Interventional Dose Assessment and Optimization Engagement

Optimize patient dose through review of imaging practices, dose knowledge assessment, and improved protocols.

You strive to acquire images of high diagnostic quality while limiting patients' radiation exposure. GE Healthcare can help with an Interventional Dose Assessment and Optimization Engagement.

A data-driven approach

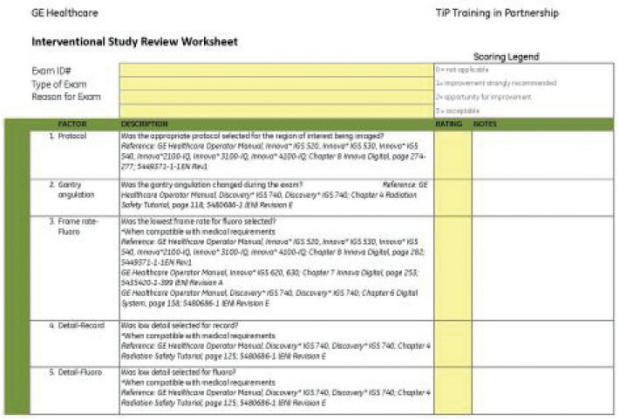
Our experienced Clinical Applications Specialists use data from your own imaging experience to help you review and optimize your patient dose levels. We assess your program, then work with you to identify the best approach to achieve your goals. Using a proven three-step process, our specialists analyze select studies to evaluate the use of your imaging systems, assess your staffs dose knowledge, and conduct an interactive protocol optimization session with your physicians and dose champions.

We evaluate and present the results to your Dose Management Team and recommend best practices to guide you going forward. We also recommend education offerings that may be beneficial based on the findings.

The Dose Assessment and Optimization Engagement three-step process

Study Review

Current studies are chosen to evaluate the use of the imaging system. By reviewing current studies, we identify improvement opportunities and help establish best practices with the physicians and technologists. Factors will be identified such as protocol usage, collimation, magnification, and use of InnovaSenseTM (if applicable). The information helps us point out best practices to your physicians and technologists.



GE Healthcare — TiP Training in Partnership

Interventional Study Review Worksheet

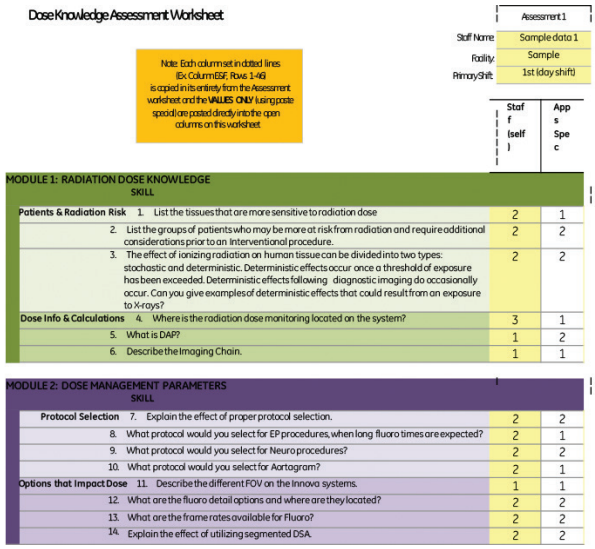
Scoring Legend

Exam ID#
Type of Exam
Reason for Exam

FACTOR	DESCRIPTION	RATING	NOTES
1. Protocol	Was the appropriate protocol selected for the region of interest being imaged? *Reference: GE Healthcare Operator Manual, Innova* IGS 520, Innova* IGS 530, Innova* IGS 540, Innova*2100-IQ, Innova* 3100-IQ, Innova* 4100-IQ; Chapter 8 Innova Digital, page 274-277; 5448573-1-1EN Rev1*		
2. Gantry angulation	Was the gantry angulation changed during the exam? *Reference: GE Healthcare Operator Manual, Discovery* IGS 740, Discovery* IGS 740; Chapter 4 Radiation Safety Tutorial, page 118; 5480686-1 (EN) Revision E*		
3. Frame rate-Fluoro	Was the lowest frame rate for fluoro selected? *When compatible with medical requirements *Reference: GE Healthcare Operator Manual, Innova* IGS 520, Innova* IGS 530, Innova* IGS 540, Innova*2100-IQ, Innova* 3100-IQ, Innova* 4100-IQ; Chapter 8 Innova Digital, page 282; 5448573-1-1EN Rev1 GE Healthcare Operator Manual, Innova* IGS 620, 630; Chapter 7 Innova Digital, page 253; 5435420-1-399 (EN) Revision A GE Healthcare Operator Manual, Discovery* IGS 740, Discovery* IGS 740; Chapter 6 Digital System, page 158; 5480686-1 (EN) Revision E*		
4. Detail-Record	Was low detail selected for record? *When compatible with medical requirements *Reference: GE Healthcare Operator Manual, Discovery* IGS 740, Discovery* IGS 740, Chapter 4 Radiation Safety Tutorial, page 125; 5480686-1 (EN) Revision E*		
5. Detail-Fluoro	Was low detail selected for fluoro? *When compatible with medical requirements *Reference: GE Healthcare Operator Manual, Discovery* IGS 740, Discovery* IGS 740, Chapter 4 Radiation Safety Tutorial, page 125; 5480686-1 (EN) Revision E*		

