS, clinicians were not utilising a standardised process for documentation of the above physical health checks thus meaning it was difficult to retrieve this information easily and quality of care was variable between patients. Our aim was to achieve 100% documentation of six-monthly physical health monitoring at City & Hackney AMHT by July 2017. An additional aim is for 100% of physical health checks to meet NICE quality criteria[2] by December 2017.

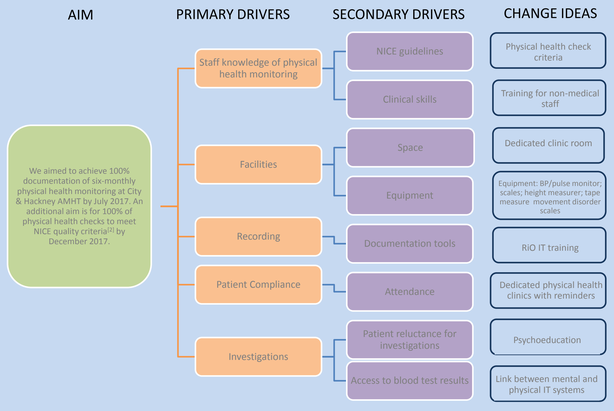

Chart 1. Driver diagram

Method

A retrospective analysis was carried out every month between August 2016 and June 2017 to determine whether adolescents taking anti-psychotic medication within City & Hackney CAMHS had undergone a physical health review.

- A review must have taken place within the previous 6 months once established on treatment in accordance with NICE guidelines.
- The review must be documented on the correct form within the RiO online database

Adolescents were included in the monthly review if they had been on anti-psychotic medication for at least 6 months at any point during the qualifying period.
If they were an inpatient at the time of review, they were not included in the data as they were under the care of another healthcare provider.
If a participant already in the cohort transitioned to the adult services or stop taking anti-psychotic medication, they were no longer included for the purposes of data collection.

The following interventions were actioned during the study period:

1. Oct 2016: An email was sent to staff with information regarding correct documentation of physical health reviews.
2. Oct 2016: This was followed up with a verbal reminder at the fortnightly MDT meeting
3. Nov 2016: Local RiO training was delivered to staff at the service
4. Nov 2016: Staff members who interacted with this cohort frequently were offered additional guidance on completing documentation.
5. Dec 2017: A written checklist was provided as an aid for clinicians conducting physical health reviews
6. Jan 2017: Practical training was delivered on physical health monitoring
7. March 2017: Development of a clinic dedicated to physical health monitoring and a clinician was appointed to oversee the reviews

Once there had been improvement following our interventions, we assessed the documentation further. We analysed the number of NICE criteria (baseline investigations and monitoring) that were recorded at each encounter.

Data

Our service had 26 adolescents (aged 14-18, F:M 12:14) who were on regular antipsychotic medication at some stage during the study period. In the first analysis in August 2016 only 2/12 (17%) had a documented physical health check in the prior 6 months. Chart 1 shows the progression of this figure over time, as well as how this correlates with our interventions. By June 2017, 10/11 (91%) had a documented 6-monthly physical health check.

After the initial reminder to staff in October regarding guidelines around physical health monitoring, we saw a considerable improvement in the frequency of clinicians conducting these checks. However, the format of documentation was inconsistent, with most documenting amidst patient notes, making it challenging to access the information quickly when required.

Approaching individual staff members who interacted frequently with this cohort of patients and providing them with a written checklist largely contributed to the dramatic improvement observed in January 2017. This has been maintained since due to introduction of dedicated physical health monitoring clinics.

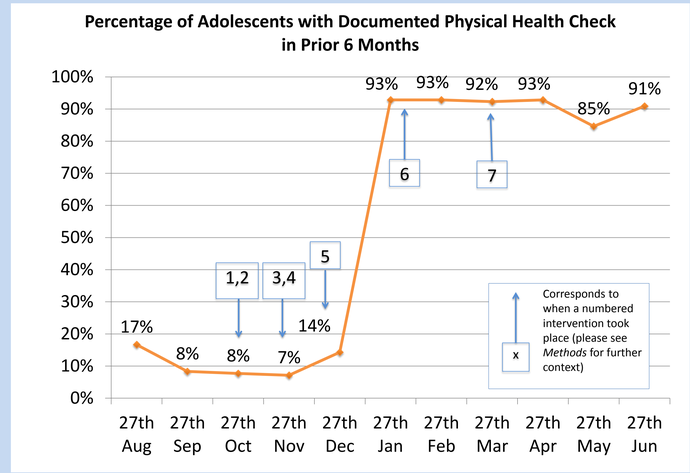

Chart 2. Percentage of adolescents with a documented physical health check in the previous 6 month period

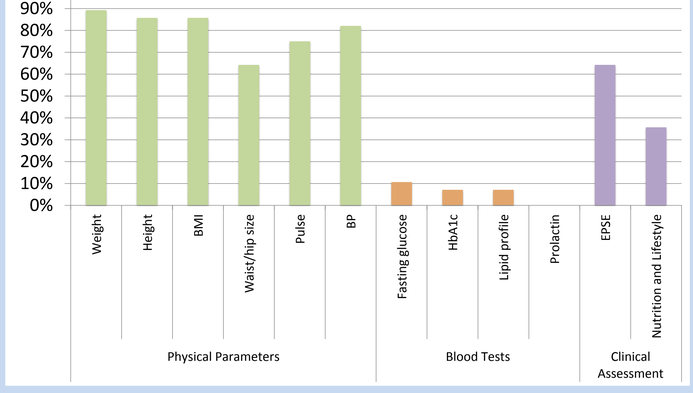

Chart 3. Percentage of parameters documented at health check in accordance with NICE guidelines[2]

From a total 28 encounters, we observed that physical parameters were assessed more frequently than blood tests or lifestyle discussion (see Chart 2).

Mean number of NICE criteria covered per patient in the physical health check was 6 out of a potential 12. Blood test monitoring was poorly documented for many reasons; tests are conducted off-site, some staff are unable to access the IT system upon which results are stored, results are monitored by patient's general practitioner or patients are reluctant to undergo invasive monitoring.

Providing reminders and easy access to results for clinicians, as well as psychoeducation of patients, may lead to increased compliance and improved patient care.

Learning

Documentation of physical health monitoring has greatly improved with our interventions which consisted of email information, verbal reminders, written handouts and face-to-face staff training. Sustainability has also been shown over several months.

The main area for improvement with respect to NICE criteria would be monitoring via blood tests. This is often the most difficult aspect to manage in a community setting and barriers to this for both patients and staff must be examined.

There appears to be a need for improved patient education regarding their medication and the potential impact on their physical health. Consistent access to psychoeducation and an emphasis on taking ownership of their physical health may improve compliance and foster a better relationship with services.

A dedicated clinic is one method of ensuring clinicians have the opportunity to discuss physical healthcare with patients and the facilities to conduct the required assessments. This could be expanded to other teams and trusts.

References:

[1] National Institute for Health and Care Excellence (NICE) (2015) *Bipolar disorder, psychosis and schizophrenia in children and young people.* [Online]. *Available at:* https://www.nice.org.uk/guidance/qs102/chapter/quality-statement-6-monitoring-for-side-effects-of-antipsychotic-medication
[2] National Institute for Health and Care Excellence (NICE) (2016) *Psychosis and schizophrenia in children and young people: recognition and management.* [Online]. *Available at:* https://www.nice.org.uk/guidance/cg155/chapter/Supplementary-information-on-baseline-investigations-and-monitoring