

**NATIONAL INSTITUTE FOR HEALTH AND CARE
EXCELLENCE**

Medical technologies guidance

**GID-MT568 Magtrace and Sentimag for locating sentinel
lymph nodes**

External Assessment Centre report

Produced by: Newcastle External Assessment Centre

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EAC Identification of on-site facilities

The EAC note that there is large uncertainty in the proportion of NHS Trusts able to realise opportunity costs due to the accessibility of radiopharmacy and nuclear medicine facilities at the same site of the SLNB procedure. The EAC note that NHS Trusts providing SLNB with on-site radiopharmacy and nuclear medicine facilities may be less likely to realise opportunity costs due to the delays by the lack of availability of radioisotope.

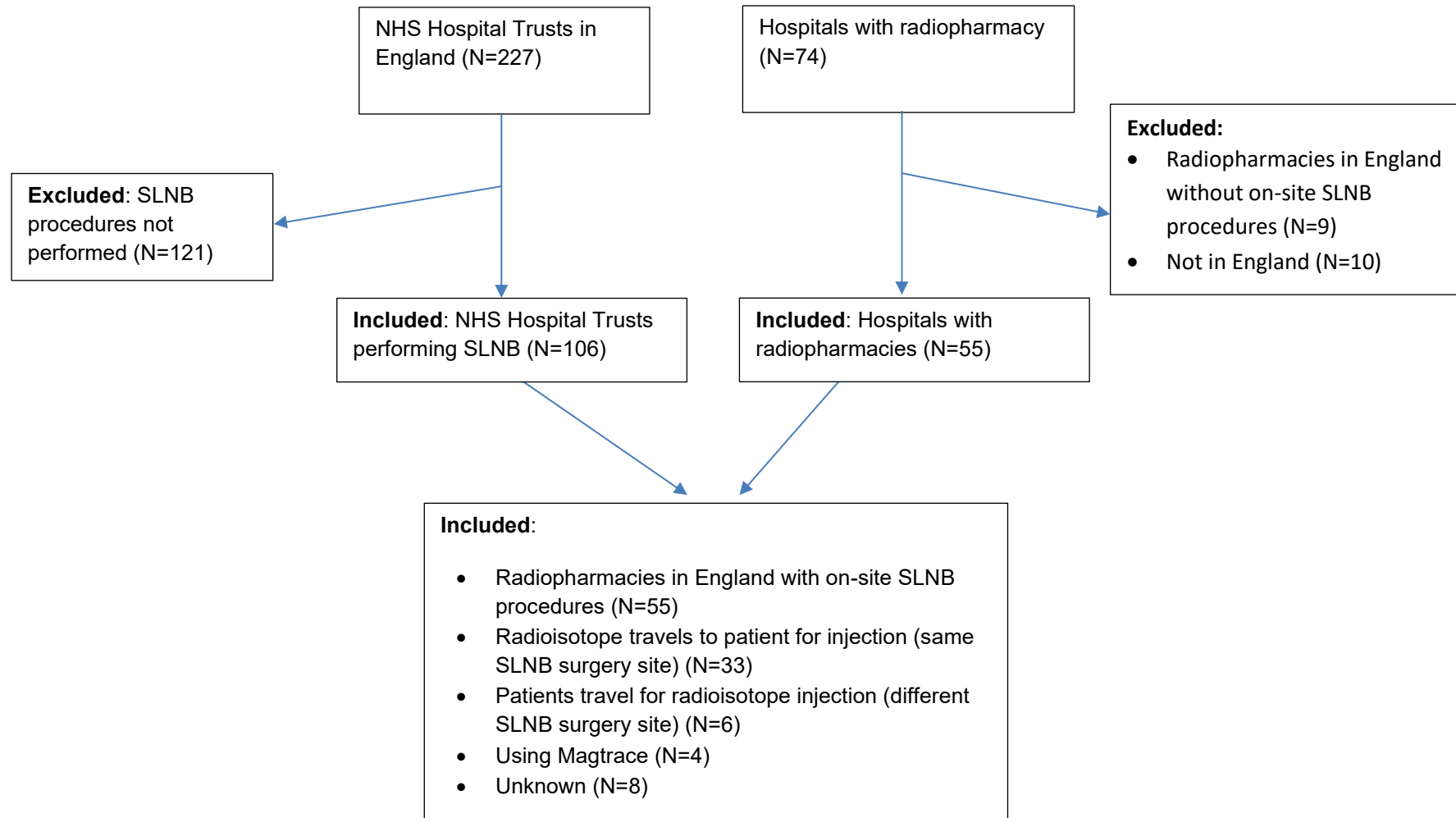
The EAC were asked to try to quantify the proportion of NHS Trusts with the potential to realise opportunity costs by the following three defined scenarios:

- radiopharmacy on the same site as the theatre where the SLNB procedure is performed;
- patients travel to a site with radiopharmacy to receive radioisotope injection; and then attends a different site with theatre where the SLNB is performed.
- radioisotope is transported to a site with the theatre where SLNB takes place for local nuclear medicine staff to administer.

The EAC contacted the British Nuclear Medicine Society (BNMS) on 13/04/2022 requesting assistance in the identification of the number of radiopharmacies in the UK. The BNMS replied via e-mail on 13/04/2022 with an Excel spreadsheet with a total 74 named UK *hospitals* with on-site radiopharmacies. The EAC noted the locations of radiopharmacies across the home nations with 64 in England, 5 in Scotland, 2 in Wales, 2 in Northern Ireland, and 1 in the Isle of Man.

The EAC identified 227 NHS Trusts through a search of <https://www.nhs.uk/> on 13/04/2022, importing to Excel. The EAC identified the location of the radiopharmacies associated with each NHS Trust in England via the same website or relevant service website and manually aligned these. The EAC considered that only NHS Trusts providing SLNB procedures for breast cancer were relevant to the decision problem and identified this through the same search methods, [Figure 1](#).

Figure 1: Flow of facilities identification



The EAC identified 106 of 227 (46.7%) English NHS Trusts where SLNB procedures were performed, of which:

- 55 (51.2%) NHS Trusts had on-site radiopharmacies and nuclear medicine support;
- 33 (31.1%) NHS Trusts where radioisotope is delivered from a radiopharmacy and administered by on-site nuclear medicine staff at the same site as the SLNB procedure;
- 6 (5.7%) NHS Trusts where patients travel to another site for radioisotope injection;
- 8 (7.5%) unknown or unconfirmed patient pathway;
- 3 (3.8%) NHS Trusts using Magtrace rather than dual technique;
- 1 (0.9%) NHS Trusts using Magtrace with or without radioisotope with unconfirmed patient pathway for radioisotope injection.

The EAC consider that 55.9% of NHS Trusts would therefore be less likely to realise opportunity costs based on the availability and accessibility of radiopharmacy and nuclear medicine facilities (due to on-site access), or through existing use of Magtrace and Sentimag. Opportunity costs may be realised in the remaining 44.1% of NHS Trusts; which is close to the value applied in the EAC base case economic analysis (50%).

The Clinical experts noted that SLNB procedures are rarely conducted in isolation and would likely be included with breast surgery (EAC Correspondence Log, 2022), which may also influence the ability to realise opportunity costs associated with ability to perform additional SLNB procedures. Realisation of opportunity costs may also be mitigated by theatre scheduling.