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NHS
Gloucestershire Health and Care
NHS Foundation Trust

Clinical Audit Report

Audit Title	Physical Health Monitoring for patients on Depot Antipsychotics in Gloucester Recovery Team			
Audit Code	23-139			
Directorates included in audit	Community PH, MH & LD	☒	Countywide Services	☐
	Children and Young People Services	☐	MH & LD Urgent Care and Inpatients	☐
	PH Urgent Care and Inpatients	☐	Trustwide	☐
Audit Lead (Name and job title)	Dr Teodor Lerescu, Consultant Psychiatrist			
Other people involved in audit (name and job title)	Dr Prakash Muthu, Specialty Doctor in Psychiatry Dr Cristiane Andrade Dr Bryson Odigwe Hanna Tunbridge, Clinical Audit Manager			
Date of audit	June 2023			
Date of report	November 2023			
Sample size	97			
Acronyms used in audit report	CPA – Care Programme Approach NICE – National Institute for Health and Care Excellence			

Abstract

Improving physical healthcare to reduce premature mortality in people with severe mental illness has gained importance since it became one of the CQUIN goals for 2015/16. Gloucestershire Health and Care NHS Foundation Trust has since introduced physical health clinics, offering annual physical health checks as recommended by NICE and the Royal College of Psychiatrists' Lester tool supporting the implementation of the National physical health CQUIN. Since it was introduced in Gloucester Recovery Team, the physical health clinic has gradually expanded over the last several years and currently is offering annual health checks to all patients under the caseload of the team. We carried out initial audit on physical health monitoring on patients on depot antipsychotics in Gloucester Recovery Team between 1st Feb 2014 and 31st Jan 2015 which was before these clinics were set up, to compare our practice with the above standard and possibly identify and implement any appropriate measures that would help us meet the National CQUIN target. We chose all patients on depot antipsychotic medications in Gloucester Recovery Team as our target population and set out to find out whether these patients are receiving annual physical health monitoring. We considered various physical health parameters as recommended by the Lester tool. We then carried out a re-audit in September 2018 on the same group of patients using the same criteria/parameters as in the initial audit. At that time physical health checks were being offered only to patients on CPA. We noted that overall compliance with physical health checks had dropped compared to previous audit period.

Since then, the physical health clinic in Gloucester Recovery Team has expanded offering annual health checks to all patients under the caseload. Therefore, we deemed that a re-audit is required to find out how this has impacted on physical health monitoring for patients on depot antipsychotics.

Key findings:

- Overall compliance was recorded at 62%, which is a 16% improvement from the previous audit.
- Improvement was also noted in 7 individual criteria including number of patients receiving annual health checks, recording and intervention for blood pressure, recording and intervention for raised BMI and intervention for raised HbA1c. However scores dropped for recording smoking status which had a 4% drop, recording glucose for which there was a 16% drop and recording lipid test results which showed 18% drop.
- Interventions for smoking cessation and abnormal HbA1c results showed green ratings whilst intervention for raised blood pressure came up as amber, the rest remained in red rag ratings although there were slight improvements in compliance in some of these areas compared to previous audit.

Recommendations/Follow up:

- To improve practice in recording smoking cessation, recording glucose and lipid test results.
- Repeat this audit in 2 years' time.

Section 1: Introduction

Background

Previous audits looking at the physical health monitoring of patients on depot antipsychotics were undertaken in Gloucester Recovery Team in 2015 and 2018. Since the last audit, there have been further changes in the physical health monitoring for these patients, with monitoring now being offered to all patients on the caseload. Therefore, a re-audit is required to find out how this has impacted on physical health monitoring for patients on depot antipsychotics in Gloucester Recovery and whether this meets the standards recommended in the NICE Clinical Guideline on the prevention and management of psychosis and schizophrenia in adults (NICE, 2014).

