

Health Information and Quality Authority

Report of the assessment of compliance with medical exposure to ionising radiation regulations

Name of Medical Radiological Installation:	University Hospital Kerry
Undertaking Name:	Health Service Executive
Address of Ionising Radiation Installation:	Rathass, Tralee, Kerry
Type of inspection:	Announced
Date of inspection:	28 April 2026
Medical Radiological Installation Service ID:	OSV-0007357
Fieldwork ID:	MON-0049639

About the medical radiological installation (the following information was provided by the undertaking):

The Radiology Department at University Hospital Kerry provides a diagnostic radiology service to Kerry, North Cork and border-line areas in county Limerick. This is a demand-driven service providing a wide range of imaging using both ionising and non-ionising radiation. The modalities include General and Dental Radiography, CT, Ultrasound, Fluoroscopy, Theatre, Interventional Radiology and Mobile Radiography.

The patient cohort includes both adult and paediatric service users. The hospital accommodates an Emergency Department, Acute Medical Assessment Unit, Intensive Care Unit, Coronary Care Unit, Special Care Baby Unit, Paediatric, Oncology, Medical and Surgical Wards as well as outpatient referrals.

The Radiology Department provides a high quality service deliverance with the implementation of NIMIS/PACS and with state of the art digital imaging systems.

A 24 hour emergency 'on-call' service is provided including CT and General/Trauma Radiography.

How we inspect

This inspection was carried out to assess compliance with the European Union (Basic Safety Standards for Protection against Dangers Arising from Medical Exposure to Ionising Radiation) Regulations 2018, as amended. The regulations set the minimum standards for the protection of service users exposed to ionising radiation for clinical or research purposes. These regulations must be met by each undertaking carrying out such practices. To prepare for this inspection, the inspector¹ reviewed all information about this medical radiological installation². This includes any previous inspection findings, information submitted by the undertaking, undertaking representative or designated manager to HIQA³ and any unsolicited information since the last inspection.

As part of our inspection, where possible, we:

- talk with staff and management to find out how they plan, deliver and monitor the services that are provided to service users
- speak with service users⁴ to find out their experience of the service
- observe practice to see if it reflects what people tell us
- review documents to see if appropriate records are kept and that they reflect practice and what people tell us.

About the inspection report

In order to summarise our inspection findings and to describe how well a service is complying with regulations, we group and report on the regulations under two dimensions:

¹ Inspector refers to an Authorised Person appointed by HIQA under Regulation 24 of S.I. No. 256 of 2018 for the purpose of ensuring compliance with the regulations.

² A medical radiological installation means a facility where medical radiological procedures are performed.

³ HIQA refers to the Health Information and Quality Authority as defined in Section 2 of S.I. No. 256 of 2018.

⁴ Service users include patients, asymptomatic individuals, carers and comforters and volunteers in medical or biomedical research.

1. Governance and management arrangements for medical exposures:

This section describes HIQA's findings on compliance with regulations relating to the oversight and management of the medical radiological installation and how effective it is in ensuring the quality and safe conduct of medical exposures. It outlines how the undertaking ensures that people who work in the medical radiological installation have appropriate education and training and carry out medical exposures safely and whether there are appropriate systems and processes in place to underpin the safe delivery and oversight of the service.

2. Safe delivery of medical exposures:

This section describes the technical arrangements in place to ensure that medical exposures to ionising radiation are carried out safely. It examines how the undertaking provides the systems and processes so service users only undergo medical exposures to ionising radiation where the potential benefits outweigh any potential risks and such exposures are kept as low as reasonably possible in order to meet the objectives of the medical exposure. It includes information about the care and supports available to service users and the maintenance of equipment used when performing medical radiological procedures.

A full list of all regulations and the dimension they are reported under can be seen in Appendix 1.

