

**NATIONAL INSTITUTE FOR HEALTH AND CARE
EXCELLENCE**

HealthTech Programme

**Robot-assisted surgery for soft tissue
procedures: early value assessment**

Equality impact assessment: guidance

The impact on equality has been assessed during this evaluation according to the principles of the [NICE Equality scheme](#).

1. Have the potential equality issues identified during the scoping process been addressed by the committee, and, if so, how?

The committee discussed the potential equality issues that were identified during scoping. Key considerations related to robot-assisted surgery (RAS) for soft tissue procedures included:

- There may be some inequalities in access to minimally invasive surgery (MIS) that may be worsened by RAS. A UK analysis of routinely collected data, linked to hospital episode statistics, found access to MIS for colorectal surgery is related to socioeconomic and geographical factors. Robotic platforms are expensive and if the placement of robotic systems is limited to larger hospitals with more resources to procure and maintain the system and staff needed to use the system, access to RAS may exacerbate existing regional inequalities.
- One of the proposed benefits of RAS is increased access to MIS because some procedures may not have been offered as MIS before RAS. This could be because the indication, or characteristics of the patient, or both meant that the procedure was high-risk. It could also be because of surgeon experience or physical constraints of the anatomy and laparoscopic tools. Some indications, procedures and patient characteristics that may mean that

other minimally invasive surgical techniques would not be a suitable approach to do the surgery include:

- Tumours requiring multiple organ resection
- People with high BMI or obesity
- People with frailties or older adults (aged 65 and over)
- Procedures deep within the pelvic region
- Transoral procedures
- Indication or patient-specific anatomical characteristics (e.g. large uterus).

Age is a protected characteristic, and many people may be covered by the Equality Act 2010 if their condition has had a substantial adverse impact on normal day to day activities for over 12 months or is likely to do so. Also, RAS can be used to treat many types of cancer. All people with cancer are covered by the disability provision of the Equality Act 2010 from the point of diagnosis. RAS may enable more MIS to be done in these groups.

2. Have any other potential equality issues been highlighted in the company's submission, or patient and carer organisation questionnaires, and, if so, how has the committee addressed these?

Patient organisations reiterated concerns around access to RAS, including mention of a 'postcode lottery', and patients having concerns about having to travel for RAS for people living rurally. They recognised the potential of RAS to widen health disparities.

Patient organisations also reiterated potential benefits of RAS in relation to health inequalities. They said RAS could widen access for people who might not have been offered or might not have wanted either minimally invasive or open surgery before. They also said RAS is perceived to have a positive impact on hospital capacity and attracting surgeons to underserved geographical regions.

The committee considered these issues alongside input from clinical experts. They recognised the potential benefits for some groups of people, including people with protected characteristics, and understood that implementation of RAS in the UK would need a national strategy to manage the risks of widening health disparities.

The committee was informed that there is an NHS England robot-assisted surgery working group that is coordinating national strategies for training, procurement and

implementation of robot-assisted surgery services. It acknowledged that the group may be influential in moderating the risks related to inequality of access with a national strategy going forward. This group and their objectives are referred to in the guidance in 'Managing the risk of use in the NHS with evidence generation', section 3.2 and section 3.10.

3. Have any other potential equality issues been identified by the committee and, if so, how has the committee addressed these?

During the committee meeting a clinical expert from the field of gynaecology felt that the earlier implementation and rapid adoption of RAS for prostatectomy may have disadvantaged women. But, a specialist committee member explained that hysterectomy has already overtaken prostatectomy as the commonest procedure performed with RAS. So, the recommendations are unlikely to disadvantage any group based on sex.

4. Do the preliminary recommendations make it more difficult in practice for a specific group to access the technology compared with other groups? If so, what are the barriers to or difficulties with access for the specific group?

No. The recommendations are permissive for all of the technologies in scope.

The committee recognised that there are barriers to the uptake of RAS in individual centres that may affect them differently, including budgeting, staff expertise and patient acceptability. This is discussed throughout the guidance (see answer to question 7).

5. Is there potential for the preliminary recommendations to have an adverse impact on people with disabilities because of something that is a consequence of the disability?

No. The guidance has the potential to increase access to minimally invasive surgery to people with comorbidities.

6. Are there any recommendations or explanations that the committee could make to remove or alleviate barriers to, or difficulties with access identified in questions 4 or 5, or otherwise fulfil NICE's obligations to promote equality?

No, but explicit dissemination of the equalities concerns identified during production of the guidance to the NHS England robot-assisted surgery working group will promote action to mitigate against national strategies that propagate or exacerbate these issues. We have representation on behalf of NICE in the working group membership (Anastasia Chalkidou as Programme Director representative).

7. Have the committee's considerations of equality issues been described in the consultation document, and, if so, where?

Yes. These are discussed throughout the draft guidance:

- The benefits of RAS for increasing access to MIS are discussed in 'Potential benefits of use in the NHS with evidence generation' and section 3.1 on unmet need and potential benefits.
- Section 3.10 explicitly discusses the key equality consideration associated with RAS. It describes existing disparities and includes a statement that the geographical placement of additional robotic systems, and the availability of training, resources and staff to implement robot-assisted surgery services for soft-tissue procedures could worsen those disparities. Sections 3.11 and 3.12 include patient organisation feedback that reiterates the discussed equalities issues.
- Issues relating to costs and budget that may affect uptake in different centres and geographical regions are discussed in 'Managing the risk of use in the NHS with evidence generation', section 3.3 and sections 3.18 to 3.20 that describe 'Differences in costs between robotic systems'.

- The need for training and staff expertise that may affect uptake in different geographical re are discussed in 'Managing the risk of use in the NHS with evidence generation', section 3.5 to 3.8.
- Section 3.1 includes a statement that experts said that hospitals with robotic systems and training programmes may attract candidates for surgical training. The guidance also acknowledges that some of the technologies are already in use in the UK meaning the current objectives and challenges associated with RAS may differ between centres.
- Outcomes relating to equalities issues, for example those capturing resource use, costing, rate of increase in MIS use once RAS becomes available and patient acceptability are included in the list of outcomes needing evidence generation (sections 1.4 and 3.21).

Approved by Programme Director: Anastasia Chalkidou

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