Aims and Objectives

The aim of the audit is to ascertain if current practice in monitoring physical health of patients on depot antipsychotics in the Gloucester Recovery Team meets the standards as set out in the NICE Clinical Guideline on Psychosis and schizophrenia in adults: prevention and management.

Methodology

A paper audit tool, based on one used in the previous audit in 2018, was used to collect the data for the audit. Data was collected by Dr Prakash Muthu, Dr T Lerescu, Dr Cristiane Andrade and Dr Bryson Odigwe.

The final sample size for the audit consisted of 97 patients, 58 patients (60%) were male and 39 patients (40%) were female. The age of the patients ranged from 20 years to 85 years. The table below shows the ethnicity of the patients.

Ethnicity	Number of patients	Percentage of audit sample
White British	71	73%
Black / Black British	11	11%
Any other white background	5	5%
Asian / Asian British	3	3%
Mixed race	2	2%
Other ethnic group	1	1%
Not documented	4	4%
Grand Total	**97**	

The table below shows the diagnosis of the patients in the audit sample:

Diagnosis	Number of patients	Percentage of audit sample
F10-F19 Drug induced psychosis	2	2%
F20-F29 Schizophrenia type psychosis	74	76%
F30-F33 Affective psychosis	16	16%
F60.3 Emotionally Unstable Personality Disorder	4	4%
Diagnosis not stated on audit form	1	1%
Grand Total	**97**	

The patients in the audit sample were on a range of depot antipsychotics, details are shown in the table below:

Name of depot received	Number of patients
Aripiprazole	21
Clozapine	1
Depixol	7
Flupentixol	25
Haloperidol	10
Modecate	1
Paliperidone	9
Risperidone	3
Trevicta	2
Xeplion Paliperidone	2
Zuclopenthixol	16
Grand Total	**97**

Some patients were prescribed other psychotropic medication, the table below shows the range of medication prescribed

Psychotropic medication prescribed	Number of patients
Aripiprazole 15 mg, Sertraline 150mg	1
Aripiprazole 15mg OD, Diazepam 5mg	1
Aripiprazole 25mg, Clonazepam 05mg, Procyclidine 5mg, Escitalopram 20mg	1
Aripiprazole 5mg monthly	1
Aripiprazole 5mg night	1
Aripiprazole, Sertraline, Procyclidine, Diazepam	1
Benzhexol	2
Chlorpromazine 25mg, Procyclidine 5mg	1
Citalopram 40mg daily	1
Diazepam 2mg	1
Diazepam 1mg	1
Diazepam 2mg, Zopiclone 3,75mg PRN, Buspirone 10mg tds	1

Psychotropic medication prescribed	Number of patients
Diazepam 5 mg	1
Diazepam, Zopiclone	1
Duloxetine 60mg OD	1
Duloxetine, Mirtazapine, Zopiclone	1
Epilim Chrono	1
Epilim (Sodium Valproate), Sertraline	1
Fluoxetine 20mg OD, Paroxetine 2m 25mg PRN	1
Lithium Carbonate 1000mg, Haloperidol 2mg BD	1
Mirtazapine	1
Mirtazapine 15mg	1
Mirtazapine 15mg, Lorazepam PRN	1
Mirtazapine 15mg night, Circadin 2mg night	1
Mirtazapine 30mg, Diazepam 2mg	1
Mirtazapine 45mg, Sodium Valproate 1g, Trihexyphenidyl 2mg, Diazepam 5mg	1
Olanzapine 150mg, Pregabalin 300 mg	1
Olanzapine 20 daily dose	1
Olanzapine, Venlafaxine	1
Pregabalin 75 mg twice daily, Procyclidine 2.5 3 times a day	1
Pregabalin, Sertraline	1
Pregabalin 300mg, Circadin 2mg nocte, Zolpidem 100mg nocte	1
Previously Flupentixol 40 mg 2X monthly	1
Procyclidine	1
Procyclidine 2,5mg TDS, Diazepam 5mg od prn	1
Procyclidine 5 mg	1
Procyclidine 5 mg, Citalopram 20mg	1
Procyclidine 5mg, Sertraline 200mg	1
Procyclidine 5mg OD	1
Procyclidine 5mg once daily, Depakote 100mg	1
Promethazine, Melatonin	1
Quetiapine	1
Quetiapine 150mg and 200mg nocte, Venlafaxine MR 150 mg, Gabapentin 3500 mg TDS	1
Quetiapine 500 mg – evening, Citalopram 30 mg – morning, Depixol Depot 160mg every 2 weeks	1
Quetiapine, Citalopram, Zolpidem	1
Sertraline	2
Sertraline 100 mg OD	1
Sertraline 100mg, Diazepam 2mg	1
Sertraline 200mg, Mirtazapine 30mg, Diazepane 5mg, Buprenorphine	1
Sertraline 50mg	1
Sertraline 50mg OD	1
Sertraline, Diazepam	1

