

Title: The impact of rerouting cancer diagnoses from emergency presentations to GP referrals: evidence from population-based patient-level data

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Abstract

Background

Studies on alternative routes to diagnosis stimulated successful policy interventions reducing the number of emergency diagnoses. A dearth of evidence on costs might prevent new policies from achieving more ambitious targets.

Methods

Retrospective cohort study on colorectal (88,051), breast (90,387), prostate (96,219), and lung (97,696) cancer patients diagnosed after a GP referral or an emergency presentation (EP) in the English Cancer Registry. Costs of care and survival were compared one year before and five years after diagnosis, including non-conversion costs. Basu-Manning estimator was used to calculate the effect of rerouting patients after risk-adjusting.

Results

The cost per year of life saved is £6,456 in colorectal, £1,057 in breast, -£662 in prostate (savings), and £819 in lung cancer (three years only). Reducing the overall proportion of EP to those achieved by the 20% of CCGs with the lowest EP percentage would result in £11,481,948 against 1,863 years of life saved for Colorectal, £847,750 against 889 years for breast, -£943,434 (cost savings) against 1,195 years for prostate, and £609,938 against 1,011 years for lung cancer.

Conclusion

Rerouting diagnoses from EP to GP/TWW referral appears an achievable target that can produce large benefits to patients against modest additional costs to the NHS.

Presenting author bio: Dr Mauro Laudicella is a Senior Lecturer in Health Economics in the School of Health Sciences at City University London and an Honorary Research Fellow in the Business School at Imperial College London. Mauro is currently leading a three years research programme investigating the costs of cancer in England sponsored by Macmillan Cancer Support. He has actively contributed to a number of funded research grants investigating various topics in health economics, including: value for money in health care, patient choice and competition, equity, and diffusion of new technologies for the treatment of cancer.

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