APEx® Standards Guide for Radiopharmaceutical Therapy Accreditation

ASTRO
AMERICAN SOCIETY FOR RADIATION ONCOLOGY

APEx Evidence Indicators (EI)

Standard 1: Patient Evaluation, Care Coordination and Follow-up

EI 1.1 – Comprehensive patient evaluation	A comprehensive patient evaluation prior to simulation/pre-treatment activities must include documentation of the following elements:
	1.1.1: Patient history. **1.1.2:** Cardiac implantable electronic device (CIED) status. **1.1.3:** Pregnancy status. Exclusions: Male patient, female patient with either a history of hysterectomy, age 55 years and older, a documented history of menopause or negative onset of menarche. **1.1.4:** Allergies, including to contrast. **1.1.5:** Previous oncologic treatment. **1.1.6:** Physical examination findings. **1.1.7:** Diagnostic information (e.g., labs, pathology, imaging studies). **1.1.8:** Staging or documentation of metastatic disease, when applicable. Exclusion: Diagnosis of a benign disease. **1.1.9:** Pain quantification. **1.1.10:** Pain management plan, when applicable. Exclusion: Pain intensity assessment indicates no pain or that a pain management plan is not applicable. **1.1.11:** Initial plan or recommendation of care. **1.1.12:** Discussion of patient treatment goals. **1.1.13:** Physician's signature and date.
Requirements	1.1 must include documentation within the medical record indicating that the physician reviewed each of the specified components before any pre-treatment procedure. Examples of compliant documentation would include: • Positive finding (e.g., allergic to contrast, prior oncologic treatment). • Pertinent negative (e.g., no known allergies, no current medications). • Confirmation of review (e.g., review of qualifying PET/CT imaging as it pertains to treatment selection and anticipated treatment response). It is appropriate for some 1.1 criteria to be documented by other team members. In those cases, there must be documentation by the physician that the information was reviewed.
Recommendations/Notes	For 1.1.1, a patient history should include prior systemic or oncologic therapies when relevant. For 1.1.9, per Pain Intensity Quantified - NQF 0384, "Pain intensity should be quantified using a standard instrument, such as a 0-10 numerical rating scale, visual analog scale, a categorical scale, or the pictorial scale." 1.1.12 should indicate a discussion of treatment intent, i.e., curative, palliative or supportive treatment goals with the patient.

EI 1.3 – Sending prior treatment details to other providers	The ROP's policy on sending/sharing prior treatment details with new providers on request includes:
	1.3.1: A process for sending prior treatment details. **1.3.2:** A timeline for sending prior treatment details.
Requirements	The documented policy must include a specified timeline and indicate the responsible staff member who gathers prior treatment information and sends to other providers requesting the information from your practice.
Recommendations/Notes	Treatment details should include treatment summary (EI 1.5) and pertinent dosimetric plan information. The preferred method of data transfer for external beam is a DICOM file from the treatment planning system. RPT dose data is best shared by prescription and progress notes.

EI 1.4 – Direct patient evaluation	The physician performs a direct patient evaluation, on-treatment visit (OTV), as part of treatment management, and includes documentation of a:
	1.4.1: Review of cumulative interim dose/activity delivered to date. **1.4.2:** Patient assessment (labs, physical, social, etc.). **1.4.3:** Physician's signature and date.
Requirements	1.4 must include documentation in the medical record that the physician provided a direct evaluation of the patient.
Recommendations/Notes	The direct patient evaluation consists of a clinical assessment of the patient combined with a review of the pertinent dosimetric data, laboratory findings, or relevant imaging data to assess that treatment is progressing as intended. The final OTV and post-treatment summary can be the same note, if the physician conducts a direct patient assessment on the last day of treatment.

EI 1.5 – End-of-treatment summary	An end-of-treatment summary by the physician must include documentation of the:
	1.5.1: Site of disease/treatment (including laterality, as appropriate). **1.5.2:** Treatment modality/technique. **1.5.3:** Dose/activity per treatment or number of fractions. **1.5.4:** Cumulative total dose/activity delivered. **1.5.5:** Treatment date range (start and end dates, including information on any significant delays). **1.5.6:** Assessment of tolerance to treatment and, if appropriate, an assessment of disease response to treatment. **1.5.7:** Concurrent systemic therapy. **1.5.8:** Pain management plan for patients with unresolved pain. Exclusion: Patient does not have unresolved pain. **1.5.9:** Follow-up plan. **1.5.10:** Physician's signature and date within one month of the patient's completion of care.
Requirements	Each criterion must be addressed and documented by the physician unless an exclusion applies. For 1.5.2, the route of administration should be documented. For 1.5.4, the agent and activity per fraction must be documented. For 1.5.5, administration dates of the radiopharmaceutical must be documented.
Recommendations/Notes	The final OTV and end-of-treatment summary can be the same note, if the physician visually assessed the patient on the last day of treatment.