Psychotropic medication prescribed	Number of patients
Sodium Valproate 400mg OD, Mirtazapine 45 mg ON, Procyclidine 5 mg OD	1
Sodium Valproate, Diazepam	1
Sodium Valproate, Pregabalin, Trihexyphenidyl	1
Temazepam 10MG nocte, Procyclidine 5MG prn	1
Trihexyphenidyl 2mg TDS, Zopiclone 7.5mg PRN	1
Venlafaxine 375mg, Procyclidine 5mg	1
Venlafaxine 75mg	1
Venlafaxine xl 150mg OD, Zopiclone 7.5mg	1
Venlafaxine 75 om, Zopiclone PRN	1
Zopiclone 7.5 PRN, Lorazepam 0.5mg PRN	1
Zopiclone 7.5 prn, Quetiapine 300mg, Venlafaxine 225 mg	1
Zopiclone 75 mg PRN	1
Grand Total	**66**

Section 2: Results

Scoring System (RAG rating)

90% - 100%	Good
80% - 89%	Requires improvement
< 80%	Inadequate

Standards		Compliance	Direction of travel and previous compliance
Overall Compliance		62%	⇧ (46%)
Number	Criterion		
1	All patients should have a formal annual health check within the last year	65% (63/97)	⇧ (48%)
2	Smoking Status should be recorded for each patient	62% (58/93)	⇩ (66%)
3	If patient is a smoker, interventions for smoking cessation should be offered or a rationale for not offering recorded	97% (33/34)	⇧ (63%)
4	BMI should be recorded for each patient	61% (56/92)	⇧ (41%)
5	If BMI is recorded and BMI > 25, interventions for weight gain/obesity should be offered or rationale given if not offered	70% (28/40)	⇧ (62%)
6	Blood Pressure should be recorded for each patient	63% (58/92)	⇧ (37%)
7	If BP is recorded and Systolic BP reading is above 140 and/or Diastolic reading is above 90, interventions for hypertension should be offered or rationale given for why not offered	83% (15/18)	⇧ (44%)
8	Glucose should be recorded for each patient	47% (37/78)	⇩ (63%)
9	If Glucose is recorded and levels are recorded as more than or equal to any of the following (HbA1C 42mmol/mol, FPG 5.5 mmol/l or RPG 11.1 mmol/l), interventions for diabetes/high risk of diabetes should be offered	91% (10/11)	⇧ (21%)
10	Lipids should be recorded for each patient	46% (36/78)	⇩ (64%)

Standards		Compliance	Direction of travel and previous compliance
11	If Lipids are recorded and levels are recorded as any of the following (Total cholesterol more than or equal to 9, non-HDL cholesterol more than or equal to 7.5 or TG more than 20 mmol/l), interventions for dyslipidaemia should be offered or rationale given for why not offered	N/A	N/A

Section 3: Discussion

Overall compliance for this audit is 62%, although this is still red RAG-rated, compliance has increased 16% since the previous audit in 2018. This finding does not truly reflect the practice of physical health checking within the recovery team currently. This is primarily because of an anomaly with the question asked in the audit data collection form which was originally designed to collect data on physical health checks in GP practices in 2015. The question we asked was whether "patient had their physical health check" as opposed to "patient had been offered physical health check". It is likely that the figures would be greatly higher if we had checked for patients who had been offered physical health checks.

