

Semaglutide in Psychiatric Inpatient Care at St Andrews: An audit of Baseline Investigation and Nutritional monitoring

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Introduction

People with severe and complex mental illness are at increased risk of obesity and metabolic complications, due to psychotropic medication, illness-related factors, and reduced physical activity. Semaglutide (Wegovy), a GLP-1 receptor agonist, is recommended by NICE for weight management in adults with obesity and weight-related comorbidities however there are no specific guidelines regarding Semaglutide monitoring.

Objectives and Aims

To evaluate real-world practice in the initiation and monitoring of Semaglutide in psychiatric inpatients, identifying gaps in nutritional risk assessment and monitoring, and inform the development of a standardised monitoring framework.

Methods

This retrospective audit reviewed 16 psychiatric inpatients at St Andrews Healthcare, prescribed Semaglutide between August 2024 and July 2025, including patients enrolled in the STEP-STAH trial and those who were prescribed Semaglutide outside the trial framework. Electronic patient records were reviewed for investigations at initiation of Semaglutide along with monitoring bloods. Baseline investigations were defined in line with routine physical health monitoring and included full blood count (FBC), liver function tests (LFTs), renal function tests (RFTs), thyroid function tests (TFTs), HbA1c, lipid profile and bowel monitoring. Existing six-monthly routine physical health monitoring and three-monthly HDAT monitoring were also reviewed. Documentation of food and fluid charts and prescription of nutritional supplements were assessed. Data were summarised descriptively using raw numbers. The audit was conducted in accordance with local clinical governance approvals.

Discussion

- Within St Andrews Healthcare, Semaglutide was introduced through the STEP-STAH trial and is increasingly used in psychiatric inpatient settings, including for patients not formally enrolled in the trial. NICE guidance emphasises the importance of baseline physical health assessment and ongoing monitoring when initiating pharmacological weight-management treatments.
- At St Andrews, we routinely conduct physical health monitoring, including six-monthly investigations for all patients on antipsychotics and three-monthly blood tests for patients prescribed high-dose antipsychotic therapy (HDAT). However, the appetite-suppressing effects of Semaglutide raise additional concerns regarding nutritional intake and risk of malnutrition in vulnerable inpatient populations. As Semaglutide is a relatively new medication, its long-term nutritional and physical health implications in psychiatric settings are not yet fully established, highlighting the need for robust monitoring.

RESULTS: The Monitoring Gap

Biochemical Testing vs. Nutritional Surveillance

Biochemical Investigations



81%

Completion of Baseline Bloods



13 out of 16 patients received full biochemical investigations within three months.



High Rates of Biochemical Follow-up:

9 patients had repeat blood tests within six months; Albumin was measured in 14 patients, all within normal range.

Nutritional Monitoring



19%

Nutritional Charting Rate



Only 3 patients had food and fluid charts initiated, one not maintained.



Ambiguous Supplement Prescription:

12 patients prescribed vitamins/minerals, but documentation for indication often variable or unclear.

Results

Baseline blood investigations were largely completed, with 13 of 16 patients having blood tests within three months of Semaglutide initiation. Ongoing biochemical monitoring was also evident, with 9 patients having repeat blood tests within the first six months and 5 patients within a year. However, Albumin was measured in 14 of these patients, with all results within the normal range; but two patients had no monitoring bloods at all.

In contrast, formal nutritional surveillance was inconsistent. Food and fluid charts were initiated for only three patients, and one of this was not updated. This might be due to change in guidance for recording food and fluid charts as they were recorded on paper earlier and only recently have moved over to an electronic form. Despite this, 12 patients were prescribed vitamin or mineral supplements, including vitamin D, iron, folic acid and multivitamins, though documentation of nutritional indication were variable and often unclear.

Conclusion

This audit identified gaps in Semaglutide-specific baseline investigations and nutritional monitoring within a psychiatric inpatient service where routine physical health monitoring is otherwise well established. Given the complexity of inpatient populations, high prevalence of obesity, appetite-suppressing effects of Semaglutide, and uncertainty regarding its long-term nutritional implications, enhanced monitoring is essential. A standardised inpatient monitoring protocol aligned with NICE guidance and integrated into existing physical health and HDAT pathways is recommended to improve patient safety and support early identification of malnutrition.