EI 1.6 – Care coordination & communication	The practice staff supports care coordination by sharing necessary documents to other providers, as appropriate, including:
	1.6.1: The comprehensive patient evaluation within one month of the initial consultation. **1.6.2:** The post-treatment summary within one month of treatment completion.
Requirements	The date of transmission must be documented for each patient in the medical record by the person performing the transmission or a confirmation from an OIS or electronic medical record. Receiving providers must be actively notified that the document is available for their review. Passive availability of the document without notification, such as uploading the document within a shared medical record, does not meet the requirement.
Recommendations/Notes	Active notification can be achieved through alerts in the medical records, copy of a successful fax saved to the medical record or email notifications. Self-referred patients who indicate a preference for no correspondence with other providers should have this information documented within the medical record.

EI 1.7 – Post-treatment care coordination	The practice staff supports patient care through follow up.
	1.7.1: Patient follow-up occurs after treatment completion. Exclusion: Patients who die within four months of treatment completion without a follow-up appointment.
Requirements	Practice staff must include evidence that a reasonable effort is made to schedule and complete follow-up appointments.
Recommendations/Notes	Follow-up may be documented as an in-person visit, telephone or telemedicine encounter, or other contact acceptable to the patient. Follow-up should be with the physician, or non-physician provider. Documentation that follow-up is not indicated, including the reason it is not indicated (e.g., enrollment in hospice, continued management of disease to be done by another provider, etc.) is compliant. If a patient does not show for follow-up care, this should be documented in the medical record along with reasonable attempts to reschedule the follow-up visit. Evidence can include notes of attempted communication, list of canceled appointments with reasons from patient, etc.

Standard 2: Treatment Planning

EI 2.2 –Treatment planning directive	Treatment planning directive.
	2.2.1: A documented patient-specific treatment planning directive/note/order guides staff on relevant calculation requirements and defines target(s) goals and normal tissue constraints for dosimetric treatment plans.
Requirements	Treatment planning directive must be documented in each patient's medical record before preparation begins, must be patient specific and must provide sufficient information to guide qualified personnel for treatment planning purposes. A radiopharmaceutical therapy written directive must include guidance on any concurrent infusions (e.g., normal saline, amino acids), imaging support and intention for monitoring drug distribution and responses.
Recommendations/Notes	The planning directive and prescription (EI 2.3) can be the same document if they show evolution or review over time with a date/time stamp (e.g., draft of intent becomes final version of treatment prescription within the medical record).

EI 2.3 – Treatment prescription	The formal treatment prescription includes: **2.3.1:** Anatomic treatment/disease site; including laterality where applicable. **2.3.2:** Treatment modality/technique. **2.3.3:** Energy or radioisotope used. **2.3.4:** Total dose or activity. **2.3.5:** Dose (or activity) per treatment/fraction. **2.3.6**: Number of treatments/fractions. **2.3.7:** Frequency of treatment. Exclusion: Single fraction/treatment. **2.3.8:** Normalization/calculation/dose assay method. **2.3.9:** Imaging guidance. Exclusion: Treatments that do not require localizing imaging. **2.3.10:** Physician's signature and date before initiation of treatment.
Requirements	All items (except 2.3.9) must be documented within the treatment prescription and signed by the physician before treatment begins.
Recommendations/Notes	For 2.3.2, documentation needs to specify route of administration. For 2.3.9, mid-treatment or post-infusion imaging requirements should be documented. Imaging orders can be documented separately within the medical record (e.g., an imaging order form, pretreatment written directive) if it is consistently documented. The written directive (2.1.1) and prescription documentation can be the same document if they show evolution or review over time using a date/time stamp (e.g., draft becomes final version of treatment prescription within the medical record).

