Utilisation and Expenditure on Blood Glucose Test Strips in Ireland-The Impact of Health Technology Management in Reducing and Containing Expenditure

Stephen Doran[1,2], Dr Claire Gorry[1,2], Sarah Clarke[1,2], Dr Amelia Smith[1,2], Prof Michael Barry[1,2], Medicines Management Programme[1]
1. Medicines Management Programme, Health Service Executive, St James' Hospital, Dublin 8
2. Department of Pharmacology & Therapeutics, Trinity Centre for Health Sciences, St James' Hospital, Dublin 8

OBJECTIVE

The management of type I and type II diabetes mellitus (DM) is assisted by blood glucose monitoring utilising blood glucose test strips (BGTS). These technologies are associated with significant expenditure. Two HTM strategies were implemented to control expenditure on BGTS. Firstly, based on literature review and in conjunction with the National Clinical Programme for Diabetes, a series of automated validations were introduced to the national reimbursement claims software to limit the monthly and annual quantities of BGTS reimbursed for patients with type II diabetes mellitus, with a separate mechanism to support individuals with additional BGTS requirements (1). Secondly, a HSE-MMP 'Preferred BGTS' initiative was implemented, where following a review of the clinical and commercial aspects of the marketed BGTS, a preferred list of BGTS was identified (2). This study aims to quantify the impact of these two health technology management (HTM) strategies implemented by the Health Service Executive-Medicines Management Programme (HSE-MMP), to manage utilisation and reduce expenditure on BGTS in the Irish publically funded health system.

METHODS

Savings gained through these two initiatives were analysed using data extracted from the HSE-Primary Care Reimbursement Services (HSE-PCRS) national pharmacy claims databases. Data was compiled and analysed in Microsoft Excel™.

RESULTS

Total expenditure on BGTS on the Community Drug Schemes in 2015 was €48.5 million. In April 2016, the automated validations were implemented based on patients' pharmacological management. This resulted in an immediate reduction in expenditure to €41.7 million in 2017 (Figure 1) with a corresponding decline in the total quantity of BGTS dispensed (Figure 2). Ongoing expenditure remained at this level, at €40.2 million for the year 2020.

The 'preferred BGTS' list was published in February 2021. This initiative resulted in a reduction in expenditure on BGTS to €27.9 million in 2022.

