



Health Information and Quality Authority

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

Name of Medical Radiological Installation:	Dublin Dentist Clinic (Dublin 1)
Undertaking Name:	Dublin Dentist LTD
Address of Ionising Radiation Installation:	43/44 Lower Dorset Street, Dublin 1
Type of inspection:	Announced
Date of inspection:	14 February 2024
Medical Radiological Installation Service ID:	OSV-0006115
Fieldwork ID:	MON-0042770

About the medical radiological installation:

Dublin Dentist Clinic (Dublin 1) is a dental practice owned by Dublin Dentist LTD. A number of different dental radiological procedures are carried out at the practice. This includes intra-oral radiographs, orthopantomograms (OPG) and cone-beam computed tomography (CBCT).

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 and 2019. 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 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 doing, we describe the overall effectiveness of an undertaking in ensuring the quality and safe conduct of medical exposures. It examines how the undertaking provides the technical systems and processes so service users only undergo medical exposures to ionising radiation where the potential benefits outweigh any potential

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.

risks and such exposures are kept as low as reasonably possible in order to meet the objectives of the medical exposure.

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
Wednesday 14 February 2024	12:00hrs to 15:00hrs	Lee O'Hora	Lead
Wednesday 14 February 2024	12:00hrs to 15:00hrs	Agnella Craig	Support

Summary of findings

An inspection of Dublin Dentist LTD at Dublin Dentist Clinic (Dublin 1) was conducted by inspectors on the 14 February 2024 to assess compliance against the regulations following previous inspections carried out on the 10 January 2023, 7 March 2023 and 30 August 2023. The focus of this inspection was to assess information supplied as part of the undertaking's compliance plan associated with the inspection in August 2023 and to validate information received as part of a compliance notice issued to the undertaking on 12 September 2023 in relation to Regulation 22 which relates to the education, information and training required for conducting medical exposures.

On the day of inspection, inspectors visited the X-ray room at the practice and focused on regulations deemed not compliant or substantially complaint on the last inspection. Inspectors noted that improvements had been made since the last inspection. For example, from speaking with staff and reviewing the radiation safety related documentation, inspectors determined that the undertaking had allocated responsibility for the radiation protection of service users at Dublin Dental Clinic (Dubin1). Also in-house radiology equipment testing, as defined by the medical physics expert (MPE), had been implemented and maintained by the undertaking which assured inspectors that all radiological equipment was now kept under strict surveillance.

Following the last inspection the undertaking was issued with a compliance notice in relation to Regulation 22. This meant that Dublin Dentist LTD must ensure that practitioners conducting cone-beam computed tomography (CBCT) procedures at Dublin Dentist Clinic (Dublin 1) successfully complete training in relation to CBCT as prescribed by the Dental Council no later than 31 January 2024. Inspectors noted that the associated training requirements had not been met by the deadline stated on the compliance notice, however, inspectors found no evidence that CBCT procedures had been conducted at the practice since the inspection in August 2023, when the undertaking assured HIQA they would not perform these procedures until the appropriate training was completed.

Overall, the inspectors noted a significant improvement in compliance with the regulations across the four inspections. The undertaking had taken steps to ensure that these improvements could be maintained through the formal allocation of responsibilities of all staff involved in the radiation protection of service users. While inspectors were not satisfied that the undertaking had taken the appropriate steps to ensure that dentists involved in the conduct of CBCT procedures had successfully completed training as prescribed by the Dental Council they were assured that the conduct of CBCT procedures had ceased at this facility effectively removing any associated risk for the service user.

Regulation 6: Undertaking

Inspectors reviewed documentation and records, and spoke with staff regarding the management and oversight structures in place at Dublin Dentist Clinic (Dublin 1). In particular, the allocation of responsibility for the radiation protection of service users attending the dental practice was examined.

Dublin Dentist LTD had now documented a clear allocation of responsibility for the radiation protection of service users as indicated in their compliance plan associated with the inspection on 30 August 2023. The undertaking had also appointed and defined the responsibilities of a dental radiology officer at Dublin Dentist Clinic (Dublin 1). The responsibilities and records associated with this role satisfied inspectors that the undertaking had taken measures to address the previously identified non compliance with Regulations 6, 9 and 14 found on the inspection carried out on 30 August 2023.

Following the inspection in August, the undertaking was issued with a compliance notice in relation to Regulation 22. This compliance notice directed the undertaking to comply with Regulation 22 by 31 January 2024. This meant that Dublin Dentist LTD must ensure that practitioners conducting CBCT procedures at Dublin Dentist Clinic (Dublin 1) successfully complete training in relation to CBCT as prescribed by the Dental Council and the undertaking was further required to demonstrate compliance by writing no later than 31 January 2024.

Subsequent communication with the undertaking and validation of information through inspection in February 2024 noted that, while the undertaking had begun to take steps to address practitioner training related to CBCT, the associated training requirements as prescribed by the Dental Council had not been met by the deadline stated in the compliance notice. However, records reviewed on site indicated that practitioners working at Dublin Dentist Clinic (Dublin 1) had not taken any CBCT scans since the inspection in August 2023 in line with assurances given to the Authority following that inspection.

Further assurances to refrain from conducting CBCT procedures were sought in writing following this inspection and the undertaking was asked to remove any information in relation to the provision of CBCT from its website. Therefore, while the training requirements detailed by the Dental Council for CBCT procedures had not been met, the undertaking had ensured that CBCT procedures were not conducted since the August inspection and gave further assurance that this would be the case until such time that these training requirements were met. This satisfied inspectors that any risks associated with the use of CBCT at Dublin Dentist Clinic (Dublin 1) had now been mitigated by the undertaking.

Therefore, the inspectors were satisfied that the requirement for a clear allocation of responsibility for the provisions of Regulation 6 had been met and the undertaking had removed any associated risk to the service user, by ceasing the conduct of CBCT procedures.

Judgment: Compliant

Regulation 9: Optimisation

After speaking with staff and reviewing associated documents the inspectors were satisfied that the gaps associated with dose optimisation through QA had now been addressed as outlined in the undertaking's compliance plan submitted after the inspection of 30 August 2023. For example, Dublin Dentist LTD had appointed and clearly defined the responsibilities of a dental radiology officer at Dublin Dentist Clinic (Dublin 1) to include in-house QA testing as suggested by the MPE. Inspectors were also supplied with records of completed in-house quality assurance testing as defined by the MPE and associated documentation.

Judgment: Compliant

Regulation 14: Equipment

On the day of inspection, inspectors spoke with the management staff at Dublin Dentist Clinic (Dublin 1) about the radiological equipment. Inspectors also requested and reviewed all documentation and records relating to the dental radiological equipment surveillance at the practice.

Inspectors were satisfied that the undertaking had established systems to ensure that MPE QA testing, routine manufacturer preventative maintenance and in-house QA tests, as defined by the MPE, were completed and records of these tests were available and reviewed by inspectors on the day.

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 and 2019. The regulations considered on this inspection were:

Regulation Title	Judgment
Summary of findings	
Regulation 6: Undertaking	Compliant
Regulation 9: Optimisation	Compliant
Regulation 14: Equipment	Compliant