This inspection was carried out during the following times:

Date	Times of Inspection	Inspector	Role
Tuesday 28 April 2026	09:30hrs to 14:55hrs	Noelle Neville	Lead
Tuesday 28 April 2026	09:30hrs to 14:55hrs	Kay Sugrue	Support

Governance and management arrangements for medical exposures

An inspection of University Hospital Kerry (UHK) was carried out on 28 April 2026 by inspectors to assess compliance with the regulations at the hospital. As part of the inspection, inspectors followed up on the compliance plan from the previous inspection in June 2024 and noted that the actions set out had been completed. Inspectors visited the computed tomography (CT), dual-energy X-ray absorptiometry (DXA) and fluoroscopy units, spoke with staff and management and reviewed documentation. Inspectors found that the undertaking, the Health Service Executive (HSE), demonstrated compliance during this inspection with all regulations reviewed, with the exception of Regulation 13 which was substantially compliant.

The undertaking had a clear allocation of responsibilities for the protection of service users from medical exposures to ionising radiation. The inspectors noted involvement in, and oversight of, radiation protection by medical physics experts (MPEs) at the hospital across a range of responsibilities. Inspectors were satisfied that referrals for medical radiological exposures were only accepted from individuals entitled to refer and only individuals entitled to act as practitioner took clinical responsibility for medical radiological exposures.

Overall, inspectors noted that improvements made by staff and management at the hospital since the previous inspection resulted in a high level of compliance with the regulations. Inspectors were satisfied that a culture of radiation protection was embedded at UHK and effective management and communication structures were in place to ensure the radiation protection of service users.

Regulation 4: Referrers

Inspectors were satisfied from discussions with staff and management and from reviewing a sample of referrals that medical radiological exposures were only accepted from individuals entitled to refer as per Regulation 4 at UHK.

Judgment: Compliant

Regulation 5: Practitioners

Inspectors were satisfied from a review of documentation and speaking with staff that only individuals entitled to act as practitioner as per Regulation 5 took clinical responsibility for medical exposures at UHK.

Judgment: Compliant

Regulation 6: Undertaking

The HSE was the undertaking for University Hospital Kerry (UHK) and the hospital was part of the HSE South West health region. Inspectors reviewed documentation and governance structure organograms and spoke with staff and management in relation to governance arrangements in place at UHK.

A radiation safety committee (RSC) was in place at UHK and this committee met twice a year. Inspectors reviewed the terms of reference for this committee which were approved in July 2025. The committee had a multidisciplinary membership which included a consultant radiologist, hospital manager or deputy, radiation protection adviser, medical physics expert, radiology services manager, radiation safety officer and representatives from nursing, risk and quality. Inspectors noted that the committee had a standing agenda and items such as incidents and near misses, departmental audit reports and equipment updates were discussed. The committee was incorporated into local governance structures, chaired by a consultant radiologist and reported to the radiology clinical governance committee which in turn reported to the quality and patient safety committee and upwards to the executive management board of UHK.

Inspectors were informed that a radiology operations group was also in place in UHK and this group met every two weeks and supported the operational functions of the RSC. In addition, a quality and audit sub-committee of the radiology clinical governance committee provided the mechanism to fulfil the requirements of clinical audit in relation to radiation safety at the hospital. Inspectors found that the radiology governance arrangements in place at the hospital facilitated communication of issues to the undertaking and compliance with the regulations.

From records reviewed and discussions with management and staff, inspectors were satisfied that systems and processes were in place to ensure that referrals were only accepted from those entitled to refer and only individuals entitled to act as practitioner took clinical responsibility for medical radiological exposures. The practical aspects of medical radiological procedures were only carried out by individuals entitled to act as practitioner. Inspectors noted that information relating to Regulation 7: Justification of Practices, had been incorporated into the justification policy in place at the hospital. This information included the allocation of staff responsibilities for requesting a new type or class of practice involving ionising radiation and the next steps involved in relation to same.

Overall, inspectors were satisfied that the undertaking had clear and effective governance and management structures in place to ensure the radiation protection of service users and staff demonstrated a strong and dedicated commitment to radiation safety at UHK.

Judgment: Compliant

Regulation 10: Responsibilities

Inspectors noted that all medical exposures took place under the clinical responsibility of a practitioner, as defined in the regulations. The practical aspects of medical radiological exposures were only carried out at the hospital by individuals entitled to act as practitioner in the regulations. The undertaking had retained the presence of radiographers in areas where medical exposures were conducted outside of the radiology department, for example, theatre. In the absence of new training requirements being implemented as per Regulation 22, this was viewed as good practice to ensure the radiation protection of service users at the hospital. Practitioners and the MPE were found to be involved in the optimisation process for medical exposure to ionising radiation. In addition, inspectors were satisfied that referrers and practitioners were involved in the justification process for individual medical exposures as required by Regulation 10.