Of the 10 audit criteria:

- 2 criteria (Interventions for smoking cessation and abnormal HbA1c results) scored a good compliance of above 90% (green RAG-rated)
- 1 criterion (intervention for raised blood pressure) scored an amber RAG-rated compliance of 83%
- 7 criteria scored an inadequate compliance below 80% (red RAG-rated). Of these there was improvement in 4 criteria (receiving annual health checks, recording blood pressure, recording and intervention for raised BMI) from the last audit. However, in the other 3 criteria there was a decrease in compliance compared to the previous audit. Recording smoking status had a 4% drop, recording glucose had a 16% drop and recording lipid test results showed 18% drop). The results are paradoxical as one would have expected improvement in these areas as well owing to significant increase in the number of patients receiving annual health checks.
- A higher percentage of patients had received a formal annual health check within the last year (65, up from 48% in the previous audit).

It is pleasing to see that compliance has increased in 7 of the audit criteria with 2 criteria scoring green and 1 scoring an amber RAG-rating, compared to the previous audit where all criteria were in the red RAG-rating. However, there were 3 audit criteria in which the performance had dropped compared to previous audit. Therefore, appropriate measures need to be considered and implemented to further improve in these areas.

Section 4: References

NICE (2014) *Clinical guideline CG178 Psychosis and schizophrenia in adults: prevention and management*

Section 5: Follow up

- Dr Muthu to liaise with the physical health clinic to look into factors that are likely to be contributing to the paradoxical drop in recording smoking cessation, glucose and lipid test results.
- Revise audit tool and ensure only one audit tool is in use before the next re-audit
- Repeat this audit in 2 years' time

Section 6: Clinical Audit Quality Impact Assessment Table:

	Description of risk	**Outline of mitigations**	**Impact Rating: Low, Moderate, High** Please ensure your action plan reflects the risk level identified in this table
Patient Safety Risk Outline any aspects of the audit that relates to or would impact patient safety where the outcome is less than expected.	Risk of premature mortality, due to cardiovascular diseases.	Early detection and secondary prevention with appropriate disease-modifying treatment and lifestyle modification.	Low
Clinical Effectiveness Risk Outline any aspects of the audit that would impact of the effectiveness of the interventions, assessment or pathway.	None identified		
Patient Experience Risk Outline any aspect that would impact the patient experience of the intervention, assessment or pathway.	None identified		

Section 7: Action Plan		**Audit Title: Physical Health Monitoring for patients on Depot Antipsychotics**		**Audit Number: 23-139**	
Number	**Area of Concern**	**Detail**	**Person responsible (Name, job title, contact details)**	**Date to be completed by**	**Actual completion date**
1	Patients receiving Annual Health Check	Although there has been improvement in the number of patients receiving annual health checks, the results are still red RAG-rated. This is likely because of an anomaly with the question asked in the audit data collection tool as mentioned above. The question will be amended in the next audit to capture practice data more accurately.	Dr T Lerescu/Dr Muthu, Pullman Place	18/03/2025	
2	Drop in recording smoking cessation, glucose and lipid test results.	In spite of improvement in the number of patients receiving annual health checks, strangely there has been paradoxical drop in recording smoking cessation, glucose and lipid test results. Clinicians running the clinic to be reminded of making sure these are addressed and relevant information is recorded.	Dr T Lerescu/Dr Muthu, Pullman Place	18/03/2025	
3	Re-audit	Re-audit to be carried out in 2 years' time	Dr T Lerescu/Dr Muthu, Pullman Place	18/03/2026	
Any items to be escalated to the Risk Register					