# **MED** SQUARE

### The new features of the DACS solution

## **RADIATION DOSE MONITOR (RDM)**

#### a. Dashboard analytics:

New RDM tool for interactive, fast and customizable statistical analysis:

- Patient dose data (visualization of possible radiation protection problems coming from a modality, drifts in procedures, etc.).
- Data related to the facility's service (number of patients, distribution of requests, waiting time between each patient, etc.).









#### b. Calculation of the effective dose for all modalities :

 Calculation of the effective dose in conventional and interventional radiology, mammography, scanner, and nuclear medicine, as well as for hybrid modalities (PET-CT, SPECT-CT).

Calculation of the effective dose in nuclear medicine: PT/CT										
Acquisition: All	*	Orga								
E : 4.94133 mSv										
Glandes surrénales	3.12									
Vessie					33,81					
Surfaces osseuses	2.86									
Cerveau		9.88								
Seins	2.34									
Vésicule biliaire	3.38									
Estomac	2.86									
Intestin grêle	3.12									
Côlon	3.38									
Partie supérieure du gros inte	3.12									
Partie inférieure du gros inte	3.64									
Cœur			17.42							

Calculations that respect the recommendations established to protect patients from radiation (including the recommendations of the ICRP).

Calculation of the effective dose in mammography											
СТ	DX		MG	NM	PT/CT RF		XA				
			Alert Dose	E (mSv)	Acc. Avg. Glandul Dose (mGy)	ar	Acc. Avg. Glandular Dose Right (mGy)	Acc. Avg. Glandular Dose Left (mGy)			
	8			1.99	16.62		5.64	10.98			
	8			1.95	16.25		7.78	8.47			
	8			1.91	15.88		8.11	7.77			
	8			1.81	15.05		6.88	8.17			
		5		1.17	10.05		6.20	5.05			



#### c. Patient at isocenter in scanner:

New feature that assesses the patient's centering during the examination, reinforcing good professional practices (a patient shift with respect to the isocenter may influence the dose).



#### **NEW TECHNICAL FEATURES**

- **Single sign-on authentication (SSO):** A method that allows a user to access multiple computer applications by performing only 1 authentication.
- RDM Connection to the Enterprise Master
  Patient Index (EMPI): a solution to bring patient
  identities closer together for a complete dose
  synthesis per patient.
- Improvement of the dose data collection module through PACS: Now, in addition to collecting dose reports in RDSR format and secondary capture, data can also be collected from the DICOM header in a more fluid and efficient way.

#### **SOME KEY NUMBERS SINCE 2015**

Number of modalities connected to RDM since 2015



#### Number of studies collected since 2015



Medsquare, 17 rue du Jura, 75013 Paris, FRANCE

W medsquare.com E contact@medsquare.com T + 33 (0)1 55 25 62 50

© 2018 Medsquare SAS – All rights reserved.

Medsquare SAS reserves the right to modify the design and specifications described in this document at any time without notice.