Judgment: Compliant

Regulation 19: Recognition of medical physics experts

Inspectors were satisfied from speaking with staff and management and reviewing documentation that adequate processes were in place to ensure the continuity of medical physics expertise at UHK. MPE resources were provided to UHK by the Cork University Hospital (CUH) group and an external MPE through a formal service level agreement (SLA).

Judgment: Compliant

Regulation 20: Responsibilities of medical physics experts

Inspectors reviewed the professional registration certificates of MPEs at UHK and were satisfied that MPEs gave specialist advice, as appropriate, on matters relating to radiation physics as required by Regulation 20(1). Inspectors noted that MPEs were involved in radiation protection across a range of responsibilities outlined in

Regulation 20(2) at UHK. MPEs were members of the RSC, radiology operations group and quality and audit sub-committee in place at the hospital and gave advice on medical radiological equipment, contributed to the definition and performance of a quality assurance programme and acceptance testing of equipment. MPEs were involved in optimisation, including the application and use of diagnostic reference levels (DRLs). MPEs carried out dose calculations for any incidents relating to ionising radiation and contributed to the training of staff in relevant aspects of radiation protection. In addition, an MPE also acted as radiation protection adviser (RPA) at the hospital and so met the requirements of Regulation 20(3).

Judgment: Compliant

Regulation 21: Involvement of medical physics experts in medical radiological practices

From documentation reviewed and discussion with staff, inspectors were satisfied that the level of involvement of MPEs at UHK was commensurate with the radiological risk posed by the facility as required by Regulation 21.

Judgment: Compliant

Safe Delivery of Medical Exposures

Inspectors visited computed tomography (CT), dual-energy X-ray absorptiometry (DXA) and fluoroscopy units, spoke with staff and management and reviewed documentation to assess the safe delivery of medical exposures at UHK. Inspectors noted compliance with each regulation reviewed with the exception of Regulation 13 which was substantially compliant.

Improvements were noted since the previous inspection in June 2024 in relation to Regulation 8, where evidence now showed that each medical exposure was justified in advance as required. Inspectors noted a strong commitment by staff in relation to optimisation of medical exposures and several examples of good practice were noted in relation to Regulation 9. Facility diagnostic reference levels (DRLs) were established, regularly reviewed and used for each modality at the hospital. Inspectors reviewed a sample of reports across modalities and noted that information relating to the patient exposure formed part of the report for the majority of records reviewed, with a small number in fluoroscopy not meeting the requirements of Regulation 13(2). In relation to Regulation 13(4), inspectors noted that considerable work had been carried out at UHK since the previous inspection in June 2024 in meeting the requirements of Regulation 13(4). A clinical audit strategy was in place and was aligned to the national procedures established by HIQA. Staff

at the hospital ensured that medical radiological equipment was kept under strict surveillance as required by Regulation 14. In relation to Regulation 16, records of pregnancy inquiries for relevant service users were seen by inspectors. There was a process for identification, management, reporting, analysis and trending of radiation incidents and potential incidents as required by Regulation 17. In addition, the introduction of a new system for reporting near misses with the aim of increasing reporting and efficiency of reporting for staff was seen as an example of good practice at the hospital by inspectors.

Overall, inspectors noted the commitment of staff to the radiation protection of service users and were satisfied that systems and processes were in place at UHK to ensure the safe delivery of medical radiological exposures to service users.

Regulation 8: Justification of medical exposures

Inspectors were satisfied that all referrals were in writing, stated the reason for the request and were accompanied by sufficient medical data to facilitate the practitioner when considering the benefits and risks of the medical exposure. The undertaking at UHK had a document titled *Policy on the Justification of Medical Radiological Procedures for University Hospital Kerry (UHK) and Caherciveen Community Hospital (CCH)*, which was approved in February 2026. This policy outlined the justification process for each modality and who was responsible for carrying out the process at the hospital. Inspectors noted improvements since the previous inspection in June 2024, from a sample of records reviewed for CT, DXA, fluoroscopy and general X-ray, inspectors were satisfied that justification in advance as required by Regulation 8(8) was now recorded as required by Regulation 8(15).

