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Complications and costs to the NHS due to outward medical tourism for elective surgery: a rapid review

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Technoleg Iechyd Cymru
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EXECUTIVE SUMMARY

What is a Rapid Review?

Our rapid reviews (RR) use a variation of the systematic review approach, abbreviating or omitting some components to generate the evidence to inform stakeholders promptly whilst maintaining attention to bias.

Who is this Rapid Review for?

The review question was suggested by the Welsh Government and is intended to help inform policy decisions regarding the impact of patients who have received private elective surgery abroad on UK NHS follow-up care. This review will consider unintended consequences and pressures on existing NHS services and potential impact on health inequality.

Background / Aim of Rapid Review

'Outward medical tourism' is when people seek medical treatment in a different country to the one they live in. There are concerns that people travelling abroad for surgery may be at risk of complications when they return home. This review aimed to identify all the studies that describe the impact on the UK National Health Service (NHS) of patients who require follow-up care due to outward medical tourism for elective surgery by answering the following questions:

1. What are the long and short-term complications of outward medical tourism for elective surgery treated in the UK by the NHS?
2. What are the costs to the NHS from treatment of complications and follow-up care due to outward medical tourism for elective surgery?
3. What benefits are there to the NHS from outward medical tourism for elective surgery?

Results of the Rapid Review

Recency of the evidence base

The review included evidence available until December 2024. Included studies were published between 2007 and 2024. Most studies reported on patients seen from 2011 to 2024.

Extent of the evidence base

- 37 studies were identified (35 were case series or case reports that described patients who were treated in the NHS for complications due to their surgery abroad and 2 were surveys of plastic surgeons in the UK); 19 related to weight loss surgery, 17 to cosmetic surgery and 1 to eye surgery.
- 5 studies relating to weight loss surgery tourism, 8 relating to cosmetic surgery tourism and 1 relating to eye surgery tourism included an analysis of the costs to the NHS of the treatment of complications.

Key findings – overview

- The case series and case reports included a total of 655 patients treated by the NHS between 2006 to 2024 for post-operative complications arising from weight loss (n=385), cosmetic (n=265) and eye (n=5) surgery tourism.
- 90% of patients were female, average age was 38 years (range 14 to 69 years). The most common destination for surgery was Turkey (61%).
- For weight loss surgery the most common type was sleeve gastrectomy (43%).
- For cosmetic surgery the most common single procedure that was conducted abroad was abdominoplasty (25%), although there is evidence that patients undergo multiple procedures at the same time.

Key findings for question 1

- Reporting was not always clear, and it was not possible to explore short and long term complications separately.
- For weight loss surgery tourism, the most common symptoms were abdominal pain, vomiting, inability to swallow and malnutrition. Gastric leak was the most common diagnosis. Over a third of patients presenting with complications needed their procedure reversed or revised.
- For cosmetic surgery tourism, the most common complications were infection and reopening of the surgical wound. The most common treatment was oral or intravenous antibiotics.
- Overall, no deaths were reported by any study but just over half of patients presenting with complications required at least one intervention or investigation under local or general anaesthetic. This can result in complex and lengthy treatment with long hospital stays.

Key findings for question 2

- Costs to the NHS from outward medical tourism for elective surgery ranged from £1,058 to £19,549 per patient in 2024 prices. The certainty of evidence for costs was very low.
- The highest costs were reported as being related to longer stays in hospital and to surgical treatment, but it was unclear if all relevant cases and all associated costs were identified in the studies.

We did not find any studies that answered question 3.

Research Implications and Evidence Gaps

- We still do not know how many people resident in the UK go abroad for elective surgery or how many people subsequently have complications. Without this data we cannot fully understand the amount of risk that people seeking surgery abroad are taking.
- There is a need for a systematic approach to collecting information on the impact on the UK NHS of treating complications arising from outward medical tourism for elective surgery and associated costs. The scale of the problem in Wales is almost completely unknown.
- Future studies should report demographic details, including gender, ethnicity and socioeconomic status.
- No studies were conducted in primary care, so we do not know what the impact of outward medical tourism for elective surgery is on GP and community services.
- There is no evidence comparing the short or long-term health of people who travel abroad for elective surgery with those treated in the UK (either in the NHS or privately). A direct comparison would allow for a better estimate of costs and benefits to the NHS.

Policy and Practice Implications

- Awareness-raising campaigns and interventions are warranted to inform members of the public in Wales considering going abroad for surgery about the potential for complications. Detailed suggestions around the most appropriate content for dissemination are included in the full report. Those seeking medical treatment abroad should be made aware of which complications the NHS is responsible for treating, and the costs for which the patient may be personally liable including non-emergency treatment.
- Introducing the need for insurance to cover potential complication costs of medical tourism could be beneficial.
- There is a need to ensure access to weight management services, including weight loss surgery, for people who meet NHS criteria is improved.

Economic considerations

- The economic impact of outward medical tourism for the NHS was thought to be highly variable as medical tourists formed a heterogeneous group, across ages, genders, and socioeconomic backgrounds. However, the evidence identified in this review suggests women are more likely to seek elective surgery abroad, especially cosmetic surgery.
- Rectification surgery and follow-up care following elective care abroad place financial and material pressures on the NHS. The extent to which insurance or improving awareness of potential adverse outcomes could mitigate these is currently unclear.

The certainty of evidence has been assessed using the GRADE (Grading of Recommendation, Assessment, Development and Evaluation) approach (<https://www.gradeworkinggroup.org/>)