EI 3.1 – Electronic data transfer integrity	Patient verification during data transfer includes:
	3.1.1: Verifying the patient identity at each point in which patient-specific data is electronically transferred from one information system to another or when manually entered. **3.1.2:** Verifying the patient identity using two patient-specific identifiers. *
Requirements	Description of policy explaining that patient data is verified during every data transfer within the practice. This could include: • Manual entry from one system to another. • Importing data from another health system (hospital to free-standing practice). • Data transferred between different vendor systems.
Recommendations/Notes	3.1 refers to data transferred between information systems and should not be confused with the patient timeout process. Patient information should be verified even when data is automatically transferred as part of a single system to ensure the correct patient was pushed (e.g., John Smith, DOB 1/1/1952 compared to John Smith, DOB 1/25/1978). Compliance for electronic transfer of data can include a patient-specific quality checklist or note within the medical record completed at time of import by staff.

EI 3.2 – Patient timeout	For each patient, a timeout is performed prior to all procedures and treatments, which is then documented in the medical record and includes:
	3.2.1: Verification of patient identity using at least two patient-specific identifiers. **3.2.2:** Verification of patient treatment site, when applicable. Exclusion: Procedures not directed at the treatment site (e.g., method of delivery is by injection or ingestion). **3.2.3:** Verification of correct patient positioning, when applicable. Exclusion: Procedures for which patient position is not a critical component (e.g., LDR, RPT, IORT, etc.). **3.2.4**: Verification of correct treatment delivery (e.g., RPT agent, moded up treatment plan)
Requirements	Patient timeout components must be completed before every procedure with each patient. Documentation in the patient's medical record must show a review of all evaluation criteria unless an exclusion applies.
Recommendations/Notes	Compliance for 3.2 can be demonstrated on a checklist for each patient, or a policy of what is evaluated with a timestamp of completion in the medical record (see sample documentation).

EI 3.3 – Standard operating procedures	The practice has comprehensive SOPs for all appropriate techniques and modalities, including:
	3.3.9: Radiopharmaceutical therapy (RPT). Exclusion: Modalities and techniques are only assessed when included in the ROP's APEx application.
Requirements	Each SOP must specify: • Procedural steps. • Responsible professional discipline(s) for each activity associated with receipt, preparation, and delivery of radioactive material (radiation oncology staff, nuclear medicine staff, etc.), • QA activities, and • Supervision requirements, as applicable. Supervision requirements differ per technique and modality. Detailed requirements can be found in the supervision table at the end of this guide.

Recommendations/Notes	• Document should account for all staff involved in planning and delivery, as applicable, examples may include:
	  ○ AU: prescription, approvals and supervision.
	  ○ MP: calculation check, preparations, residual activity check.
	  ○ RT or NMT: chart checks, setup and delivery of treatment, imaging requirements.
	  ○ Nurse: chart checks, patient setup, dose delivery.
	
	• Documented QA activities associated with the specific modality treatment delivery could include:
	  ○ Independent dose check.
	  ○ Patient-specific QA.
	  ○ Physicist plan check.
	  ○ Source QA.
	  ○ Survey of dose to check activity.

EI 3.4 – Patient-specific treatment plan checks	For non-emergent cases, qualified staff verify the following elements:
	3.4.1: A check of the treatment plan/calculation completed before treatment commences. **3.4.3:** Independent check of the dose before treatment commences.
Requirements	All patient-specific plan checks must be performed under the direction of a QMP. Documentation must be demonstrated using a method such as a checklist, task or other item for each patient, or a policy of what is evaluated when just an electronic timestamp of completion in the medical record is completed.
Recommendations/Notes	N/A
EI 3.6 – EOT chart checks	End-of-treatment chart checks.
	3.6.1: For each patient, a QMP performs an end-of-treatment review of the medical record within one week of the completion of treatment completion.
Requirements	Compliance must be demonstrated using a documented checklist for each patient, or a policy of what is evaluated with an electronic timestamp of completion in the medical record.
Recommendations/Notes	N/A

Standard 4: Staff Roles and Responsibilities

EI 4.1 – Job descriptions	The practice has a job description, for each profession, that lists scope and responsibilities within the clinical practice, supervisory role or who they report to, certification and/or eligibility and, where applicable, state licensure requirements.
	4.1.1: Authorized User. **4.1.2:** Medical physicist. **4.1.3:** Treatment delivery personnel (e.g., NMT, RTT, etc.) Exclusion: ROPs that do not employ radiation therapists. **4.1.5:** Radiation oncology nurse. Exclusion: ROPs that do not employ radiation oncology nurses. **4.1.9:** Radiation Safety Officer. *
Requirements	Documents must: • define the scope and responsibilities of the discipline within the practice. • define the supervisory role of the discipline in relation to other staff or who they report to. • define the appropriate state licensure (if applicable) and experience/knowledge required. • define board certification eligibility requirements.
Recommendations/Notes	All staff should have licensure based on state requirements.