Inspectors were satisfied that information about the benefits and risks associated with the radiation dose from medical exposures was available to service users throughout the radiology department. In addition, staff demonstrated to inspectors that previous diagnostic information from procedures which took place in the hospital and other hospitals was available for review on the hospital's radiology information system.

Judgment: Compliant

Regulation 9: Optimisation

The undertaking at UHK had a document titled *Policy on the Optimisation of Medical Radiological Procedures for University Hospital Kerry (UHK) and Caherciveen Community Hospital (CCH)*, which was approved in February 2026. This policy set out the roles and responsibilities in relation to optimising medical exposures for each modality used at the hospital.

Inspectors noted several examples of good practice in relation to optimisation at UHK. An audit was carried out comparing an older unit of equipment with a new unit for upper extremity imaging in theatre. The aim of this audit was to compare the dose performance of both units. A dose difference of 65% was noted between the units for wrist imaging demonstrating that the new unit shows a significant dose reduction. Therefore, it was recommended that the new unit be used for extremity imaging where possible.

Another audit carried out at the hospital was a review of paediatric CT image quality. The aim of this audit included reviewing local paediatric CT protocols, comparing dose levels with national DRLs and assessing whether image quality remains diagnostically significant. The results of this audit included that one CT unit produced superior image quality compared to another for comparable patient weights, scan parameters and doses. A number of recommendations were made in relation to this audit including the review of paediatric protocols to balance dose reduction with acceptable image quality and repeat audit following protocol adjustments.

Overall, inspectors noted that staff at UHK demonstrated a strong commitment to optimisation and keeping doses to service users as low as reasonably achievable consistent with obtaining the required medical information.

Judgment: Compliant

Regulation 11: Diagnostic reference levels

The undertaking at UHK had a document titled *Policy on the use of Diagnostic Reference Levels in Diagnostic Imaging* in place, the most recent version of which was approved in January 2024. This policy set out the responsibilities of staff in respect of diagnostic reference levels (DRLs) and also the method for establishing and using local DRLs. Inspectors found that facility DRLs had been established, regularly reviewed and used for each modality having regard to national DRLs and were displayed prominently in the hospital.

Judgment: Compliant

Regulation 13: Procedures

Written protocols were in place at UHK for standard radiological procedures as required by Regulation 13(1). Regulation 13(2) states that an undertaking shall ensure that information relating to patient exposure forms part of the report of the medical radiological procedure. Inspectors reviewed a sample of reports across modalities and noted that information relating to the patient exposure formed part

of the report for the majority of records reviewed, with a small number in fluoroscopy not meeting the requirements of Regulation 13(2). In addition, inspectors noted that in a sample of reports reviewed, information relating to the patient exposure did not accurately reflect procedures that involve ionising radiation. While improvements had been made in meeting the requirements of Regulation 13(2) since the previous inspection in June 2024, a consistent approach to ensuring information relating to the exposure forms part of the report of each medical radiological procedure should be in place at UHK to ensure full compliance with Regulation 13(2). Referral guidelines were adopted at the hospital and were available for staff as required by Regulation 13(3).

Regulation 13(4) requires that an undertaking shall ensure that clinical audits are carried out in accordance with national procedures established by the Authority. Inspectors noted that considerable work had been carried out at UHK since the previous inspection in June 2024 in meeting the requirements of Regulation 13(4). A radiology quality and audit sub-group was in place at the hospital and this sub-group reported to the radiology clinical governance committee. The sub-group met twice a year and its work included carrying out audits as identified and prioritised by the radiology clinical governance committee.

