

# Utilisation of Intermittent and Real-time Continuous Glucose Monitoring in the Irish Healthcare System

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## OBJECTIVE

To describe the utilisation of intermittent and real-time continuous glucose monitoring (collectively referred to as CGM) in the publically funded healthcare system in Ireland, and review the expenditure associated with CGM. CGM systems measure frequent glucose levels in the interstitial fluid using a disposable sensor inserted under the skin.

## METHODS

Data was extracted from the Health Service Executive-Primary Care Reimbursement Services (HSE-PCRS) national pharmacy claims databases, which include the General Medical Services (GMS), Drugs Payment (DP), and Long-Term Illness (LTI) schemes, from 1 January 2021 to 31 December 2022. People with diabetes mellitus (DM) have an entitlement to receive approved technologies used for the management of DM under the LTI scheme, at no cost to the patient (1). Data for CGM usage was combined across the LTI/DP/GMS schemes. Analysis was performed in Microsoft Excel™.

## RESULTS

Between January 2021 and December 2022, the number of monthly patients in receipt of CGM sensors increased by more than 100%, from 6,084 to 12,368.

Monthly expenditure on CGM sensors increased from €1.57 million in January 2021 to €3.64 million by December 2022. Total expenditure in 2021 was €23.8 million, rising to €35.1 million in 2022. Total expenditure over the 2-year period amounted to €58.9 million.

The Dexcom G6-STS-GS-003 Sensor accounted for over half the expenditure in December 2022 (51.3%). It was also used by the greatest number of patients (n=6,164, 49.8%), followed by the Freestyle Libre (n=2,907, 23.5%) and the Dexcom G7 Sensor (n=1,858, 15%).

The majority of expenditure is incurred on the LTI scheme (93.7% of expenditure in December 2022).