Standard 5: Qualifications and Ongoing Training of Staff

EI 5.1 – Board eligibility requirements	For each professional discipline, the practice defines:
	5.1.1: A process for individuals who are eligible, but were not board-certified when employment commenced, to achieve that certification. **5.1.2**: A timeline for individuals who are eligible, but were not board-certified when employment commenced, to achieve that certification. Exclusion: ROPs with a policy of only hiring board certified personnel. ROPs must upload a document stating that they do not hire non-Board-certified personnel.
Requirements	The document must include: • A set process and timeline for the employee to achieve board certification once hired and a process if the timeline is not met. • The supervision policy for the employee until certified and what level of supervision is required (direct/indirect). • Any limitations to the work the individual can complete until certified (e.g., shielding requirements must be reviewed by a QMP, not MP).
Recommendations/Notes	Supervision and timing of board certification can be listed in a policy or on each individual job description.

EI 5.3 – Staff on-boarding	Staff on-boarding and competency assessment.
	5.3.1: The staff define and complete an initial training orientation, and job-specific competency assessment process for each new team member.
Requirements	N/A
Recommendations/Notes	Responsibility for verifying compliance could be human resources, team lead, employee or third-party depending on the type of assessment.

EI 5.4 – Annual staff training	Annual staff training requirements include:
	5.4.1: Annual radiation safety training to all staff assigned radiation exposure monitors. **5.4.2:** Annual training for the infection control program. **5.4.3:** Annual training for staff in emergency procedures. **5.4.4:** Annual or on-going staff training on the Health Insurance Portability and Accountability Act (HIPAA).
Requirements	5.4.2-5.4.4 must include evidence of completed training within the last 12 months (e.g., certificate of completion, checklist of compliance review, etc.). A sample set of completed assessments or training will be requested, not proof for the entire staff.
Recommendations/Notes	N/A

EI 6.1 – Staffing levels	The practice maintains safe staffing levels.
	6.1.1: The practice establishes, measures and maintains staffing requirements for safe operations in RPT. **6.1.2:** The practice specifies the number of each professional discipline required to be on- site, directly involved in patient treatment. **6.1.3:** The practice requires a qualified physician to be on-call 24 hours a day/seven days a week to address patient needs and/or emergencies. **6.1.4:** The practice has a process for providing coverage during planned and unplanned absences of professional staff.
Requirements	For 6.1.1, the practice must complete the APEx Staffing Table, located in the APEx Portal, separately for the main facility and any satellite locations using current patient volumes to compare calculated requirements and actual levels with an explanation or action plan for variances. For 6.1.2, detailed supervision requirements can be found in the supervision table at the end of this guide. For 6.1.4, the practice must describe how planned and unplanned absences are covered for all clinical professionals within the practice.
Recommendations/Notes	For 6.1.3, the requirement may be met by a rotating call schedule or an answering service. There should also be documentation that practice staff educate the patient on how to contact the after-hours services. For 6.1.4, staffing levels ensured during planned absences (PTO, conferences) and unplanned absences (sickness). Examples may include: • Coverage with locum tenens. • Coverage from satellites. • Use of pool staff or per diem.

EI 7.1 – Culture of Safety	The practice Culture of Safety SOP: **7.1.1:** States that all patient safety events, including near misses, are to be reported and tracked within the practice. **7.1.2:** Includes a method for staff to report a safety event that encompasses reporting that is compliant with institutional, state, local and national requirements (e.g., NRC). **7.1.3**: Includes an option for staff to report anonymously. **7.1.4:** Has a timeline for reporting all patient safety events by staff. **7.1.5:** States that procedures are not started until all questions and/or concerns are resolved. **7.1.6:** Provides assurance that there will be no reprisals based on reporting of patient safety events. **7.1.7:** Identifies a method for patients to report safety events. **7.1.8:** Includes a method for undertaking an immediate review of safety events that reach the patient.
Requirements	The SOP must include the steps of how staff are to report all safety events, who reviews the reports, and how practice staff tracks the information.
Recommendations/Notes	For 7.1.1, a system and process for reporting patient events and near misses within the practice. Examples can include using a: • Patient Safety Organization (e.g., RO-ILS hosted by Clarity PSO), • hospital electronic reporting system, or • paper reporting system. 7.1.2 and 7.1.8 should include a process for determining if an event is reportable to state/national reporting agencies (e.g., NRC) if a patient safety events that reach the patient and, when necessary, who makes the decision to report and who reports. 7.1.3 can include any method of reporting (e.g., paper form dropped in a box or a way to report within the electronic system). For 7.1.4, the actual timeline should be reasonably achievable and close to when the event happened. For 7.1.5 and 7.1.6, safety culture relies on staff feeling empowered and not having a fear of reprisal for reporting an event. The policy should explain how staff members are encouraged to speak-up and stop any procedure regarding a safety concern. 7.1.7 can include comment boxes or end of treatment surveys for example. The patient concerns about safety may be captured as part of the patient experience measurement specified in Standard 14.