The undertaking had also developed a document titled *Clinical Audit Strategy - University Hospital Kerry, Radiology Dept.* dated May 2025. This document outlined the audit strategy in place at the hospital which was aligned to HIQA's national procedures document covering the principles and essential criteria to support clinical audit and ensure compliance with the regulations. A proposed schedule of audit was outlined in the strategy together with audit templates and checklists for staff to use when carrying out clinical audit. Inspectors noted strong multidisciplinary involvement in clinical audit through a review of audit records and discussions with staff in each area visited in the hospital. A number of audits were carried out at UHK including *CTPA: patient pathway, dose implications magnification has on hysterosalpingogram (HSG) procedures in the X-ray department* and *adherence to departmental protocols pertaining to the acquisition of the LVA projection in DXA*. The clinical audit strategy, schedule of audit and completed audits demonstrated oversight of the full clinical pathway of the patient and audit topics covered the three elements of structure, process and outcome. Overall, inspectors were satisfied that compliance with Regulation 13(4) was demonstrated at UHK.

Judgment: Substantially Compliant

Regulation 14: Equipment

Inspectors were satisfied that equipment was kept under strict surveillance at UHK as required by Regulation 14(1). The inspectors received an up-to-date inventory of medical radiological equipment in advance of the inspection and noted that appropriate quality assurance programmes were in place for equipment as required by Regulation 14(2). The undertaking had a document titled *X-ray QA Programme*

for Licensed X-ray Units at University Hospital Kerry. This document outlined staff responsibilities and the frequency of testing for each modality at the hospital. The inspectors reviewed records of regular performance testing and were satisfied that testing was carried out on a regular basis as required by Regulation 14(3) and there was a process in place to report any equipment faults or issues arising if needed. In addition, inspectors were satisfied that acceptance testing was carried out on equipment before the first use for clinical purposes as required by Regulation 14(3).

Judgment: Compliant

Regulation 16: Special protection during pregnancy and breastfeeding

A document titled *Policy for Obtaining Informed Consent from Patients of child-bearing age undergoing Medical Exposures in University Hospital Kerry (UHK) and Caherciveen Community Hospital (CCH)*, the most recent version of which was approved in April 2024, was in place at UHK. This policy included information on the pregnancy procedures in place at the hospital including the practitioner and referrer role in ensuring that all reasonable measures are taken to minimise the risks associated with potential fetal irradiation during medical exposure of female patients of childbearing age. From a sample of records reviewed, inspectors were satisfied that a referrer and practitioner inquired as to the pregnancy status of service users and recorded the answer to this inquiry in writing. In addition, inspectors noted multiple notices in the hospital to raise the awareness of the special protection required during pregnancy and breastfeeding in advance of medical exposures.

Judgment: Compliant

Regulation 17: Accidental and unintended exposures and significant events

Inspectors were satisfied from discussions with staff and management and a review of documents that an appropriate system for the recording and analysis of events involving or potentially involving accidental or unintended medical exposures was in place at UHK. The incident management process in place at the hospital was outlined in a document titled *Policy on reporting of accidental and unintended exposures and significant events involving ionising radiation in UHK and CCH Radiology Departments*, the most recent version of which was approved in February 2026. This document included information on the requirement to notify HIQA of certain reportable incidents. Inspectors noted that four incidents had been reported to HIQA since the previous inspection in June 2024 and all were within the required timelines and aligned to procedures in place at the hospital.

Inspectors noted an area of good practice where staff at the hospital had identified the potential to increase near miss reporting. The potential to increase near miss

reporting was also a finding on the previous inspection in June 2024. As a result, a new system for reporting near misses had been introduced at UHK with the aim of increasing reporting and efficiency of reporting for staff. Staff in the CT unit had introduced a flashcard system to facilitate efficient capture of near misses and feedback suggested that this new system resulted in an increase in reporting. Inspectors were informed that staff in the other units at the hospital were provided with a diary to facilitate capture of near misses, however, it was noted that this system did not lead to an increase in reporting. As a result, it was proposed that a near miss form be introduced to allow staff to document key information in a timely manner to capture near misses. Inspectors were informed that the introduction of the near miss form in February 2026 had led to an increase in near miss reporting at UHK and an MPE and RPO continued to oversee the collation of data to ensure continued compliance with Regulation 17. Inspectors found that the implementation and evaluation of the new system of reporting for near misses was an example of good practice at UHK.

