

DoseWatch

Enterprise-wide radiation and contrast dose management software for multi-modality, multi-vendor imaging environments to ensure patient safety and regulatory compliance.

<https://example.com/1762583716454>

Overview

DoseWatch by GE Healthcare is a holistic, enterprise-wide dose management solution designed to automatically collect, track, and analyze radiation and contrast dosage data across a full fleet of imaging environments. It is a vendor-neutral platform that supports multi-facility, multi-modality (CT, IR, CV, Mammography, Radiography, Nuclear Medicine), and multi-manufacturer setups.

Product Overview and Key Benefits

The primary goal of DoseWatch is to support healthcare institutions in driving better-informed, patient-centered care by simplifying the efforts to optimize patient dose and ensuring compliance with evolving industry guidelines, such as the ALARA (As Low As Reasonably Achievable) principle and national Diagnostic Reference Levels (DRLs). The system automatically detects outliers in dosing data, provides insight into their root causes, and documents anomalies for review, facilitating a comprehensive dose management program.

Main Features and Capabilities

Automated Dose Tracking: Automated archiving and analysis of radiation and contrast dose data from multiple sources (DICOM RDSR, image headers, MPPS, OCR).

Outlier Identification: Automatic detection and alerting system based on DRL or custom thresholds, with automated email notifications.

Advanced Dose Estimation: Includes automated Fetal Dose Estimation (Dose to Fetus), automated Peak Skin Dose Estimation (4D Skin Dose Map) for interventional procedures, and automated Organ Dose Dosimetry (using licensed technology from Duke University).

Contrast Data Management (CDM): An optional module that provides a single database for the joint optimization of both radiation and iodine doses, capturing contrast injection details.

Compliance and Benchmarking: DRL audit tool for all modalities and in-depth benchmarking against national or local DRLs.

Unified Patient Dose Record: Unifies all examinations into a single patient dose record, even when links between different patient identifiers are provided, to manage cumulative dose alerts.

Target Users and Use Cases

DoseWatch is used by a collaborative team within a healthcare institution, including:

Medical Physicists: For protocol evaluation, DRL benchmarking, organ dose estimation, and post-procedure skin injury risk assessment.

Radiologists/Clinicians: For accessing patient dose history, receiving proactive alerts, and ensuring appropriate radiation levels for high-quality images.

Technologists: For monitoring dose-related information at the point of care.

Hospital/Imaging Administrators: For enterprise-wide monitoring, quality improvement initiatives, and regulatory compliance (e.g., EU MDR, MDDS, ACR DIR reporting).

Key Features

- Automated Multi-Vendor Dose Tracking
- Outlier Identification and Alerting
- Diagnostic Reference Level (DRL) Benchmarking
- Automated Fetal Dose Estimation (Dose to Fetus)
- Automated Peak Skin Dose Mapping (4D Skin Dose Map)
- Contrast Data Management (CDM) Module
- Unified Patient Dose Record
- HL7 and DICOM Integration

Pricing

Model: enterprise

Available as a purchasable software solution or as a service subscription. Pricing is not publicly disclosed; contact GE Healthcare for a quote.

Target Company Size: medium, enterprise

Integrations

DICOM (RDSR, MPPS), HL7, PACS, RIS, EMR, LDAP (Active Directory)

Compliance & Certifications

EU Medical Device Regulation (MDR) Class I CE Mark, Medical Device Data System (MDDS) - US,
ISO 13485:2016, ACR DIR Certified Software Partner, IHE Radiation Exposure Monitoring (REM)
Compliant

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