



**PHILIPS**

Healthcare



**Philips DoseWise Portal**

Radiation exposure management software

The first step in building an **effective radiation dose management strategy** is collecting complete and accurate data so you can analyze and measure your current performance.

The DoseWise Portal functionality is at the core of Philips' comprehensive dose management program. The web-based software solution automatically collects, measures, analyzes and reports radiation exposure data on an individual and group basis and allows for integration with real-time staff exposure measurements using DoseAware. It provides a streamlined, efficient way to review and manage data on radiation exposure to both patients and staff.

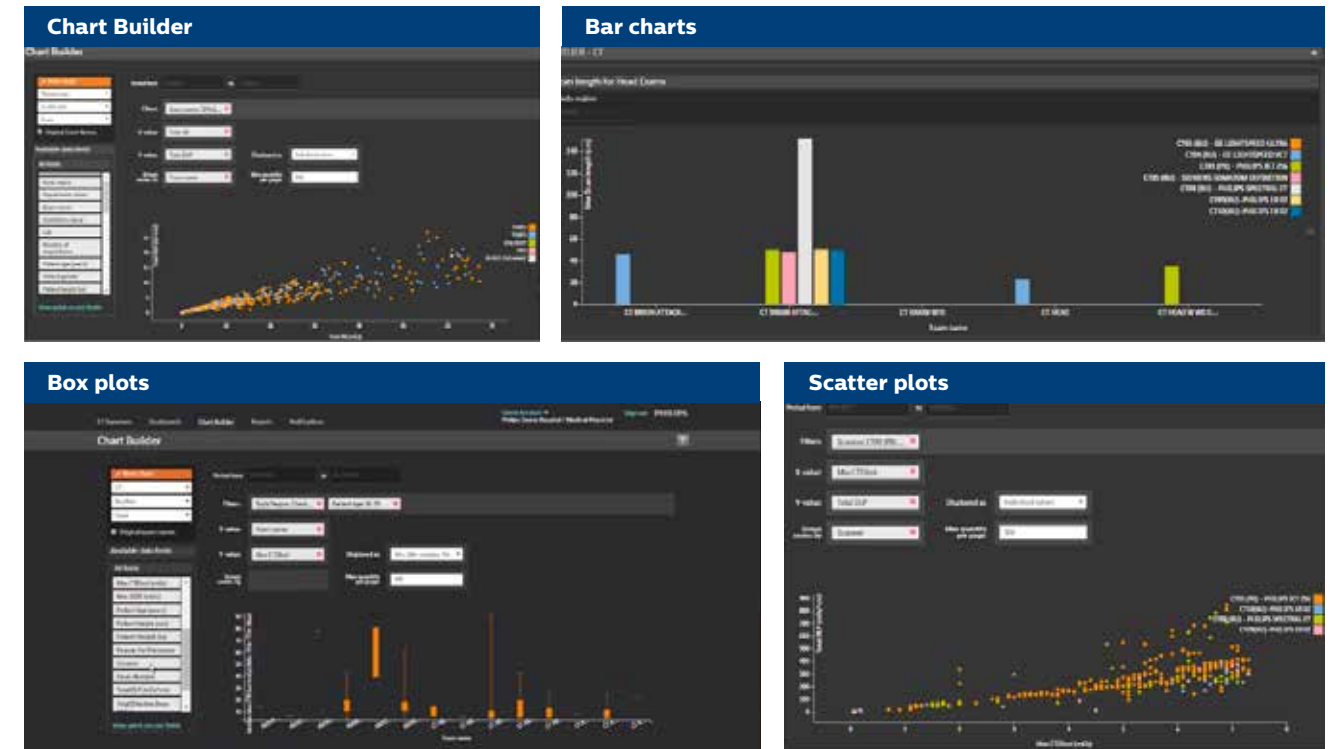
**By collecting and analyzing the right data you can:**

- ✓ Gain actionable insights
- ✓ Identify variations in practices, such as among technologists and scanners
- ✓ Benchmark your facility
- ✓ Standardize protocols using exposure data
- ✓ Set dose management goals
- ✓ Facilitate compliance with local dose management standards and regulations

## Key capabilities

### Tools

The DoseWise Portal provides advanced analytic tools, such as customizable dashboards and drill-downs for multi-vendor/multi-modality imaging systems. Chart Builder analytics creates bar charts, scatter plots, box plots and tables by simply dragging and dropping the DICOM field into a graph.