Judgment: Compliant

Appendix 1 – Summary table of regulations considered in this report

This inspection was carried out to assess compliance with the European Union (Basic Safety Standards for Protection against Dangers Arising from Medical Exposure to Ionising Radiation) Regulations 2018, as amended. The regulations considered on this inspection were:

Regulation Title	Judgment
Governance and management arrangements for medical exposures	
Regulation 4: Referrers	Compliant
Regulation 5: Practitioners	Compliant
Regulation 6: Undertaking	Compliant
Regulation 10: Responsibilities	Compliant
Regulation 19: Recognition of medical physics experts	Compliant
Regulation 20: Responsibilities of medical physics experts	Compliant
Regulation 21: Involvement of medical physics experts in medical radiological practices	Compliant
Safe Delivery of Medical Exposures	
Regulation 8: Justification of medical exposures	Compliant
Regulation 9: Optimisation	Compliant
Regulation 11: Diagnostic reference levels	Compliant
Regulation 13: Procedures	Substantially Compliant
Regulation 14: Equipment	Compliant
Regulation 16: Special protection during pregnancy and breastfeeding	Compliant
Regulation 17: Accidental and unintended exposures and significant events	Compliant

Compliance Plan for University Hospital Kerry OSV-0007357

Inspection ID: MON-0049639

Date of inspection: 28/04/2026

Introduction and instruction

This document sets out the regulations where it has been assessed that the undertaking is not compliant with the European Union (Basic Safety Standards for Protection against Dangers Arising from Medical Exposure to Ionising Radiation) Regulations 2018, as amended.

This document is divided into two sections:

Section 1 is the compliance plan. It outlines which regulations the undertaking must take action on to comply. In this section the undertaking must consider the overall regulation when responding and not just the individual non compliances as listed in section 2.

Section 2 is the list of all regulations where it has been assessed the undertaking is not compliant. Each regulation is risk assessed as to the impact of the non-compliance on the safety, health and welfare of service users.

A finding of:

- **Substantially compliant** - A judgment of substantially compliant means that the undertaking or other person has generally met the requirements of the regulation but some action is required to be fully compliant. This finding will have a risk rating of yellow which is low risk.
- **Not compliant** - A judgment of not compliant means the undertaking or other person has not complied with a regulation and considerable action is required to come into compliance. Continued non-compliance — or where the non-compliance poses a significant risk to the safety, health and welfare of service users — will be risk rated red (high risk) and the inspector will identify the date by which the undertaking must comply. Where the non-compliance does not pose a risk to the safety, health and welfare of service users, it is risk rated orange (moderate risk) and the undertaking must take action *within a reasonable timeframe* to come into compliance.

Section 1

The undertaking is required to set out what action they have taken or intend to take to comply with the regulation in order to bring the medical radiological installation back into compliance. The plan should be **SMART** in nature. **S**pecific to that regulation, **M**easurable so that they can monitor progress, **A**chievable and **R**ealistic, and **T**ime bound. The response must consider the details and risk rating of each regulation set out in section 2 when making the response. It is the undertaking's responsibility to ensure they implement the actions within the timeframe.

Compliance plan undertaking response:

Regulation Heading	Judgment
Regulation 13: Procedures	Substantially Compliant
Outline how you are going to come into compliance with Regulation 13: Procedures: • The hospital has written to in-house and external staff on the 28/05/2026, informing them of their responsibility to include accurate information relating to patient exposure in the radiology report. Furthermore, this activity will be included in the clinical audit schedule, reviewed by the RSC to ensure compliance with Regulation 13(2).	

Section 2:

Regulations to be complied with

The undertaking and designated manager must consider the details and risk rating of the following regulations when completing the compliance plan in section 1. Where a regulation has been risk rated red (high risk) the inspector has set out the date by which the undertaking and designated manager must comply. Where a regulation has been risk rated yellow (low risk) or orange (moderate risk) the undertaking must include a date (DD Month YY) of when they will be compliant.

The undertaking has failed to comply with the following regulation(s).

Regulation	Regulatory requirement	Judgment	Risk rating	Date to be complied with
Regulation 13(2)	An undertaking shall ensure that information relating to patient exposure forms part of the report of the medical radiological procedure.	Substantially Compliant	Yellow	03/08/2026