EI 7.2 – Culture of Safety leadership	Designated Culture of Safety leadership is responsible for: **7.2.1:** Collecting information and investigating patient safety events. **7.2.2:** Convening interdisciplinary safety meetings to report back to staff on activities and findings.
Requirements	Leadership must be defined, but can be a person, discipline group or committee within the practice.
Recommendations/Notes	Culture of Safety leadership is responsible for the general culture within the practice. This should include conducting regular safety meetings, follow up from the meetings and education of staff when a safety event occurs. If a committee is assigned to lead, there should be a point person held responsible for convening interdisciplinary safety meetings. The committee should have an SOP that defines membership, purview, scope, purpose and standing agenda items.

EI 7.3 – Interdisciplinary safety meetings	Culture of Safety interdisciplinary meetings: **7.3.1:** Promote an interdisciplinary team-based approach to safety. **7.3.2:** Review all patient safety events and unsafe condition data from patient, staff, and equipment events. **7.3.3:** Proactively assess the practice's structure and processes that promote safety. **7.3.4:** Assess the progress of action plans to improve safety.
Requirements	Uploaded documents must demonstrate that meetings are conducted at least quarterly, evidence staff in attendance, and include meeting minutes with safety event discussion. Documents must have all PHI removed or redacted (e.g., patient names, medical record numbers, date of birth, etc.) prior to uploading.
Recommendations/Notes	Practice staff should prioritize safety as a continuous learning topic through interdisciplinary safety meetings. These meetings should include representatives from all professional disciplines within the practice to provide diverse perspectives on patient care and safety. The objective is to establish a proactive approach that promotes safety and prevents patient safety events, instead of just reacting to them when they occur. Safety meetings may also happen ad hoc when safety events are reported.

EI 7.4 – Patient Safety Organization	Patient Safety Organization (PSO). **7.4.1:** The practice submits patient safety data to a PSO.
Requirements	The practice submits patient safety data to a federally recognized entity that collects information about medical errors and safety risks in a confidential and protected environment.
Recommendations/Notes	PSOs range from hospital-wide systems to specialty-specific initiatives and are listed by AHRQ.

EI 8.1 – Facility licenses	Facility licenses: **8.1.2:** Comply with regulatory requirements for the use of radioactive materials.
Requirements	NRC, agreement state or local regulatory documentation must be included for all NRC regulated modalities. A current, valid license from the NRC or Agreement State for all radioactive materials (if applicable to practice using radioactive materials) must be evidenced for all facilities on the application, as applicable.
Recommendations/Notes	N/A

EI 8.2 – Personnel radiation monitoring	Personnel radiation monitoring. **8.2.1:** The practice uses radiation exposure monitoring systems for staff consistent with NRC (or Agreement State), State, or local requirements.
Requirements	Documentation must include evidence of radiation monitoring for all practice staff working with radiation equipment or radioactive materials within the last 12 months.
Recommendations/Notes	The goal of this EI is to ensure that the facility has radiation exposure monitoring systems in place.

EI 8.3 – Radiation safety	The practice has processes compliant with federal, state, and local regulations regarding storage, handling, and waste for radioactive materials, including: **8.3.1:** Safe receipt of radioactive materials. **8.3.2:** Appropriate labeling, inventory, theft reporting. **8.3.3:** Appropriate area and signage for radioactive material storage. **8.3.4:** Appropriate patient areas for treatment delivery. **8.3.5:** Safe disposal. **8.3.6:** Radioactive material release (e.g., lost sources, spills).
Requirements	8.3 must show the process for receipt and treatment delivery for radiopharmaceuticals with the listed criteria.
Recommendations/Notes	8.3.1 should include a secured location for placing shipments and a process for surveying the shipment before opening. 8.3.4 must consider treatment rooms, dedicated bathrooms and areas for patient monitoring.

