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Budget Impact of Stepping Off Patients From Long-Term Proton Pump Inhibitors (PPIs) Use to Episodic Alginate Treatment

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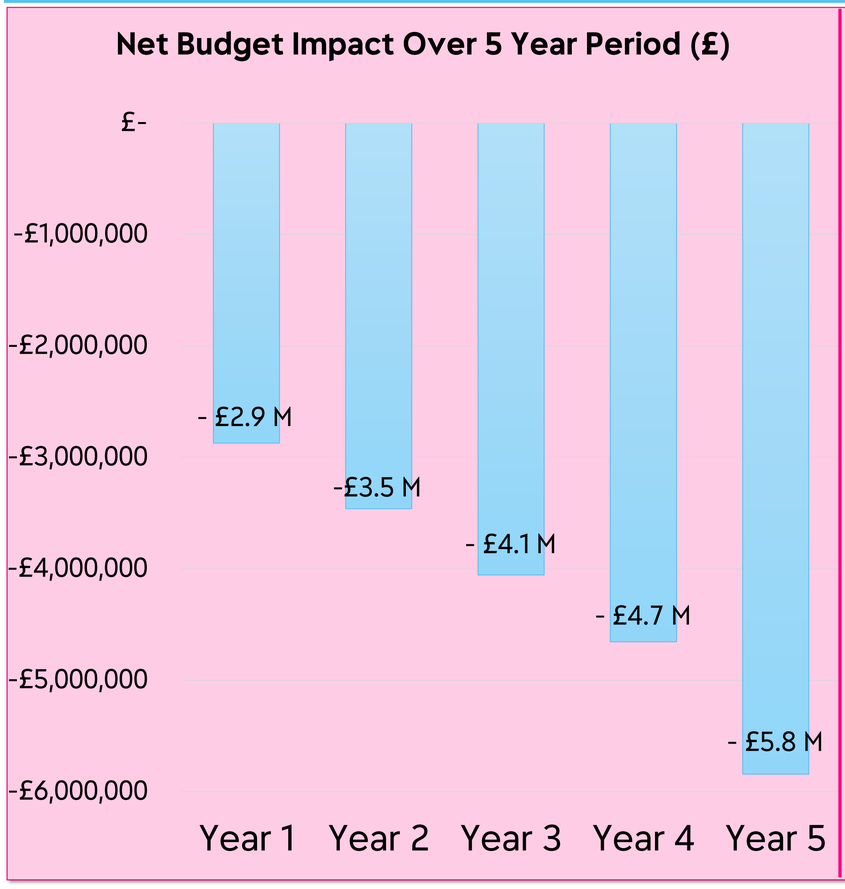
Background & Objectives

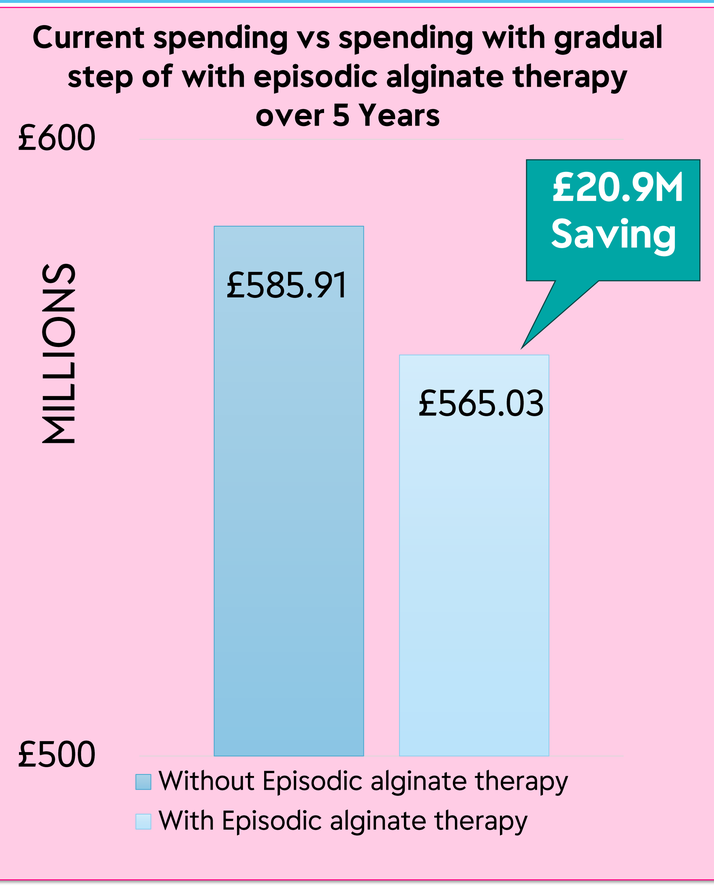
- Prolonged use of proton pump inhibitors (PPIs) has been associated with adverse effects, including increased risk of infections, kidney diseases, and bone fractures[1].
- Current treatment guidelines recommend 4-8 weeks of PPIs in patients with gastro-oesophageal reflux disease (GORD) and dyspepsia[2].
- Patients are often offered longer-term maintenance therapy, however NICE guideline recommends gradual step-down. Nevertheless, studies have shown that patients are placed on PPIs for an extended period[3].
- This study investigates the economic impact of stepping off patients on long-term PPIs to episodic alginate for the treatment of GORD and dyspepsia from the NHS England payer perspective.