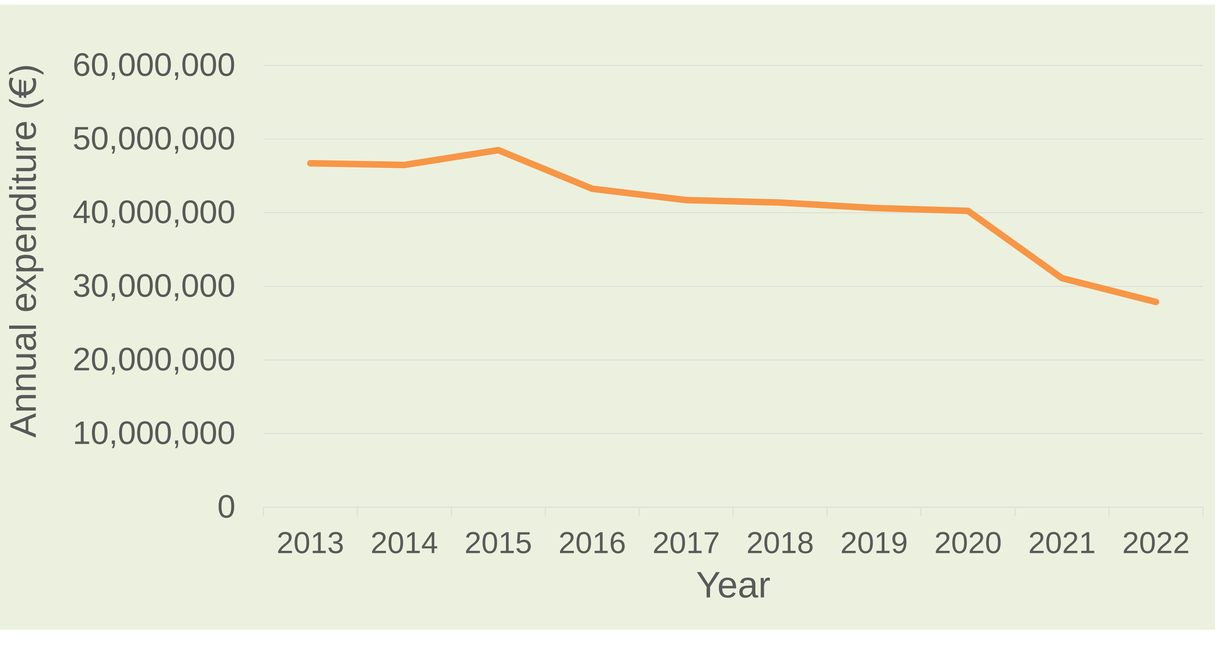

Figure 1: Annual expenditure on BGTS on the Community Drugs Schemes, 2013-2022

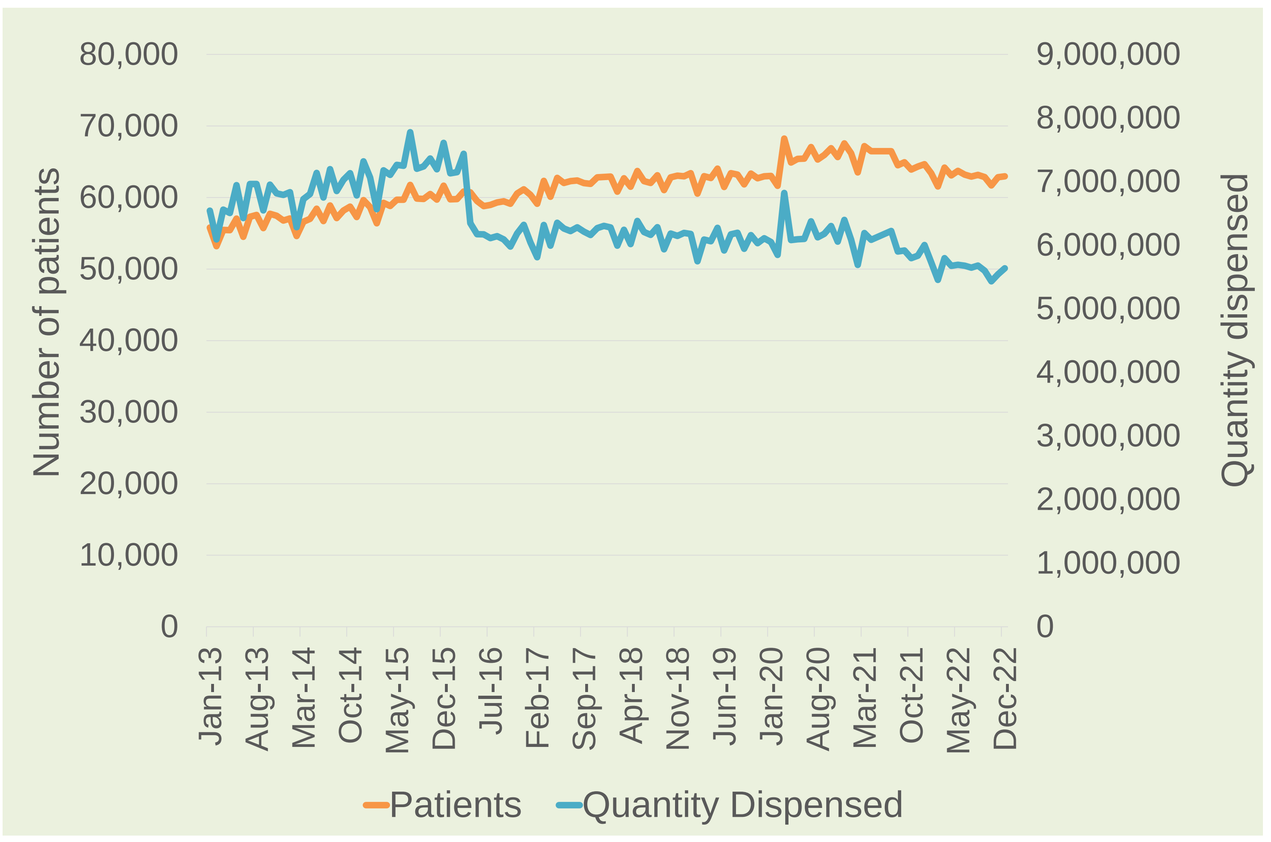

Figure 2: The number of monthly patients in receipt of BGTS and total quantities of BGTS dispensed, per month between January 2013 and December 2022

CONCLUSION

The implementation of HTM strategies by the HSE-MMP in the area of medical devices has demonstrated reductions in expenditure on BGTS. Similar strategies could be successfully applied to optimise utilisation of continuous glucose monitoring systems.

REFERENCES

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Author contact details: mmp@hse.ie

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