

Digital dose management system (DMS)

for monitoring and optimising patients' radiation exposure

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Last three months

DAP, JUG

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Empowering Frontline Service Heroes Wherever They Are

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Legally compliant documentation with the OR dose inspector[™]

The solution for documenting the applied radiation dose in your X-ray practice

A **dose management system (DMS)** in radiology is essential for monitoring and optimising patient radiation exposure. This is particularly important for healthcare professionals, as it supports clinical decision-making, enhances patient safety, and ensures compliance with safety standards.

Why is a dose management system necessary?

- Radiation protection: In Germany, legal requirements prescribe regular recording and assessment of radiation exposure. Reference values can be adapted to the regulations applicable in your country.
- **Optimisation of radiation exposure:** A strain gauge helps to reduce the radiation dose to the necessary minimum without impairing the image quality.
- **Documentation:** Hospitals and practices can monitor radiation exposure and take measures to reduce if necessary.
- **Comparison with reference values:** The system makes it possible to compare the applied dose values with national reference values and recognise deviations.
- **Increased patient safety:** Better monitoring helps avoid unnecessarily high radiation doses.

Advantages for doctors and medical-technical radiology assistants:

- **Simple monitoring and evaluation:** Doctors can view the patient's radiation exposure directly and take action if necessary.
- **Quality control of examinations:** Consistent image quality at a reduced dose reduces radiation exposure for patients without compromising on diagnostics.
- **Reduction of legal risks:** A DMS helps to comply with legal regulations and can protect doctors from potential liability cases.
- More efficient workflows: Automated analyses and reports save time and make working with X-ray systems easier.



Focus on dose - with system and safety

What is the OR dose inspectorTM?

The OR dose inspector[™] is a powerful dose management system (DMS) that supports you in the legally compliant documentation and monitoring of radiation doses in radiology. The software automatically extracts radiation-relevant information from the DICOM headers of your X-ray images, stores it securely, analyses it and presents it clear graphical form.

More safety. More efficiency. Less effort.

By using the *OR dose inspector*[™], you follow internationally recognised best practices for radiation safety. The system enables efficient and comprehensive tracking and monitoring of applied X-ray doses, helping to enhance patient safety and support quality assurance in medical imaging.

Automated detection of deviations

If the software recognises deviations from the defined diagnostic reference values, an 'incident' is automatically marked and documented for the examination in question.

Such incidents include, among others

- Dose values too high or too low compared to the reference values
- Missing or incorrect dose data in the DICOM file (e.g. no measured value included)

Seamless integration - or stand-alone use

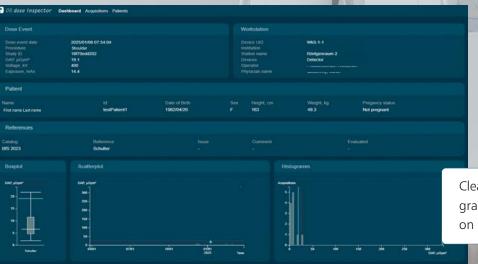
The OR dose inspectorTM is optimised for use with the dicomPACS[®]DX-R and ORmedTM systems from OR Technology. Examinations carried out using these modalities can be automatically recorded and processed. Alternatively, the OR dose inspectorTM can also be used independently from

existing systems as a stand-alone tool - flexible, user-friendly and secure.

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References	

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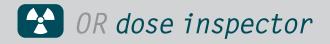
Graphical overview of all exposures (dose events)



Clearly presented graphical information on the dose event

his year 🔫								
Patient Id	Patient name	Date of birth	Gender	DAP [µQym/]	Height (cm)	weigh	PDF	
L9ZAM-PYRC2	Emergency						XLS	
P6RHN-8K7PA	First name Last name	1987/04/01					ose Report (Bf5)	
RMAXT-URKLF	First name Last name	1991/04/17		158.40				94/0
3094	First name Last name							34/0
TMX5N-3YGF6	Emergency							34/0
UTP63-FRNLR	Emergency							04/0
4YPK9-CM8KX	Emergency			20.42				94/1
5ZME2-7GZ6Z	First name Last name	1980/04/11					2025/0	34/0
RGZRN-REG89	First name Last name	2005/03/31						94/6
R4CPT-KMYCN	First name Last name	2000/04/01						34/1
UXC33-38H7K	First name Last name	1987/03/27		334.55			2025/0	04/1

Patient list, sortable by time periods, with various export options



Features of the DMS software

- The software electronically records all dose-relevant parameters for determining exposure during examinations with X-ray tubes and makes these available in electronic form for quality assurance purposes.
- The **systematic checking and documentation** of compliance with defined diagnostic reference values helps to avoid exceedances.
- Automatic detection, recording and visualisation of significant deviations (incidents) makes it possible to prevent similar situations in the future.
- Easy reception and reading of DICOM files ensures simple integration into existing systems.

Set new standards – with with smart radiation control and digital efficiency!

Let us advise you: Info hotline: +49 381 36 600 600 info@or-technology.com

🕑 OR Technology

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Further information about OR Technology is available: