# Implementing a physical health monitoring clinic for patients taking clozapine at South Kensington and Chelsea CMHT:

## A Quality Improvement Project

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## Background

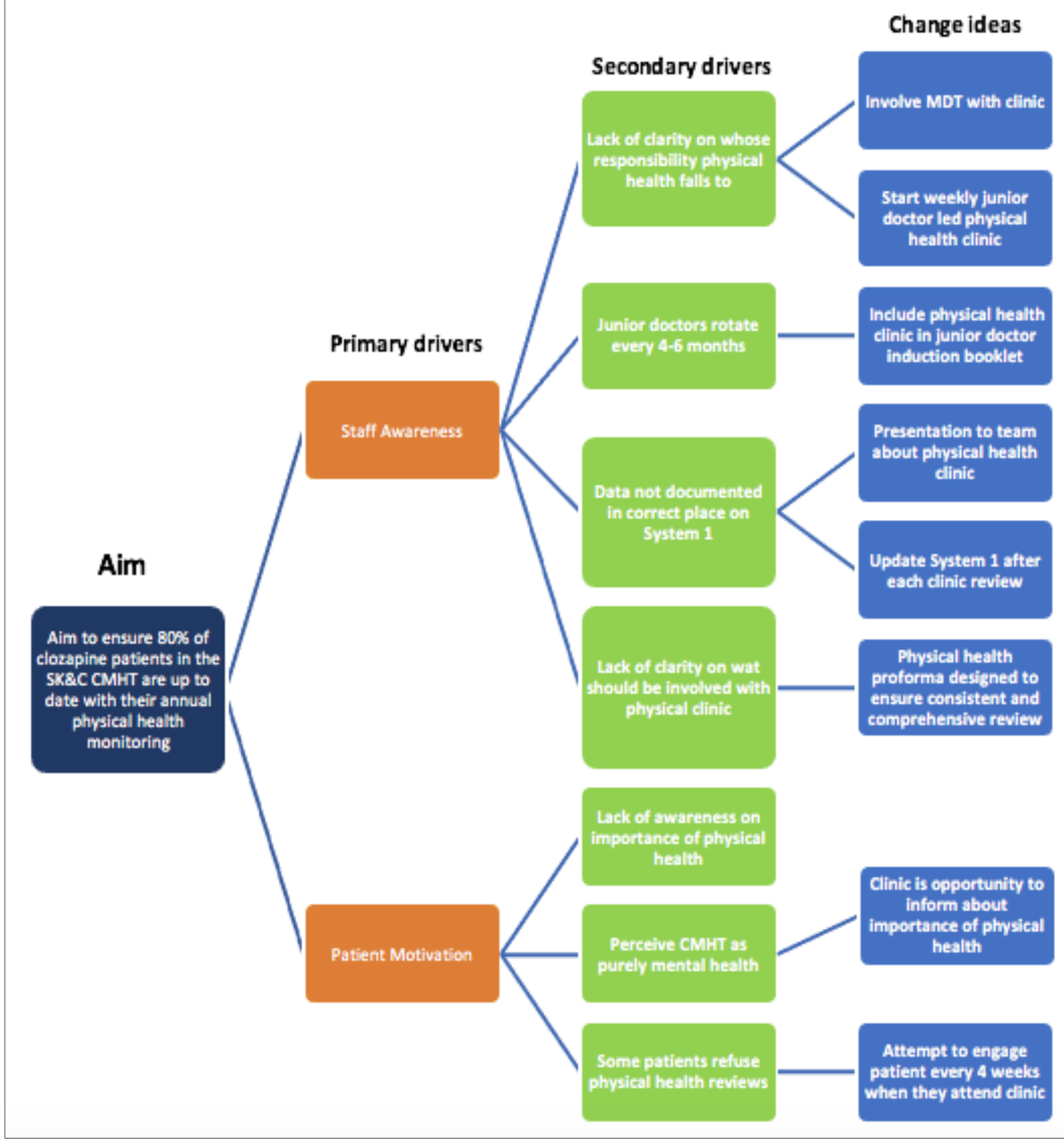
Despite increasing awareness and efforts, there remains a significant mortality gap between people with severe mental illnesses (SMI) and the general population, with the life expectancy of patients with schizophrenia still 20 years lower than the general average.[1] This disparity is driven by multiple factors, including: lifestyle choices, side effects of antipsychotic medications, diagnostic overshadowing and the recurrent failures of public physical health interventions to engage these patient groups.[2] The latter challenge has been magnified by the Covid-19 pandemic, which has presented new obstacles to delivering adequate physical health monitoring to SMI patients in primary and secondary care.

Alongside frequent monitoring of clozapine levels and full blood count, NICE advise that patients established on clozapine should have the following done annually: blood tests (including UEs, LFTs, lipid levels, prolactin, HbA1c), BMI and ECG.[3] In response to the Covid-19 pandemic, South Kensington and Chelsea Community Mental Health Team implemented a new physical health clinic for patients with schizophrenia taking clozapine. By scheduling the clinic appointments in conjunction with the patients' existing monthly face-to-face clozapine reviews, we aimed to improve physical health monitoring in line with NICE guidelines, whilst minimising additional Covid-19 exposure to this vulnerable group.

