

## Radiation Therapy Competencies

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## Agenda

- What does it mean to become and remain competent?
- Maintenance of Certification for RTT's
- Competency Opportunities
- Why are competencies important in radiation therapy
- Developing a competency program
- Panelists

## Competence

- Ability to perform a job properly
- Combination of knowledge, skills and behavior used to perform a defined task
- Maintenance of ARRT registration **AND** ongoing acquisition of necessary skills

## Certification

- **Initial**
  - Shows past accomplishments
  - Snapshot in time
- **Maintenance**
  - Purpose:
    - ✦ To sustain a level of expertise
    - ✦ Remain aware of changes and advances in radiation therapy practice

## Maintaining Certification

- Documents ongoing qualification and competence
- Patients expect *and deserve* healthcare providers who remain competent
- Technology advancements are evolving at an increasingly rapid rate
  - Old expectation:
    - ✦ "once certified, forever qualified"
  - New expectation
    - ✦ "Once certified forever growing, learning and developing in the profession"

## Maintaining Certification

- To maintain certification, ARRT-registered radiation therapists are required to complete 24 hours of continuing education in approved activities every 2 years
  - Directed readings
  - Higher education
  - Society Meetings (RTOW, ASRT, ASTRO, etc)

### ARRT Continuing Qualification Requirements

- CQR
  - Identify and remediate where knowledge and skills may not meet entry-level qualification standards
- Certifications earned post 1/1/11
- 10 year certification – complete CQR in final 3 years of term
- Opportunity to demonstrate up-to-date knowledge and skills
- 3 components
  - Professional Profile
    - Achievements related to education, work, special skills and professional development
    - Shows how RTT has maintained qualification
  - Self-assessment process
    - Not a test – **Online skills assessment**
    - Evaluates strengths and weaknesses in knowledge and skills
    - Identifies targeted learning opportunities
  - Completing identified CE activities

<https://www.rrt.org/Registration/CQR>

### Competency Opportunities

- Workplace specific competencies
  - In addition to CQR
  - In-person assessment
  - Specific to technology/workflows/practices at site
  - Program developed by site
  - Opportunity for staff to document knowledge
- Purpose:
  - Sustain a level of expertise
  - Remain aware of change and advances in radiation therapy

### Competency Opportunities

- New staff
- Ongoing for current staff
- New technology/procedures/software

### Workplace Specific Competencies

- Considerations
  - Skills needed to operate equipment may not have been taught during initial training/education
  - Time constraints
    - Revenue generating vs non-revenue generating activities
  - Cost of incompetence

### Benefits

- Continual professional development
- Gain confidence
- Gain personal insight to changes in radiation oncology
- Validate and advance knowledge and skills
- Re-energize passion and enjoyment of career

### New Equipment & Technology

- Need to ensure current RTT's are competent on new technology/procedure **prior to implementation**
  - New treatment machine
  - New CT Sim
  - New Software
  - Gating
  - 4D CT
  - SBRT
  - Total Body
  - IGRT (CBCT, CT on rails, etc.)

### Partner with Vendor

- Ensure materials are developed and available prior to implementation
- Vendor has a responsibility to ensure proper training

### Goal

- Competent therapists
  - Therapists who are thoroughly and completely trained on equipment/procedures
  - Prepared to provide safe care
  - Prepared to provide quality care
  - Prepared to provide the care patients deserve

### Key Points

- Competency assessment = continuing education, *not a test!*
- Continuing education **must** be an ongoing process, **especially in radiation therapy**
- Maintaining and enhancing competency is inherent in the radiation therapy professional performance standards
- In-person assessment is different than online assessment

### Why

- Safety
- Documentation that staff are competent
- Ongoing education
- Promotes professionalism
- Enhance perception of professionalism by lifelong learning
- Sets workplace standards
- Provides opportunity for staff to grow

### Develop a Program

- Identify skills to be assessed
  - New Staff
  - Ongoing
  - New technology/software
- Frequency
- Identify a proctor
- Promote peer to peer assessment
- Clearly identify the process and educate all staff
- Encourage ongoing education, specifically related to radiation therapy

## *Radiation Therapist Competencies*

RTOW Spring Meeting 2013

### *What's Involved?*

- Peer to Peer review
- Patients Point of View
- Mistakes or Failed Comps?



### *How Often are Competencies Performed?*

- Assessments are performed annually per departmental policy
- Some assessments are not applicable for staff.



### *Types of Competencies*

- Machine Warm up
- CT Simulations
- Treatment & Confirmation Simulations



### *Treatment Competencies*

- CT on Rails with Confirmation Simulation
- Siemens Tx + Confirmation Simulation with IGRT
- Elekta Infinity Tx + Confirmation Simulaiton & IGRT
- Tomotherapy Tx + Confirmation Simulation
- Emergency Sim & Treat on Linac
- TBI
- TSI
- Superficial Skin Treatment
- Craniospinal
- SBRT
- Gating



### *CT Simulation Competencies*

- IV Contrast
- Multiple Iso-centers
- Craniospinal
- 4D, Gating / Breast Simulation
- TBI



### *Who Proctors the Annual Competencies?*

- Tiered responsibility- Lead therapists proctor most competencies
- Peer Assessment
- Physics Assessment
- Chief Therapist Involvement



