

National Survey of Nurse and Midwife Referral Practices for Radiological Procedures

Background

Statutory instrument 256 (2018)(4)(1)(a) gives nurses and midwives who are appropriately trained and competent the authority to refer patients for radiological procedures which necessitate exposure to medical ionising radiation.

The scope of practice for nurse and midwife referrers depends on their particular area of work and the approval of the local Radiation Safety Committee (RSC). Thus, referral practices can vary within medical specialities and across different locations.

Traditionally, nurse referrals for diagnostic imaging procedures were strictly limited to low dose modalities such as plain radiographs of extremities and DXA¹ scans. However, with the legislative changes and increased demand on services to ensure that the patient's experience is expeditiously managed, the modalities for which a nurse or midwife may refer have expanded. These now include high dose radiological procedures like computed tomography (CT) and non-ionising modalities such as magnetic resonance imaging (MRI) and ultrasound.

Further information on the nurse and midwife authority to refer for diagnostic procedures can be found in the appendix.

Questions have been raised with the National Radiation Protection Committee (NRPC) about the safety of expanding the scope of practice for nurse and midwife referrers. Concerns include, for example, the potential to miss or a failure to correctly address an incidental finding on a scan; the potential to increase the number of unnecessary or inadvertent exposures of patients to radiation; and the potential to increase the demand on diagnostic departments which are already limited in resources and capacity. Also, the use of non-ionising modalities such as MRI are not without risk.

The NRPC commissioned a national survey to establish the extent and governance of nurse and midwife referrals for radiological procedures in hospital and community services.

The survey

The survey was developed by the National Radiation Protection Office (NRPO) with the support of the NRPC and issued to the Designated Managers of all public hospital and community diagnostic imaging services in July 2024.

Nurse referrers do not refer patients for radiological procedures in HSE dental and orthodontic services and in the HSE *Breastcheck* Screening Programme so these services were omitted from the survey.

A summary of the findings and recommendations to promote radiation protection are presented herein.

Findings

Almost all locations returned completed surveys to the NRPO within the designated timeframe. Respondents included Designated Managers, Directors of Nursing and members of the local radiation

¹ Dual Energy X-ray Absorptiometry scan

protection team. In some instances, respondents completed a single survey to represent referral practices across several locations operating under their remit.

Local governance arrangements to support nurse /midwife referrers

The majority of respondents confirmed that there was a RSC in operation within their service, chaired by either the Designated Manager or a senior clinician with expertise in radiation protection. The RSC often had oversight of radiation protection across a number of different locations. Nurse / midwife referrer practices were routinely discussed at committee meetings.

Almost half of respondents confirmed that, for their radiological services, nurse / midwife referrers were either members of the RSC or were represented on the RSC by another member of the multidisciplinary team. In some instances, the RSC was supported by a Local Implementation Group (LIG) for Nurse / Midwife Referral for Radiological Procedures (or equivalent committee). The LIG would assess requests for approval to refer from nurse / midwife referrers, undertake regular audits of referral practices and provide updates to the RSC. In some instances, it was confirmed that nurse / midwife referrers were members of the LIG.

A number of respondents confirmed that, in the services operating under their remit, nurse / midwife referrers were not represented on either the RSC or the LIG.

The majority of respondents confirmed that the scope of procedures a nurse / midwife could request for a patient was determined by the particular medical speciality in which they worked. These specialities varied widely across different locations and included for example, older person services, oncology, rheumatology, urology, orthopaedics, gastroenterology and respiratory medicine. Nurse / midwife referrers were also active in emergency departments, medical assessment units, critical care units and numerous specialist clinics such as breast care, cystic fibrosis and deep vein thrombosis clinics.

In the majority of responses, it was confirmed that the scope for nurse / midwife referral for radiological procedures was reviewed and accepted by either the RSC or by the LIG; and the LIG subsequently reported to the RSC.

The nurse / midwife referrer typically worked as a member of the multidisciplinary team which was led by the medical consultant. Although the nurse / midwife referrer was approved to make referrals for radiological procedures, the medical consultant retained overall responsibility for the patient's care and had the legal obligation to address any incidental findings on a scan.

Types of nurse / midwife referrals for diagnostic imaging procedures

The majority of respondents confirmed that nurses / midwives referred patients for various imaging procedures within their location. Some respondents also advised that more nurses under their remit were in the process of being trained to take on this additional role in order to meet service demand. Many respondents advised that local policies available to support nurse / midwife referrers proved to be very helpful. Respondents also confirmed that a review of referral practices featured on the annual audit schedule for radiation protection.

Almost all of the respondents confirmed that nurse / midwife referrals for plain radiographs of the extremities or the chest were allowed and in a few returns, plain radiographs of the abdomen were also permitted.

A small number of respondents confirmed that nurses refer for DXA imaging however, it must be acknowledged that not all locations provide a DXA service. One respondent advised that although

nurse referrals for DXA imaging were allowed within their region, this authority to refer had been delegated locally and not granted through the RSC or LIG. Also, the respondent observed that the DXA referrals were not submitted through the local radiology ordering system and as a result, were not visible to the RSC or LIG.

In a number of locations, nurses referred patients for CT scans. These referrals were dependent on the particular scope of practice for that nurse and were typically supported by locally approved clinical pathways. Nurse referrals for CT procedures were mainly associated with oncology services. All CT scans ordered by nurses were endorsed by the patient's treating consultant and also vetted by the consultant radiologist, or in one case, a clinical specialist radiographer prior to proceeding.

Other imaging procedures

A small number of respondents confirmed that nurse referrers were approved to order MRI scans for patients. MRI does not involve ionising radiation however there are still inherent risks associated with this procedure. Respondents confirmed that, like CT scans, these referrals were related to the nurse's individual scope of practice, were approved by the patient's treating consultant and were vetted by a radiologist.