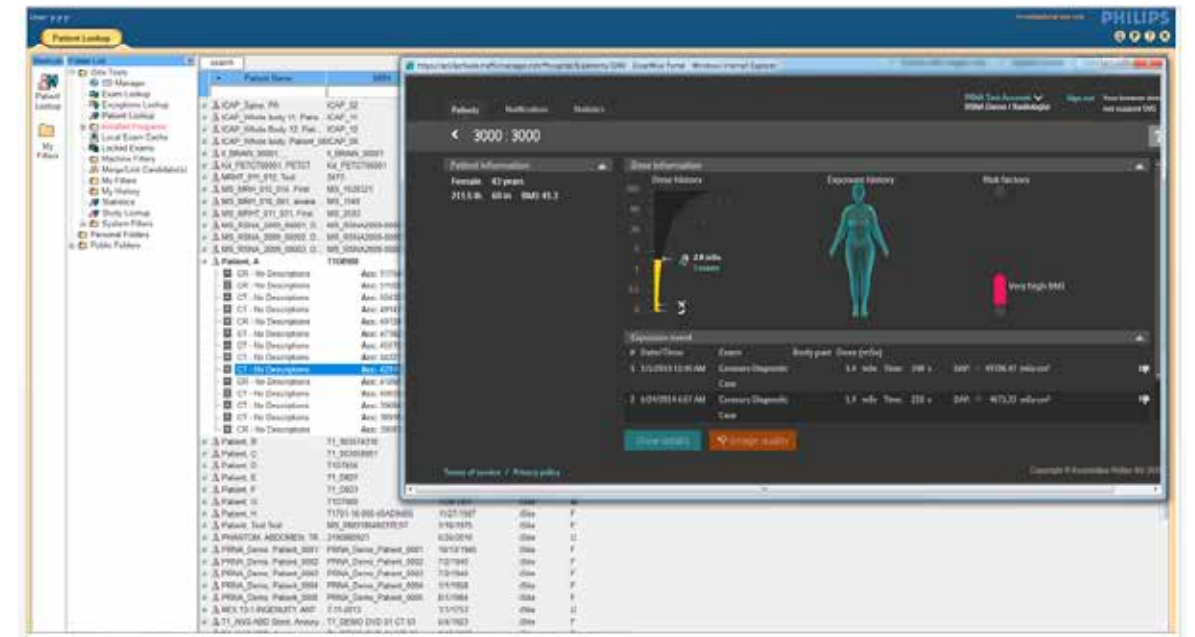




## Data

The DoseWise Portal captures all patient radiation events, not just those sent to PACS, and retrieves data directly from the imaging equipment. This prevents you from missing data that is discarded by a Technologist due to poor image quality. The radiation from these exams are factored toward a patient's exposure history.

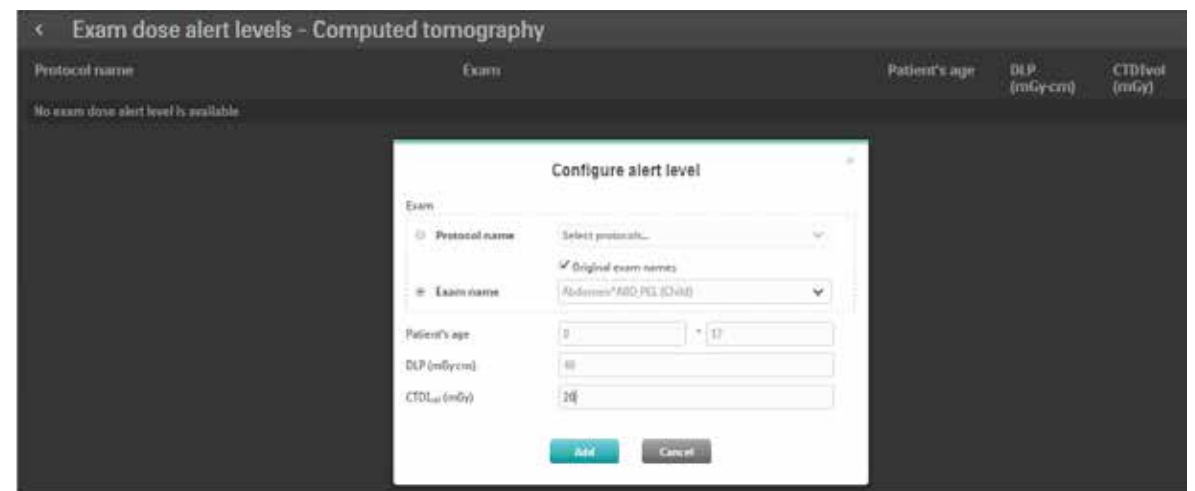
DoseWise Portal can map your CT exam naming convention to the RadLex® Playbook to standardize your exam names for external benchmarking.



