Learning the Ropes: Clinical Immersion in the First Month of Residency

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Goals for the First Month

- Didactic:
  - Equipment
  - Workflow

- Soft Skills
  - Get to know departmental staff
  - Staff gets to know resident
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<th>Mentor</th>
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| SD     | Clinic Orientation | ☐ Attend all orientation lectures  
☐ Follow three patients (H&N, breast, prostate) longitudinally from consult through treatment  
☐ Observe Simulation/HDR (1 week)  
☐ Observe Elekta (1 week)  
☐ Observe Tomo/Dosimetry (1 week) |
|        | QA Orientation | ☐ Attend radiation safety training. Sign-off on training topics.  
☐ Credential Radiation Safety read-and-sign  
☐ Attend engineering introduction to treatment machines  
☐ Attend machine operation and safety inservice  
☐ Observe machine warm-up and daily (morning) QAs on all treatment and simulation units: Agility, Integrity, Tomo, HDR, Gamma Knife, CT-sim. Coordinate with the appropriate therapists.  
☐ Complete on-line Mandatory Annual Training  
☐ Attend new employee orientation |
|        | Required Reading | ☐ AAPM TG109 - Code of Ethics (4th week)  
☐ ASTRO Safety is No Accident (3rd week)  
☐ AAPM MPPG on Supervision (2nd week) |
|        | Didactics      | ☐ Review basic principles in radiation therapy chapter in Perez & Brady  
☐ Review simulation P&Ps  
☐ Clinical Lectures  
☐ Clinical Conferences |
Clinic Orientation: The “axial” slice of workflow
Clinic Orientation Week 1: Administrative

- 2 Days of Orientation jointly with Physician Residents
  - Shared physics/RadOnc residency room
  - Establish social ties with physician residents
- 1 Day for mandatory training (HIPAA etc.)
- 1 Day for departmental training (engineering intro, linac safety, radiation safety etc.)
Clinic Orientation Week 2: Simulation

- Meet RTTs on simulator
- “Pretend here is your new therapy student”
- Simulation connects patients from physician to treatment
- Introduces the human aspect to the chart
- Appreciate the challenges of a good setup
- Learn about good bedside manners
- Communication between care team members
Clinic Orientation Week 3: Elekta

- Meet RTTs on machines
- Learn about reproducibility of setup from Sim to treatment
- Relationship between RTT and patient
- Feedback loop from machine to attending
- Start recognizing types of treatments (breast, prostate, H&N)
- Get a feel for workflow, typical issues (e.g. Monday chemo patients etc.)
Clinic Orientation Week 4: Tomo/Dosimetry

• Meet Tomo RTT team
• Compare/contrast Tomo vs. Elekta workflow
• Dosimetry
  • Meet dosimetrist
  • Workflow
  • Communication between dosimetrist, resident, attending, physics
Clinic Orientation: The “longitudinal” slice of workflow
Site-Specific Clinic Rotation

- In parallel to machine observation
- Three high-volume sites:
  - Breast
  - H&N
  - Lung
- Strengthens tie with three of the physician residents
QA orientation
QA orientation: Daily warm-ups

- Work with morning RTT, Clin Eng, Physics
- Why it is important to leave machines in a good state at night!
- How to communicate issues found at night and actions taken to morning warm-up

Machine down. Clin Eng/Chief RTT notified. No ETA for repair. Resident, 8/2 10 pm
Other Thoughts
Shared Workspace Physician/Physics Residents

- Larger peer group means better social support
  - Finding your best buddy to weather the storms
  - Can de-escalate tension between the two physics residents
  - Diversity of background and experience
- Mutual understanding between professions
- Mutual teaching of didactics