

Value for money of large scale changes



Research:
at a glance

1. What we knew

- ❑ Centralising specialist surgery for some cancers can improve outcomes for patients.
- ❑ But there is only limited evidence of the impact on costs or quality of life.

2. What we did

- ❑ We looked at patients' anonymous health records.
- ❑ We calculated the **costs** of treatment over 10 years for prostate, bladder, renal, and oesophago-gastric (OG) cancers, for people diagnosed in 2012-2017.
- ❑ We also calculated patients' **quality of life** based on diagnoses and treatments, and information from other studies in similar patients.
- ❑ We combined all this information to get the **mean differences in costs and quality-adjusted life-years** due to the change itself happening
 - ❑ **Quality-adjusted life-years (QALYs)** is a patient outcome measure based on people's quality of life and how it changes over time.
- ❑ We did this separately for patients in the London Cancer region (LC) and in the Rest of England excluding Greater Manchester (ROE). The changes happened in 2015-16, so we looked at surgeries done before 2015 and after 2016.

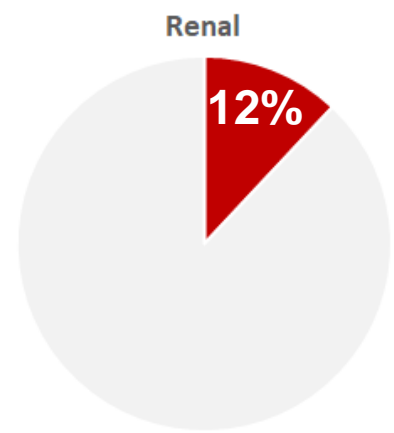
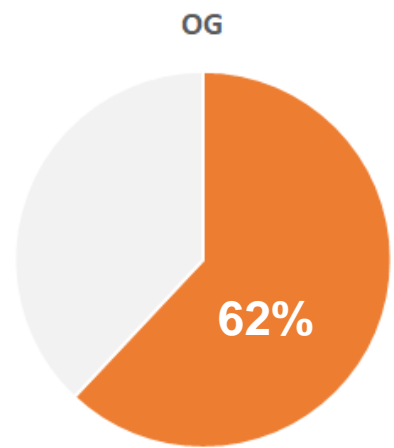
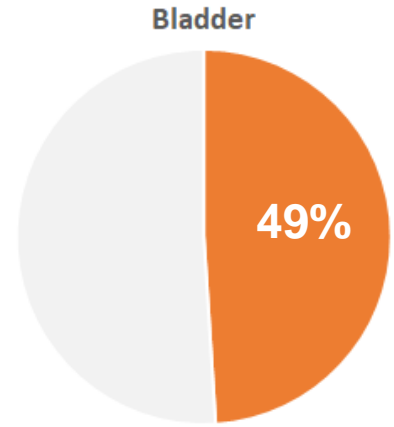
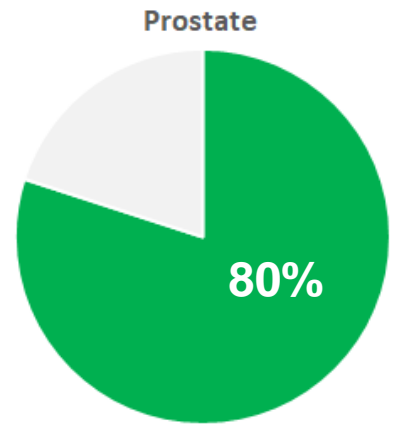
3. What we found

- ❑ Centralising specialist **prostate** cancer surgery services was quite likely (80% chance) to have been cost-effective, at the standard threshold of £30,000/QALY gained.
- ❑ The "after" period was short (2016-17) so patient numbers were small for the other three less-common cancers, so the results were less clear.
- ❑ Centralising specialist **oesophago-gastric (OG)** and **bladder** cancer surgery services had about an even chance of having been cost-effective at this threshold (62% and 49%, respectively).
- ❑ Centralising specialist **renal** cancer surgery seems not to have been cost-effective (12% chance). This was partly due to greater improvements in renal cancer patient outcomes in ROE during the study. This made the LC improvements seem less good.

4. What this means

- ❑ Prostate cancer reconfigurations had the highest chance of being **cost-effective**, but healthcare delivery in the NHS is highly networked and collaborative, so the result should not be taken alone.
- ❑ These reconfigurations also happened at the same time as some **other changes** in cancer care and other system changes, making it difficult to look at only the cancer changes by themselves.
- ❑ Collecting standard quality-of-life data using questionnaires in routine care (e.g. EQ-5D-5L questionnaire) would improve future work like this.

How likely was it that the changes were good value for money?



Reference

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Our website

<https://www.ucl.ac.uk/epidemiology-health-care/research/applied-health-research/research/health-care-organisation-and-management-group/respect-21-0>

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