FROEDTERT/MEDICAL COLLEGE RADIATION ONCOLOGY RADIATION THERAPIST CLINICAL COMPETENCY ASSESSMENT		
PROCEDURE: Tomotherapy IGRT Conformity Simulation + Treatment		
Staff Name / Year		
Evaluator's Signature		
Action	Performed	Needs Assistance
<b>► Prior to Confirmation Simulation</b>		
Verifies dosimetry documentation is equal to plan information		
<b>► Patient Relationship</b>		
Exhibits professionalism and instills confidence through verbal and nonverbal interaction with patients		
Applies the 5 AIDET fundamentals of service		
<b>► Patient Verification</b>		
Verifies and confirms patient identification as outlined in department guidelines		
Performs and documents "time-out" in patient's chart within the OMS		
<b>► Patient Alignment and Set Up</b>		
Places appropriate patient position and immobilization devices in accordance with sim set-up instructions		
Follows instructions regarding shifts and measurements as outlined in patient's Oncology Management System chart		
Accurately aligns patient for acquisition of MVCT Scan		
Accounts for treatment accessories such as bolus		
Simulation shifts are applied and updated within Patient's Tomotherapy plan		
Remarks the patient after IGRT adjustments if applicable		
<b>► MVCT Registration / Treatment</b>		
Sets appropriate scan parameters as outlined in patient's Oncology Management System chart		
Verifies the correct patient information corresponds to the chosen plan		
Follows tomotherapy's recommendation for patient registration		
Runs MVCT with planning scan images according to physician's orders		
Monitors patient during treatment delivery		
Reacts appropriately to termination and interrupt faults		
<b>► Documentation</b>		
Documents daily treatment information accurately and appropriately in patient's Oncology Management System chart		
Records necessary documentation in patient's Electronic Medical Record		
Takes appropriate field photos		
Ensures delivered dose is recorded accurately		
Ensures appropriate billing charges		
<b>► Safety</b>		
Applies rules of radiation safety as outlined in departmental policies and procedures		

## New Equipment Competencies



- Work together with vendor representatives to ensure successful implementation and training
- Applications trainers will develop, implement & provide checklists for post-assessment competency of the Radiation Therapists' skills
- Follow-up Meetings are Scheduled

## Personal Experience

- Build a culture where ongoing peer review is supported
- Encourage staff to keep up to date on competencies
- Take advantage of on-site vendor training with new emerging treatment modalities
- Ask questions, don't be afraid to learn.
- Request checklists from applications trainers to master required expectations
- Therapist rotations are important



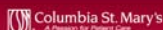
## Competencies

Columbia St. Mary's  
Radiation Oncology  
Spring RTOW 2013



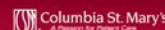
## Background

- Two campuses
  - Water Tower Medical Center Campus
  - Mequon Campus
- Therapy, Dosimetry, Nursing, & Front Desk rotations



## Development of Competencies

- The Joint Commission
  - The very beginning
  - Very Basic
- Tied to employee evaluations
  - Very technical



## Always Evolving

- Current Employee Evaluations
  - Less technical
  - Transitions/Project Symphony
- Looking to the Future/Changes
  - Billing expertise
  - More Varis/Aria focused

The screenshot shows a Microsoft Word document with the following content:

**CSM RADIATION ONCOLOGY**  
**CORE SKILL COMPETENCY CHECKLIST**  
**FOR RADIATION THERAPIST**

Name: \_\_\_\_\_

Position: \_\_\_\_\_

ESSENTIAL SKILL	DATE	INITIAL	COMMENT
<b>UNIT COMPS BY SITE</b>			
Chem. Petis			
HLN- Brain			
Brain (old target)			
Leptomeningeal			
Electron I-Tag Setup			
<b>IXI COMPS</b>			
TN, Uter Vagina			
COB Vagina			
DCS Vagina			
Cardiogram CT			
Block Curving			
EMR viewing tooling			

The screenshot shows a Microsoft Word document with the following content:

ESSENTIAL SKILL	DATE	INITIAL	COMMENT
<b>SIM SKILLS BY SITE</b>			
Long with Respiratory Gating			
Prostate with IMRT/IGRT			
HLN- with IG			
Brain			
Brain (old target)			
Leptomeningeal			
Electron Skin Setup			
Wedge Creation (rectal, sigmoid, bladder, gastric, etc.)			
<b>SPECIAL TREATMENT PROCEDURES (SMTREAT)</b>			
SBRT			
SRS			
IGIM			
<b>REQUIREMENTS IN SERVICES</b>			
MSI Calculations (annual)			
Emergency Unit Simulation (annual)			
Radiation Safety (annual)			
TRC Safety (annual)			
Mandatory Education (annual)			
ARRT Registration (annual)			
Body Mechanics (annual)			
CPRE (every 2 years)			

## “Comp Out” Time

- The Process
  - Treatment unit comps
  - Special procedures
  - In-services
- Proctors
  - Depends on type of comp

## “Comp Out” Time –Cont.

- Patient experience
- Concerns
  - Culture at CSM
  - Solid orientation & training
- Feedback
  - Open to change & Rotations
  - Mistakes or failures

## New Technology

- New Equipment
  - Education contracted
  - Vendor & On-Site training/Off-Site training
  - Email lists
  - Physics & MD support


## New Technology-Cont.

- We determine current & future comps
- Policy & Procedures/Rad. Onc. WIKI
- Ever evolving




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A Passion for Patient Care.

## Questions???



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## Thank You!



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