## Alerts

The DoseWise Portal can create custom alerts based on your preference. Regardless of exam type, you can select your protocol or exam name and add alert triggers, such as:

- Patients age
- ESD
- AGD/exam
- DLP
- SSDE
- Staff dose level
- CTDIvol
- Compressed Breast Thickness
- DAP
- mAs





## Reports

In addition to offering a platform to create custom reports using Chart Builder, DoseWise Portal contains several standard reports:

- CT exams sorted by CTDIvol
- CT exams sorted by DLP
- CT volume by exam name
- CT volume by Reference Exam Name
- High utilization patients sorted by number of exams
- High utilization patients sorted by total effective dose
- Evaluate staff dose by procedure and lab

Summary Dashboards Chart Builder Reports Patients Notifications

Sps Hospital 1 / Medical Physicist Sign out PHILIPS

### Staff dose by procedure

Report date: 4/1/2014

# staff members to show: 10 # exam types to show: 10

Staff name (role)	# exams last week	Median last week (mSv)	Median comparison group	# exams YTD	Cumulative dose YTD (mSv)	Extrapolated annual dose (mSv)
ABCTAB (Doctor)			0.013	136	2.213	5.067
IHEIDK (Technician)	14	0.001	0.025	151	1.464	3.348
EEDEBO (Doctor)	3	0.006	0.013	20	1.083	2.478
LCOHUN (Nurse)	5	0.007	0.014	142	0.703	1.609
KEHQOQ (Physicist)	18	0	0.002	128	0.672	1.536
ABBAAB (Doctor)	29	0	0.013	194	0.519	1.188
AAAAAA (Doctor)	8	0	0.013	110	0.497	1.137
FBIHRA (Doctor)	15	0.002	0.013	177	0.468	1.072
ABFDLI (Nurse)	2	0.033	0.014	82	0.314	0.719
AOORIT (Doctor)	7	0.001	0.013	177	0.3	0.685

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## Benchmarking

Meeting the new radiation dose requirements for benchmarking requires standardizing your exam nomenclature and comparing your data against national registries or diagnostic reference levels.

The DoseWise Portal takes your CT exam names from your RIS and automatically maps them to the RadLex Playbook naming convention. This allows you to compare your exam data to industry benchmarks, such as the American College of Radiology's Dose Index Registry<sup>1</sup>.

<sup>1</sup> The ACR® DIR™ is an independent program. Participation and access to DIR data is not provided with DoseWise Portal. Healthcare facilities must register with ACR directly.

Exam name	Body region
AB/PEL	Abdomen, Pelvis
ABD PELVIS	Abdomen, Pelvis
ABD/PEL	Abdomen, Pelvis
ABD/PELVIS I	
ABDOMEN	
ABDOMEN*AAA (ADULT)	Abdomen, Pelvis
ABDOMEN*AAA_WO (ADULT)	Abdomen, Pelvis
ABDOMEN*ABD_PEL (CHILD)	Abdomen, Pelvis
ABDOMEN*ABD_PEL_ROUTINE (ADULT)	Abdomen, Pelvis
CTS	
ABDOMEN*ABD_PEL_WITH (ADULT)	
ABDOMEN*ABD_PEL_WITHOUT (ADULT)	Abdomen, Pelvis
CTS	