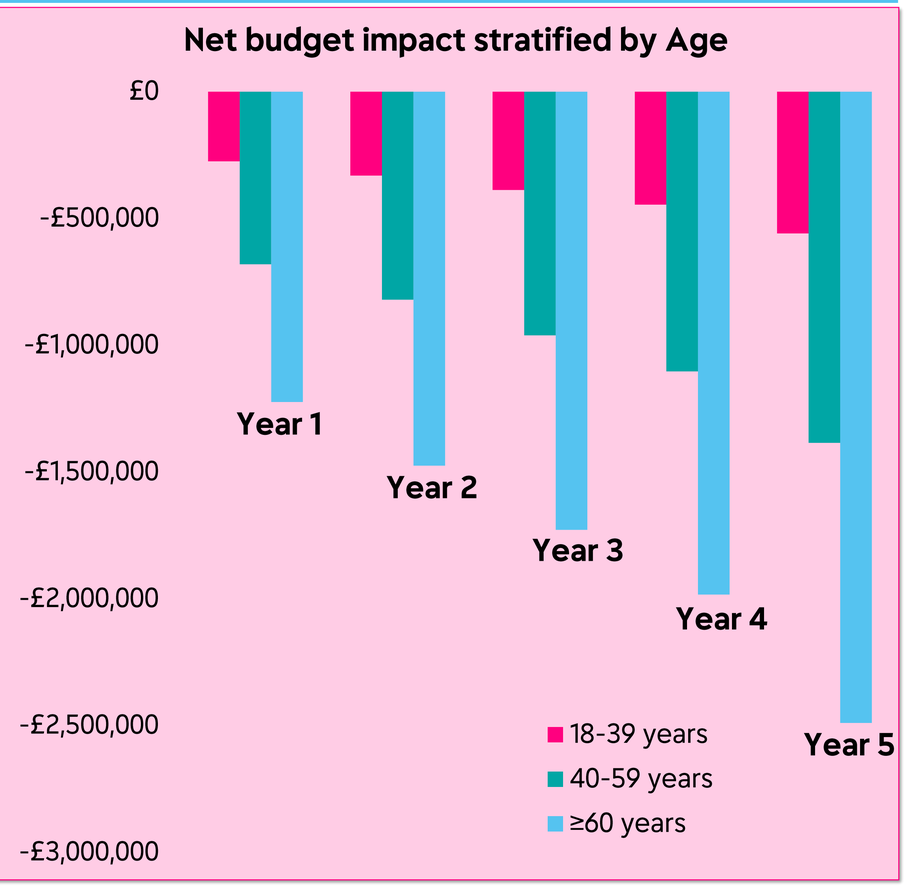
Methods

- A budget impact model (BIM) with a 5-year time horizon was developed from NHS England perspective.
- Two scenarios were assessed; with and without the use of alginate therapy.
- The model included real world data from NHS primary care of adult population identified as having inappropriate long-term PPI usage.
- The target population segregated based on age (18-39 years, 40-59 years and ≥60 years) and PPI duration use (3-6 months, 6-12 months, 1-5 years, and >5 years).
- Model assumed that 20% of patients would be stepped off from long-term PPI use to alginate therapy by year 5

Results







- Over a 5-year period, switching 20% of patients from PPIs to alginates led to a cumulative cost savings of approximately £21 million.
- Cost savings increased with each year of switching, from £2.9 million in year 1 to £5.8 million in year 5.
- Regardless of the adverse events, there were cost savings in patients treated with alginates
- Varying parameter values by 25% in the sensitivity analysis indicates cost-savings in net budget for patients switched to alginate therapy

Conclusion

- In the management of GORD and dyspepsia, switching patients from inappropriate long-term PPI to episodic alginate therapy can help reduce the treatment cost and NHS England burden by 3.56% over 5 years
- It is important for prescribers to consider the potential cost saving implications which may give room for reallocation of resources without detrimental impact to patient health outcomes.

References:

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