Risk scores to guide referral decisions for people with suspected ovarian cancer in secondary care: a systematic review and cost-effectiveness analysis

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Plain English summary

Referral decisions for people with suspected ovarian cancer in secondary care

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Plain English summary

Ovarian cancer is the sixth most common cancer in UK women and is more likely to be treated successfully if found early and treated by specialist teams. However, early-stage ovarian cancer can be difficult to diagnose. Symptoms, such as feeling bloated, feeling full early or having a poor appetite, abdominal or pelvic pain, and needing to urinate more often or more urgently can be early warning signs of ovarian cancer, but can also be caused by other conditions (e.g. fibroids, endometriosis and infections).

It is important to find tests that can predict which women are more likely to have ovarian cancer so that they can be referred to a specialist centre as quickly as possible.

This assessment considered how best to combine information from blood tests, ultrasound and clinical examinations (signs and symptoms reported by the patient and menopausal status), in order to decide when a woman is more likely to have ovarian cancer and should therefore be referred to a specialist centre for further investigations (including biopsy or surgery) and treatment.

A total of 51 studies of a variety of tools used to predict ovarian cancer in women who had a mass that was visible on ultrasound were included in the study. Two tools, one based on features seen by ultrasound (the International Ovarian Tumour Analysis simple ultrasound rules) and one that combined morphological features seen on ultrasound, a tumour marker and clinical information [the Assessment of Different NEoplasias in the adneXa (ADNEX) model], identified a higher proportion of those women with cancer than the method that is currently recommended [the Risk of Malignancy Index (RMI 1)]. This means that if the RMI 1 were replaced by either of these tools, more women with ovarian cancer would be referred to a specialist centre; however, more women with benign (non-cancerous) lumps would also be referred.

Health economic analyses indicated that the ADNEX model (threshold 10%), may be cost-effective compared with alternative tools to predict ovarian cancer.

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