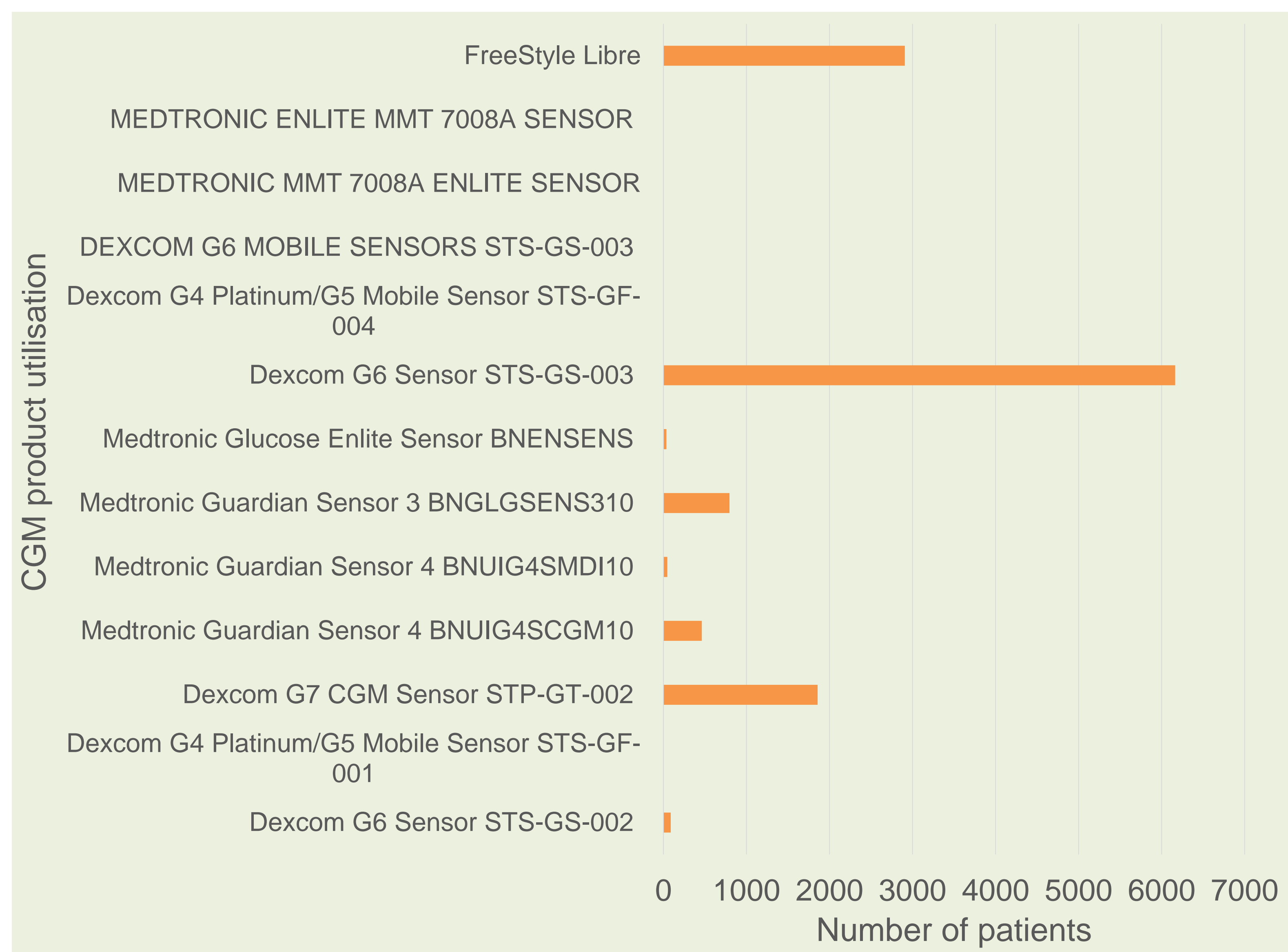


Figure 2: Product utilisation on the Community Drugs Schemes, December 2022

## CONCLUSION

The number of patients in receipt of CGM sensors in Ireland between January 2021 and December 2022 has increased by 103%, while monthly expenditure has increased 132%. These CGM technologies generally do not undergo routine health technology assessment prior to reimbursement, and their cost-effectiveness in the Irish setting is unknown. A health technology management process could help contain expenditure on CGM.

## REFERENCES

1. Health Service Executive. Long-Term Illness Scheme [Internet]. Health Service Executive; 2022 [cited 2023 Sep 5]. Available from: <https://www2.hse.ie/services/schemes-allowances/lti/about/>

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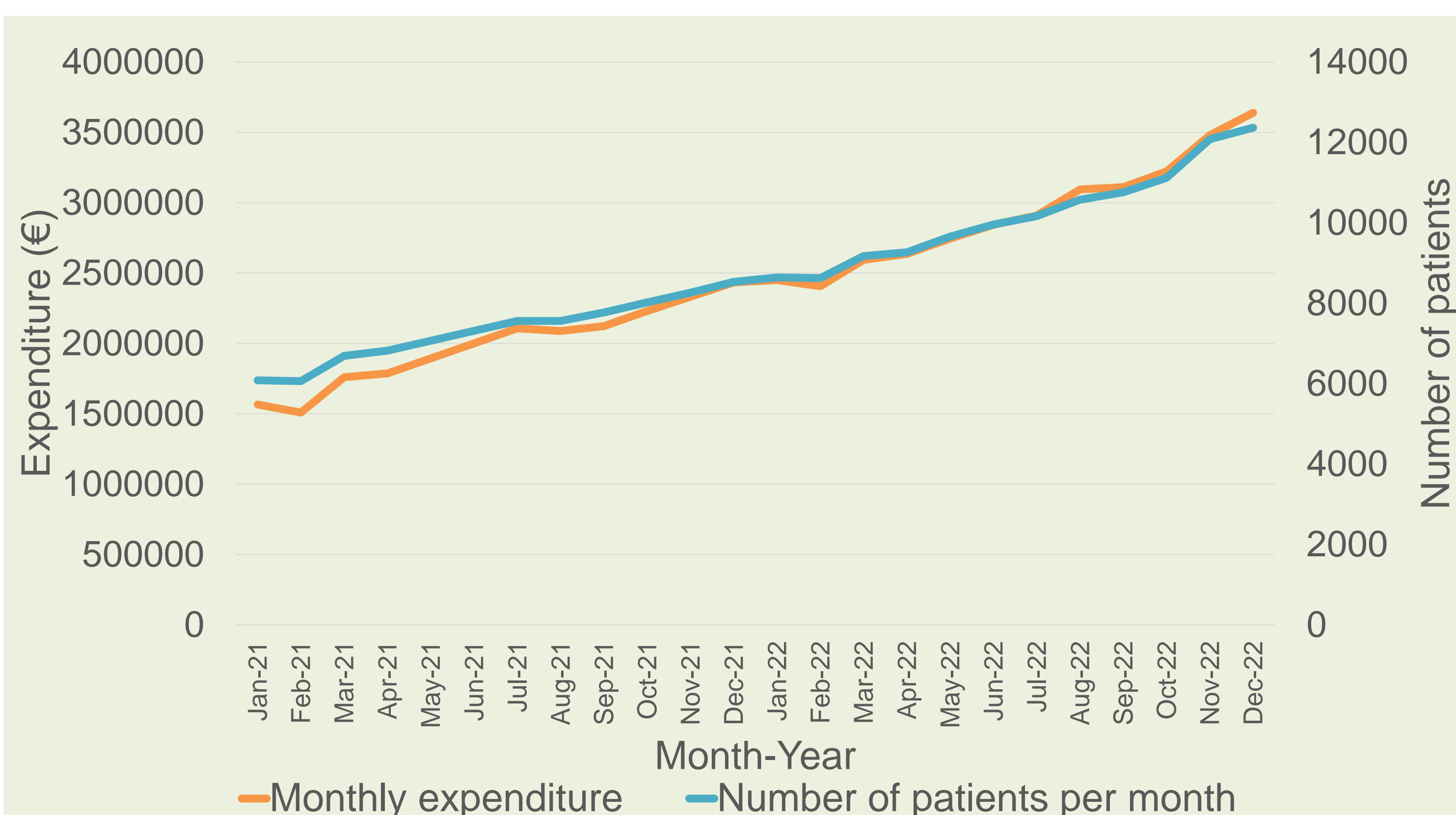


Figure 1: Number of patients in receipt of CGM per month on the Community Drug Schemes, and monthly expenditure on CGM