



***HERCA Multi-Stakeholder meeting
1st April 2015***

**THE WAY FORWARD: AWARENESS AND
ADOPTION OF DOSE OPTIMIZATION
AND MANAGEMENT**

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TOPICS

- Multi-stakeholder - manufacturers' contribution
 - Training curricula
 - Types & Availability
 - Challenges
 - Tools
 - Features & Deployment
 - Challenges
 - Discussion on adoption



TRAINING CURRICULA

- Dose awareness
 - General dose training, awareness of risks, ALARA, pediatric considerations etc...
 - Availability:
 - In person with manufacturer representative (physicist, application specialist etc...); Online; Operator manual chapters
- System feature
 - How to use the system features, “buttonology”, features impact on dose,
 - Availability:
 - Typically 1-2 weeks “hands on” with application specialists on installation; Supplemental “hands on” (contact with manufacturer representative to arrange); Operator manual; Online options
- External options
 - EuroSafe Imaging
 - Image Gently
 - EMAN
 - IAEA



TRAINING CURRICULA

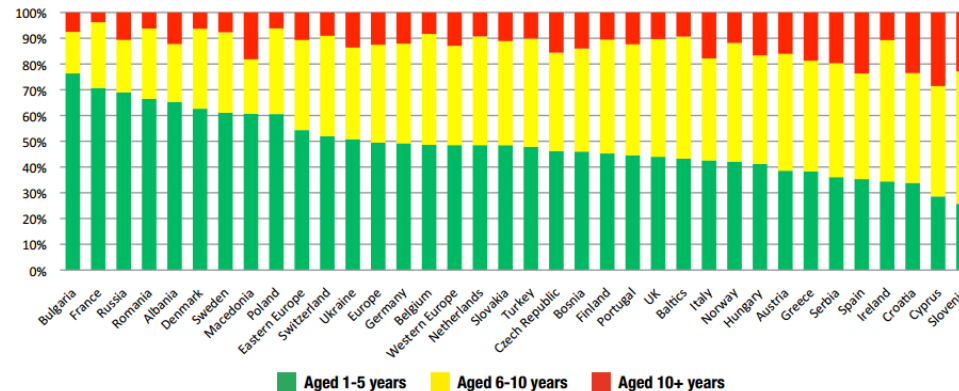
- Challenges for effective use/adoption, manufacturer's experience:
 - Time constraints for staff (techs/radiologists/physicists)
 - Adoption of new ideas/processes/protocols etc... by personnel
 - Cost of training for the facility
 - Staff turnover
 - Changing requirements/regulations



TOOLS

- Contemporary features/capabilities for dose management
 - Advanced protocols & guidance by patient size/age, clinical need etc...
 - Automatic exposure control (e.g. tube current modulation, scan initiation, kV selection)
 - Advanced reconstruction algorithms (e.g. adaptive, iterative, and model based)
 - Dose Management & Reporting
 - DICOM SR (IHE-REM, RDSR)
 - Dose metrics (CTDIvol, DLP, SSDE (future) etc...)
 - Dose Check (alert and notification values)
- ~50% of systems in installed base are > 6 years old (up from ~40% in 2008)

TABLE 2 Country overview age profile for COMPUTER TOMOGRAPHY in 2013





TOOLS

- Challenges for effective use/adoption, manufacturer's experience:
 - Cost of equipment upgrade/replacement for the facility
 - Technical limitations for upgrading older systems
 - Global implementation and standardization
 - Use of available features by staff in daily practice



DISCUSSION ON ADOPTION

- What are the hurdles stakeholders face in making contemporary training and tools part of daily practice?
 - How do clinicians use the training options?
 - How do clinicians implement new tools in daily practice?