Exam name	Body region
CT ABDOMEN	Abdomen
CT ABDOMEN ADRENAL	Abdomen
CT ABDOMEN ADRENAL WO AND W CONTRAST	Abdomen
CT ABDOMEN MULTIPHASE	Abdomen
CT ABDOMEN PELVIS	Abdomen, Pelvis
CT ABDOMEN PELVIS (LARGE/OBESSE)	Abdomen, Pelvis
CT ABDOMEN PELVIS CONOLOGRAPHY	Abdomen, Pelvis
CT ABDOMEN PELVIS ENTEROGRAPY	Abdomen, Pelvis
CT ABDOMEN PELVIS WO AND W CONTRAST	Abdomen, Pelvis
CT ABDOMEN WO AND W CONTRAST	Abdomen
CT ANGIO ABDOMEN	Abdomen
CT ANGIO ABDOMEN KIDNEY	Abdomen
CT ANGIO ABDOMEN KIDNEY DONOR	Abdomen

The DoseWise Portal will map your current CT exam names from your RIS to the RadLex Playbook®

This allows you to benchmark yourself against peers and dose registries effectively.



# Benefits

## Technical

- Connect X-ray imaging equipment (regardless of vendor or equipment type) for monitoring radiation dose data
- A simple, compact and secure IT footprint behind your firewall
- Scalable; start with one modality (such as CT) and add more later
- Compatible with ACR Dose Index Registry
- Compatible with Nuance PowerScribe 360 dictation system
- Compatible with Philips IntelliBridge Enterprise HL7 engine
- Integrated with Philips IntelliSpace PACS
- Integrated with real-time dosimetry systems

## Operational

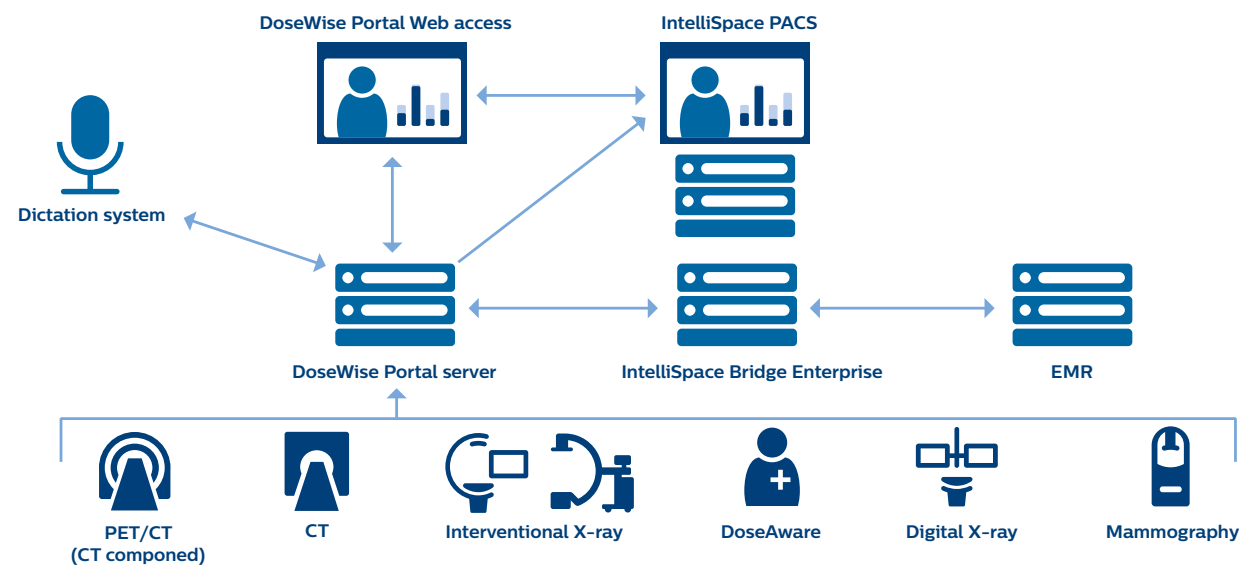
- Users can quickly access data most relevant to their function
- Detect previously-unseen trends in imaging equipment performance
- Set custom patient dose alert levels and receive scheduled notifications
- Custom graphs and dashboards facilitate compliance with regulatory requirements or quality projects

## Clinical

- Monitor staff exposure in the interventional suite in real-time
- Standardize CT exam names
- Set custom patient dose alert levels and receive scheduled notifications
- Custom graphs and dashboards facilitate compliance with regulatory requirements or quality improvement projects
- Compare exams to custom diagnostic reference levels
- Evaluate and manage variations in imaging exam ordering



## DoseWise and IntelliBridge Enterprise Integration (HL7)



## Compatibility with real-time dosimetry systems<sup>2</sup>

The entire family of DoseAware products and I2 (RaySafe® product) are compatible with DoseWise Portal. Combining patient and staff dose into one display allows for specific optimization of radiation protection in the interventional radiology suite.

