

ECR 2017: The DACS Radiation Dose Monitor (RDM) and the approaching EU Directive

Medical imaging plays an essential role in healthcare. However, while the benefits are unquestionable, the side effects must not be ignored – in particular, the increasing exposure of patients to imaging radiation.

The DACS* RDM and the approaching EU directive

Dose monitoring has become an important issue – especially since the release of the Euratom/2013/59 Directive, which mandates member states to have national legislation on safety standards in place by February 2018 (less than a year from now!).

Medsquare’s DACS [Radiation Dose Monitor \(RDM\)](#) fully supports compliance with this impending European Directive and meets its requirements perfectly. “With the approaching EU Directive, the DACS RDM not only helps prepare hospitals and clinics to meet the regulatory requirements by improving patient dose tracking and study justifications, but it also creates a wealth of information useful for all healthcare professionals,” explains Arnaud Legland, Strategic Accounts Manager, [Medsquare](#).

Indeed, RDM is a dose monitoring solution that can quickly change the practices of healthcare professionals, as Florent Jault, our Product Specialist confirms: “With its powerful statistics, medical physicists can detect anomalies, regulatory agencies can enhance dose level guidelines and Diagnostic Reference Levels, radiologists can substitute a non-irradiating exam depending on the patient’s history, and so on. RDM is a highly valuable tool that increases patient safety today and will do so even more in the future.”

Presenting RDM’s latest features at ECR 2017

During the [European Congress of Radiology \(ECR\)](#), Medsquare will introduce [RDM’s new features](#):

- **Peak Skin Dose Module:** calculation of the PSD with a 2D or 3D graphic presentation
Jad Farah, medical physicist at AP-HP (Paris’ hospitals), is currently conducting a scientific study using RDM to calculate peak skin dose in interventional radiology in a variety of healthcare institutions. He provided this testimonial on his use of the peak skin dose module:

“This new module of the RDM solution is particularly interesting to me, since it allows a 2D/3D calculation of the patient’s peak skin dose, independent of the equipment, while integrating the contribution of backscattered radiation, table and mattress attenuation, etc. in the cumulative dose to the skin. In addition, once the study has been validated, the solution can be used to evaluate the real dose exposure of any patient undergoing an interventional radiology procedure. Accurate knowledge of the patient’s peak skin dose will thus make it possible to set up the most appropriate dermatological follow-up – especially when a deterministic effect to the skin is expected.”

- **Organ dose Module in Partnership with Virtual Phantoms:** Monte Carlo algorithm calculation of mean doses delivered to organs by type of activity using existing dose data (DLP, CTDI, etc.)
- **Pivot table:** Creation of dynamic pivot tables, based on the different categories of the RDM solution – age, procedures, acquisition protocols, acquisition types, etc. – which can be created in a few clicks
- **New advanced statistics module:** Allowing you to perform cross-dose data comparison
- **Powerful rules alerts:** Implementation of specific alerts regarding a patient and/or his or her studies
- **Alerts distribution:** Allowing you to spread alerts over every day of the week
- And many more!

The focus of this year’s exhibition is on the new generation in radiology. RDM’s philosophy is totally in line with ECR’s theme, which is “YOUTH” – die Jugend, la jeunesse, la giovinezza, la juventud, молодежь – as Paul Parizel, President of the ESR, said in his previous message.

“In order to optimize dose – which is a long journey of continuous improvement teamwork – RDM helps bridge the gap between all of the participants in patient radiation safety. The solution involves, and brings closer together, the young generation, which will make a real difference in the future. After all, the young generation are the future radiology professionals,” Dominique Gabriel, CEO, Medsquare, affirms.

With RDM, Medsquare is preparing healthcare institutions to be ready before 6 February 2018 (the EU Directive’s National Compliance Deadline) by supporting hospitals in improving delivery of patient care and promoting compliance.

About Medsquare

Medsquare provides innovative solutions for the medical imaging environment. Our solutions (burning, printing, archiving, secured web image distribution through the internet, etc.) are currently being used in more than 450 university hospitals and private clinics in France and more than 2000 around the world.

Founded in 2006 as a French company based in Paris, Medsquare is a key partner of the world’s leading radiology equipment manufacturers, who offer our peripheral devices and software to their customers bundled with the sale of their DICOM modalities (CT, MR, XA, etc.).

Medsquare is also a leading player in the DACS (Dose Archiving and Communication System) market. Our patient dose management system – **Radiation Dose Monitor (RDM)** – enables healthcare institutions to collect, control and analyze radiation doses delivered to patients during medical imaging exams. RDM helps improve clinical practices and optimize doses.

Contact

Karen FRANGIE: k.frangie@medsquare.com

Communication Leader

Medsquare

17 rue du Jura

75013, Paris – France

T: + 33 (0)1 55 25 62 50

For more information, visit our website: www.medsquare.com

**DACS: Dose Archiving and Communication System*