Some respondents advised that nurses were also approved to refer patients for ultrasound, renal lithotripsy and fluoroscopy, depending on service need and the nurse's field of expertise.

Conclusion

The survey confirmed that the nurse / midwife referrer was authorised to refer patients for radiological procedures within their documented scope of practice; that they were supported by the patient's treating consultant and endorsed by the local RSC; and that these referrals were assessed by the practitioner before proceeding.

The NRPC supports measures which prioritise patient safety and promote an efficient and effective radiological service. This survey identified that nurse / midwife referrers were ordering a wide range of diagnostic imaging procedures in the majority of locations. It also highlighted that there was an increasing need for nurses / midwives to take on the extended role of referrer in order to meet service demand.

Recommendations

The following recommendations are proposed:

- Expanding the scope of imaging procedures for which a nurse / midwife can refer be implemented with the oversight of the local RSC.
- The referral site coordinator for nurse / midwife referral for radiological procedures, or an experienced nurse / midwife referrer for radiological procedures, be included in the membership of the local RSC.
- Nurses / midwives who refer for radiological procedures adhere to existing legislation, national guidance and local governance arrangements when completing an episode of care within their scope of practice.
- All nurse / midwife referrals for radiological procedures, including DXA, be visible to the local RSC.
- All nurse / midwife referrers for radiological procedures undertake regular audit of their practice and share audit outcomes with the local RSC.

Appendix

Legislation to support nurse / midwife referrers for radiological procedures

Statutory Instrument 256 (2018) provides nurses and midwives who are registered with the Nursing and Midwifery Board of Ireland (NMBI²), the authority to refer patients for radiological procedures.

The purpose of endorsing nurse / midwife referrers for radiological procedures is to improve the patient experience. When a nurse / midwife has the authority to refer a patient for an imaging procedure within their scope of practice, it allows them to provide a complete episode of care to the patient.

Studies have shown that nurse / midwife referrers for radiological procedures increase patient satisfaction, promote continuity of care, improve patient outcomes and expedite the patient's throughput in the service.

The HSE Office of the Nursing and Midwifery Services Director (ONMSD) commissioned an independent evaluation of the framework for nurse referring for radiological procedures and the report can be accessed here: <https://healthservice.hse.ie/filelibrary/onmsd/an-evaluation-of-the-hse-guiding-framework-for-the-implementation-of-nurse-prescribing-of-medical-ionising-radiation-x-ray-in-ireland.pdf>

A similar robust framework supporting nurse referral practices for radiological procedures exists in the UK and information on this system can be accessed here: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9733618>

Guidance and Supports

Referring a patient for an imaging procedure is an expanded role for a nurse / midwife and therefore requires the nurse / midwife to undertake additional training. This training must meet the standards and requirements established by the NMBI in 2020, which can be accessed here: [Standards and Requirements for Education Programmes Nurse Authority to Refer for Radiological Procedures](#)

The ONMSD developed the *National Nurse and Midwife Authority to Refer for Radiological Procedures Guidelines* (2021) and a suite of additional guidance to support nurse / midwife referrers, which can be accessed here: <https://healthservice.hse.ie/about-us/onmsd/onmsd/specific-programmes/referral-medical-ionising-radiation-procedures.html>

In addition to the above supports, approved clinical referral pathways have been developed and implemented locally. Also, nurse / midwife referrers have access to the online resource *iRefer Guidelines*³ which is made available by the HSE to all referrers via the local hospital internet and GP *Healthlink* portal.

Local governance

Upon successful completion of an education programme approved by the NMBI, the nurse / midwife referrer is authorised by the Director of Nursing (DON) of their service to expand their individual scope

² NMBI is the regulator and competent authority for nursing and midwifery professions in Ireland.

³ *iRefer Guidelines* is an online tool developed by the UK Royal College of Radiologists to support clinicians referring patients for diagnostic imaging procedures.

of practice to include referring patients for radiological procedures. This decision is made by the DON in collaboration with the Clinical Director of the service in which the nurse / midwife is employed.

The DON advises the local RSC on the nurse / midwife authority to refer, outlining their individual scope of practice, local governance arrangements and the measures in place to support practice. A sample [local governance checklist for referrers](#) is available for review.

The RSC considers the information presented and determines if this authority to refer for radiological procedures is to proceed and whether the referrers name and NMBI registration number/NMBI pin (as appropriate) may be added to the 'Local Entitled Referrer List'.

Once endorsed, the Nurse / Midwife Referral Site Co-ordinator is informed and will maintain a record of this authority to refer for radiological procedures.

Continuous professional development and Clinical Audit

It is mandatory for all nurse / midwife referrers for radiological procedures to undertake continuous professional development (CPD) to ensure that they remain safe and are up to date in their practice.

To support this, the ONMSD organises an annual CPD event to share learning and highlight the latest developments in radiological referral practices. This event is multidisciplinary and open to all stakeholders. For example, the latest event was convened on the 27th June and the programme can be accessed here: [CPD event](#)

In addition, the ONMSD collaborated with the National Centre for Clinical Audit to revise and develop new guidance to support nurse / midwife referrers in auditing their referral practices. This guidance aligns with the HIQA guidelines, published in 2023, entitled '*Guidance on the assessment of compliance in undertakings providing medical exposure to ionising radiation*' which can be accessed here: www.hiqa.ie/sites/default/files/2019-10/Guidance_assessing-compliance-in-ionising-radiation.pdf.

The HSE clinical audit guidance can be accessed here: [clinical audit toolkit for nurse and midwife referral for radiological procedures](#) Evidence of CPD and clinical audit are maintained by the Nurse / Midwife Referral Site Co-ordinator and are available for inspection by the Health Information and Quality Authority, upon request.