

DoseWatch Product Evolution



DoseWatch is an enterprise-wide dose management solution designed to automatically collect and analyze patient radiation and iodine exposure across multifacility, multimodality, and multivendor imaging environments. We are continuously updating our software to meet our customers' needs and changing industry guidelines.

	Feature	DoseWatch v2.1	DoseWatch v2.2	DoseWatch v2.3	DoseWatch v3.1
Tracking & Awareness	Enterprisewide, multidepartment, multifacility patient radiation dose tracking	X	X	X	X
	Multimodality: Computed Tomography (CT), Interventional Radiology (CV/IR), Diagnostic Radiology (RF), Mammography, (MG), Nuclear Medicine	X	X	X	X
	Vendor-neutral compatibility	X	X	X	X
	List of performed exams by modality, site, device, period of time	X	X	X	X
	Patient multimodality dose history	X	X	X	X
	Tracking of injected radiotracer for single-injection procedures in Nuclear Medicine (NM)	X	X	X	X
	Automatic tracking of contrast injection dose for CT scanners	X	X	X	X
	Manual input of contrast injection dose for other imaging modalities (CV/IR, etc.)	X	X	X	X
	Automatic alerts system based on automatic, manual, or DRL thresholds	X	X	X	X
	Automated email notifications for alerts	X	X	X	X
	Alert on patient's cumulative Kair for interventional procedures (CV/IR)		X	X	X
	Worklist of upcoming exams with proactive alerts on patient dose history	X	X	X	X
	Proactive alerts on patient risks for contrast-enhanced exams	X	X	X	X
	Alert justification enhancements, customized annotation codes, and study comment history	X	X	X	X
	Voting tool to collect feedback on Image Quality	X	X	X	X
	Calculation of Effective Dose for all imaging modalities			X	X
	Computation of the Peak Skin Dose for interventional procedures (CV/IR)			X	X
	Estimation of the Radiation Dose to fetus for CT exams with manual adjustments and validation			X	X
	Radiation Dose to Fetus estimation for CT exams (Duke University methodology)				X
	Management of obsolete procedures/protocols		X	X	X
Local study description and protocol mapping to RSNA RadLex Playbook for CT modality	X	X	X	X	
DRL module with library of National Reference Levels for several countries	X	X	X	X	
Optimizing Current Performance	Configurable automated monthly reports	X	X	X	X
	Customizable Dose Performance Report for CT and Interventional imaging (CV/IR)	X	X	X	X
	Listings of Exams and patients with highest dose	X	X	X	X
	Dose analyses by procedure, period of time, age range	X	X	X	X
	Dose analysis including BMI range		X	X	X
	Contrast injection data analyses, including contrast volume vs. BMI/Weight/Age	X	X	X	X
	Comparison tool (per imaging device, exam procedure, date range, etc.)	X	X	X	X
	Database exports to Microsoft® Excel	X	X	X	X

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Optimizing Current Performance (cont.)	Patient exam dose report in PDF format with dose history	X	X	X	X
	Automatic SSDE calculation for CT procedures (AAPM TG204)	X	X	X	X
	Automatic Water-Equivalent SSDE for CT procedures (AAPM TG220)		X	X	X
	Evaluation of CT acquisition quality: isocenter shift, mA modulation	X	X	X	X
	Automatic cumulative dose incidence map for CV/IR modality	X	X	X	X
	3D Skin Dose Map interactive application for CV/IR modality				X
	Organ Dose estimates for pediatric CT examinations			X	X
	Organ Dose estimates for all CT examinations (Duke University methodology)				X
	Display of cumulated Dose per breast per study in mammography (MG)		X	X	X
	Tracking of rejected images and related dose for GE Pristina™ mammography systems				X
Enterprise Implementation	Web-based application, zero-footprint web interface, VPN-accessible	X	X	X	X
	Distributed acquisition architecture for multisite configurations	X	X	X	X
	Site-specific settings for notifications, statistics, DRLs, lexicon mappings, etc.	X	X	X	X
	Management of user's functional and data-access rights (user profiles and teams)	X	X	X	X
	LDAP integration to enterprise user directory for user authentication	X	X	X	X
	Inbound HL7 interface for patients updates/merges and procedure updates	X	X	X	X
	Contextual launch of DoseWatch from 3rd-party applications (e.g. RIS, PACS viewer, EMR)	X	X	X	X
	Auto-forward of MPPS and Radiation Dose SR to 3rd-party systems	X	X	X	X
	Outbound HL7 interface to share radiation or contrast dose with other information systems	X	X	X	X
	Radiation Dose SR creation based on image header analysis	X	X	X	X
	Exam dose report feed to Nuance PowerScribe 360 Reporting	X	X	X	X
	IHE PIX interface for unified patient dose record when multiple patient identifiers are used across enterprise	X	X	X	X
Project Execution & Application Support	Dedicated DoseWatch IT Professional Services team (project management, system integration, training, optimization services)	X	X	X	X
	Customer training	X	X	X	X
	Diagnostic and basic optimization of some protocols	X	X	X	X
	Dose Excellence Program (DEP)	X	X	X	X
Integration & Data Quality	Multi-integration capabilities (MPPS, RDSR, Images, OCR, device logs, etc.)	X	X	X	X
	Automated exam acquisition from PACS (exam retrieve workflows)	X	X	X	X
	DICOM Query/Retrieve from imaging system			X	X
Standards & Regulations	Supports all DICOM standards: MPPS, RDSR, raw image headers	X	X	X	X
	IHE REM-compliant for Dose Reporter and Dose Consumer	X	X	X	X
	ACR DIR-certified software partner: automated send to ACR DIR	X	X	X	X
	Supports IHE Patient Identifier Cross Referencing (PIX) as consumer	X	X	X	X
	« CE » Marked in compliance with the applicable requirements of the Directive 93/42/CEE	X	X	X	X

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