## Project Aims

- Ensure 80% of patients prescribed clozapine have up-to-date ECG and blood tests over 5 month study period
- Complete physical health questionnaires on 80% of patients prescribed clozapine over 5 month study period

## Driver Diagram




## References

[1] Kilbourne AM, Morden NE, Austin K, Ilgen M, McCarthy JF, Dalack G, et al. (2009) Excess heart-disease-related mortality in a national study of patients with mental disorders: identifying modifiable risk factors. *Gen Hosp Psychiatry* 31: 555–563
[2] Brown S, Barraclough B, Inskip H. (2000) Causes of the excess mortality of schizophrenia. *Br J Psychiatry* 177: 212–217
[3] https://bnf.nice.org.uk/drug/clozapine.html

## Methods

QI methodology was applied to this project. The main change was the introduction of a Junior Doctor-led physical health clinic for all CMHT patients with schizophrenia taking clozapine (*n*=41). Retrospective baseline data on recent blood tests and ECG were collected from the electronic health records system (SystemOne), between October-November 2021. Two PDSA cycles were achieved and this was re-audited after each cycle.

***PDSA cycle 1:*** **October 2020 – December 2020**

- ▶ Implement Junior Doctor-led physical health clinic (face-to-face)
- ▶Physical health questionaire designed to ensure consistent and comprehensive review
- ▶Update SystemOne after each clinic review and inform GP of relevant results
- ▶Presentation to CMHT about physical health clinic

***PDSA cycle 2:*** **December 2020 – February 2021**

- ▶Presented Cycle 1 results to the CMHT
- ▶SystemOne proforma designed and completed after each review to ensure consistent and comprehensive documentation
- ▶Include physical health clinic in junior doctor induction booklet

## Results

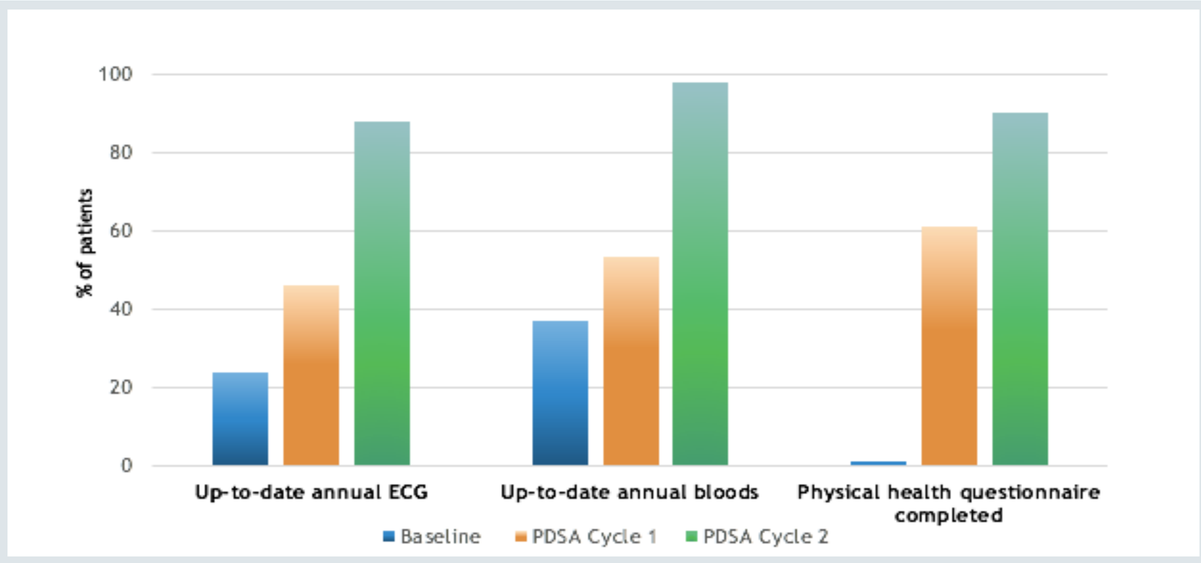



*Figure 1.* **Primary outcomes of patients at baseline, after PDSA cycle 1 and PDSA cycle 2**. Data is represented as a percentage (%) of the total baseline study population (*n*=41).

## Discussion

The baseline data in this study shows that physical health monitoring of patients taking clozapine at the CMHT was inadequate, with only 24% and 34% having an up-to-date ECG and blood tests respectively. This is presumed to be largely a result of the lack of a structured framework for keeping track of upcoming or outstanding physical health checks. Following implementation of the clinic over 5 months, 88% of patients had an up-to-date ECG, 98% had up-to-date routine blood tests and 90% had completed an annual physical health questionnaire, meaning that the project aims were met. Following PDSA cycle 1, only 23 patients out of the 41 baseline study group had been seen in physical health clinic and SystemOne documentation completed. By presenting to the CMHT, scheduling more time in the rota for the physical health clinic and introducing a SystemOne proforma, this was increased to 41 patients (100%). Of these patients, some still refused to have blood tests, ECG or to complete the questionnaire, explaining why 100% compliance was not reached after PDSA cycle 2. It is suggested that the impact is re-audited in 12 months post-intervention to confirm a sustained impact.

## Conclusions

Although physical health monitoring of patients with SMI can be carried out in primary care, it can be harder for these patients to reliably engage with GP services. This project show that scheduling structured physical health reviews in conjunction with patients' pre-existing CMHT appointments is a valuable way to improve compliance. Overall, it emphasises that secondary mental health services can play a significant role in engaging patients with SMI in physical health monitoring, both during and, hopefully, beyond the Covid-19 pandemic.