Dose Knowledge Assessment

Select staff members complete a self-assessment. The Clinical Applications Specialist interviews and assesses them on dose-related topics and features using a robust compilation of dose concepts. Results help identify staff strengths and development needs.



Dose Knowledge Assessment Worksheet

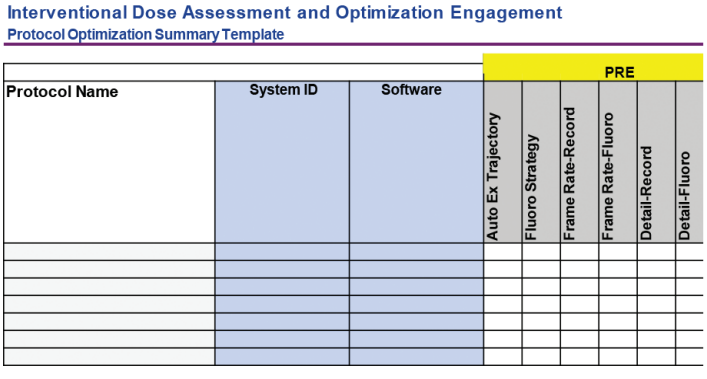
Assessment 1
Staff Name: Sample data 1
Facility: Sample
Primary Shift: 1st (day shift)

Note: Each column set in dotted lines (Ex: Column E&F, Rows 1-46) is copied in its entirety from the Assessment worksheet and the VALUES ONLY (using paste special) are pasted directly into the open columns on this worksheet.

		Staff (self)	Apps Spec
MODULE 1: RADIATION DOSE KNOWLEDGE SKILL			
Patients & Radiation Risk	1. List the tissues that are more sensitive to radiation dose	2	1
	2. List the groups of patients who may be more at risk from radiation and require additional considerations prior to an interventional procedure.	2	2
	3. The effect of ionizing radiation on human tissue can be divided into two types: stochastic and deterministic. Deterministic effects occur once a threshold of exposure has been exceeded. Deterministic effects following diagnostic imaging do occasionally occur. Can you give examples of deterministic effects that could result from an exposure to X-rays?	2	2
Dose Info & Calculations	4. Where is the radiation dose monitoring located on the system?	3	1
	5. What is DAP?	1	2
	6. Describe the Imaging Chain.	1	1
MODULE 2: DOSE MANAGEMENT PARAMETERS SKILL			
Protocol Selection	7. Explain the effect of proper protocol selection.	2	2
	8. What protocol would you select for EP procedures, when long fluoro times are expected?	2	1
	9. What protocol would you select for Neuro procedures?	2	2
	10. What protocol would you select for Aortogram?	2	1
Options that Impact Dose	11. Describe the different FOV on the Innova systems.	1	1
	12. What are the fluoro detail options and where are they located?	2	2
	13. What are the frame rates available for Fluoro?	2	2
	14. Explain the effect of utilizing segmented DSA.	2	2

Interactive Protocol Optimization

We review imaging system protocols with your technologists and physicians in charge of dose and protocols and incorporate findings from the two previous steps. We present options for optimizing protocols, helping you take full advantage of the GE imaging system technology, strike the right balance between image quality and dose, and adopt and apply best practices and dose savings.



Interventional Dose Assessment and Optimization Engagement

Protocol Optimization Summary Template

			PRE					
Protocol Name	**System ID**	**Software**	**Auto Ex Trajectory**	**Fluoro Strategy**	**Frame Rate-Record**	**Frame Rate-Fluoro**	**Detail-Record**	**Detail-Fluoro**

About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.
Our "healthymagination" vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world.

It's not business as usual.

Find out how GE Healthcare Services can help.

www.gehealthcare.com/services

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