

DOSIMETRY
SKILLS CAPABILITIES

IDENTIFYING INFORMATION

Last Name	First Name	Middle Initial
Previous Surname	Social Security Number	Date of Birth

CLINICAL SKILLS

	Competency					Competency			
	None	Limited	Proficient	Extensive		None	Limited	Proficient	Extensive
RADIATION THERAPY PHYSICS					BRACHYTHERAPY PROCEDURES (cont.)				
Physical property of atoms and nuclei					Application insertion				
Basic nuclear transformations					Implant localization and stimulation				
Medical linear accelerators (specify types/brands)					Treatment prescription				
1.					Implant design and evaluation				
2.					Localization				
3.					Computer treatment planning				
4.					Manual verification of computer				
5.					Patient preparation, setup, and treatment				
Interaction of high energy electrons & x-rays with matter					Post treatment quality assurance				
Photoelectric effect					Emergency Procedures for HDR				
Compton scatter					Routine emergency equipment				
Pair production					Physical plant emergencies				
Physical properties of dose and exposure					Minor and major emergencies				
Dosimetry equipment					Intravascular brachytherapy				
Ion chambers					Prostate seed implants				
Thermoluminescent Dosimetry					I-125 seeds				
TG-51 (calibration protocol)					P-103 seeds				
Radioactive isotopes					Ommaya reservoir				
Electron beam therapy					Other:				
IMRT (intensity modulated radiation therapy)									
Beam modifiers					TREATMENT PLANNING				
Physical wedges					Auxiliary devices (digitizer, plotter)				
Dynamic wedges					Software (what types?):				
Blocks					1.				
3-D conformal radiation therapy					2.				
Basic principals and applications:					Quality Assurance				
CT scan (specify brands)					SPECIAL TECHNIQUES				
1.					TBI (total body irradiation)				
2.					Electron arc therapy				
MRI machine					Intraoperative electron therapy				
PET scan (specify brands)					TSI (total skin irradiation)				
1.					Other:				
2.									
BRACHYTHERAPY PROCEDURES					SRS (stereotactic radiosurgery)				
Systemic errors					Beam data acquisition for small fields				
Random errors					Treatment planning computer data input				
Treatment documentation, procedure checklists & forms					SRT (Stereotactic radiotherapy)				
Application preparation					Other:				

	Competency					Competency			
	None	Limited	Proficient	Extensive		None	Limited	Proficient	Extensive
STANDARDS FOR TREATMENT PLANS/PROTOCOLS					TREATMENT AIDS (cont)				
Ensures accurate dose					Gonadal shields				
Ensures proper patient positioning					Eye shields				
Ensures proper machine settings					Internal shields				
Deviation of normal parameters for equip.					In vivo Dosimetry				
TREATMENT AIDS					TLD (Thermoluminescent Dosimeters) chips				
Field shaping					Patient positioning				
Custom blocking					Immobilization devices				
Multileaf collimators:					Anatomic landmarks				
Half-value thick blocks					Other:				

Name Printed
Signature
Date