<sup>2</sup> Compatibility with DoseWise Portal V2.2 and higher versions

## Compatibility with IntelliSpace PACS<sup>3</sup>

The DoseWise Portal is compatible with the Philips PACS system.

Clicking on a clinical image or the patient's name in the worklist launches the DoseWise Portal corresponding dosimetry page.

Clicking on a particular CT image and selecting "dose history" allows you to see the exposure data for that exam, or their exposure history by clicking on their name.

<sup>3</sup> IntelliSpace PACS V4.4.551 and DoseWise Portal V2.2 and higher versions

# CT dose management services

Philips works closely with West Physics® consultants to offer comprehensive, turn-key CT radiation dose optimization programs to facilitate compliance with dose management requirements and to support your patient safety initiatives.

West Physics uses data from your DoseWise Portal\* to optimize radiation dose based on deep expertise and experience in patient dosimetry.

### Tailored offerings

We offer three tiers of professional Medical Physicist support to help any size facility achieve their CT dose management goals. Service programs are designed to suit your unique needs and flexible to meet your staffing situation and budget.

<h2 style="margin: 0;">Premium</h2> <h3 style="margin: 0;">Dose Management Program</h3> <p style="font-size: 0.9em; margin: 5px 0 0 0;">A completely turn-key Joint Commission-compliant Dose Management Program, including equipment testing, dose tracking and analysis and oversight of all functions of the dose management program.</p>	<h2 style="margin: 0;">Full</h2> <h3 style="margin: 0;">Dose Management Program</h3> <p style="font-size: 0.9em; margin: 5px 0 0 0;">An efficient Joint Commission-compliant CT equipment testing and patient dose management solution, including management of your dose tracking software, with some elements of the dose management program managed yourself.</p>	<h2 style="margin: 0;">Basic</h2> <h3 style="margin: 0;">Dose Management Program</h3> <p style="font-size: 0.9em; margin: 5px 0 0 0;">For facilities that already have a medical physicist performing annual equipment testing services and need help properly setting up and managing your dose tracking software.</p>
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- Included in all programs:**
- Protocol reviews and optimization
  - Current performance evaluation against industry benchmarks
  - Tests of CT scanners for accuracy against the stated dose output
  - Establishing and set up of dose alert levels
  - Training for staff

**Services that consistently prove their value**  
 The Philips/West Physics offering helps your organization establish a compliant and effective dose management program. We assist with interventions that optimize radiation protection for patients in the long-term. And we conduct annual onsite assessments to help you stay on track.



### Program details

Three tiers of service	Premium	Full	Basic
CT dose testing for 4 commonly used CT protocols	✓	✓	✓
Set up individual dose tracking analysis & report system	✓	✓	✓
Join annual CT Protocol Review Committee Meeting	✓	✓	✓
Ongoing remote consultation (up to 8 hours annually per facility) by phone, email or video conference to answer questions, respond to dose alerts or help refine protocols	✓	✓	✓
Comparisons with national indexes, industry averages and benchmarks	✓	✓	
Performance evaluation to meet local/JC standards	✓	✓	
Review facility policies & procedures for compliance with accreditation standards; assist with changes	✓	✓	
On-site CT tech training for dose management; adjustments during the year with certificate	✓	✓	
Certification that facility exercises dose reduction mechanisms, meets standards and has been reviewed by experts	✓	✓	
Use patient data to set dose index ranges for 10 commonly used protocols and set up dose alert levels for the 10	✓		
Patient dose management education materials you can use/modify	✓		
JC and ACR-compliant CT protocol books with best practices examples	✓		
6-month on-site: review records and alert histories, refine dose action levels and, if possible, lower doses; conduct Q&A; training check-up	✓		
Annual dose management review to assess protocols and re-measure dose and image quality to compare to baseline	✓		
Protocol optimization for abnormal doses for 1 protocol in addition to the 4 commonly used CT protocols; set up dose alert levels for a total of 5 protocols		✓	
Set up dose alert levels for the 4 commonly used CT protocols			✓



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