## Costs and outcomes of increasing access to bariatric surgery for obesity: cohort study and cost-effectiveness analysis using electronic health records

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**Declared competing interests of authors:** A Toby Prevost was a member of National Institute for Health and Care Excellence Public Health Advisory committees during the period of this research and has been a member of the National Institute for Health Research Public Health Research funding board since January 2014.

Published May 2016 DOI: 10.3310/hsdr04170

## **Plain English summary**

Bariatric surgery for obesity: costs and outcomes of access increase Health Services and Delivery Research 2016; Vol. 4: No. 17 DOI: 10.3310/hsdr04170

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# **Plain English summary**

**R**ates of severe and morbid obesity are rising quickly. Bariatric surgery is an effective treatment for severe obesity, but is currently offered to just a small number of the patients who might benefit. This study looked at the costs and health outcomes of increasing access to bariatric surgery for obesity treatment. Patient electronic health records were used to investigate obesity and the use of bariatric surgery. We found that patients who are obese and do not have surgery rarely maintain weight loss. The cost of health care for the obese is largely due to obesity-related disease and depression. Bariatric surgery is being used more frequently over time, with older and heavier patients now being treated. Women still account for 75% of surgeries but the gender imbalance is decreasing. Bariatric surgery was found to reduce the onset of type 2 diabetes by 80%, and in patients who had diabetes already almost six times more went into remission compared with those who did not have surgery. Bariatric surgery patients often have psychological difficulties and surgery may not help these. Morbidly obese patients who have bariatric surgery can expect to live for longer overall, and for longer without diabetes, than those who do not have surgery. Overall, bariatric surgery was associated with higher health-care costs, but also improved health status, meaning that overall it was a cost-effective treatment. It was slightly more cost-effective in patients with diabetes.

## **Health Services and Delivery Research**

ISSN 2050-4349 (Print)

ISSN 2050-4357 (Online)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: nihredit@southampton.ac.uk

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#### This report

The research reported in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number 12/5005/12. The contractual start date was in October 2013. The final report began editorial review in October 2015 and was accepted for publication in February 2016. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health.

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