EI 8.4 – Patient related radiation surveys	Radiation surveys for radiopharmaceuticals.
	8.4.1: Pre-treatment surveys are conducted on the patient and room. **8.4.2:** Post-treatment surveys are conducted on the patient and room. **8.4.3:** Surveys are conducted using properly calibrated survey meters.
Requirements	8.4 must show proof that surveys of the patient and room are completed. Compliance can be shown through checklists, survey results log, calibration results, etc.
Recommendation/Notes	N/A

Standard 9: Emergency Preparation and Planning

9.2 – Patient Related Emergencies	The practice has procedures for clinical emergencies, including:
	9.2.1: Falls. **9.2.2**: Threats of violence. **9.2.3:** Adverse reactions (e.g., allergic reaction to contrast, extravasations). **9.2.4:** Cardiac events. **9.2.5:** Referring patients to the emergency room from practice during operating hours. **9.2.6:** Referring patients for emergency care after hours.
Requirements	Each evaluation criteria must include the procedural steps that staff will follow in the event of the clinical emergencies rather than preventative measures. For 9.2.5 and 9.2.6, the SOP must demonstrate how the staff refers their patients to emergency care (i.e., the ER) during or after hours.
Recommendations/Notes	For 9.2.5, the process for referring patients to the ER during business hours when an injury (hip fracture from fall that occurs in the practice) or progression of side effects. For 9.2.6, the process for patients to reach the practice staff and be referred to care when the practice is closed. This can include calling the RO on-call or instructing patients to go directly to a specific ER.

Standard 10: Facility and Equipment

EI 10.1 – Facility radiation shielding	The practice provides radiation shielding for each radiation area that is:
	10.1.1: Based on shielding calculations performed by a QMP. **10.1.2:** Verified annually against current workload. **10.1.3:** Validated with radiation surveys performed by a QMP.
Requirements	The practice staff must show documented evidence that the reviews were performed.
Recommendations/Notes	10.1 adopts the NRC's definition of "radiation area" as any area with radiation levels greater than 5 millirems (0.05 millisievert) in one hour at 30 centimeters from the source or from any surface through which the radiation penetrates. Radiation shielding includes treatment rooms, imaging rooms, mobile shields, syringe and vial shields as applicable.

Standard 12: Quality Management of Treatment Procedures and Modalities

EI 12.2 – Non-linac QA	Non-linac-based treatment equipment QA program(s) are consistent with AAPM, or equivalent body, guidance on: **12.2.8:** Radiopharmaceutical day of treatment checks. *
Requirements	12.2 must include documented evidence of completed QA for applicable treatment that include dosimetric and safety checks based on current AAPM guidance.
Recommendations/Notes	12.2 only applies to the modalities and techniques included in the ROP's APEx application.

EI 12.5 – Equipment QA	Equipment QA checks include: 12.5.3: Annual QA of measurement equipment. 12.5.5: Routine QA of secondary check programs. *
Requirements	12.5 must include documented evidence of completed QA following current AAPM guidance.
Recommendations/Notes	12.5.6 refers to checks or auditing on second check systems, in-house developed spreadsheets and/or manual calculation algorithms used for routine physics checks.

Standard 13: Peer Review of Clinical Processes

EI 13.1 – Intradisciplinary peer review	The practice staff defines and implements intradisciplinary peer review processes for each professional discipline providing patient care including: **13.1.1:** Authorized user. **13.1.2:** Medical physicist. **13.1.3:** Treatment delivery personnel (e.g., NMT, RTT, etc.) **13.1.4:** Dosimetrist or other staff members (e.g., nurses).
Requirements	13.1 must include a policy, attestation or SOP outlining the method(s) of peer review for each profession that includes the objectives, frequency, number/type of cases and learning potential of peer review for each professional discipline listed.
Recommendations/Notes	Intradisciplinary peer review is a process by which professionals within the discipline (e.g. physician) evaluate and critique each other's work, providing constructive feedback to ensure high quality and adherence to standards within that discipline. Peer review processes where only one representative from a profession is in attendance does not meet the requirement. Practices that have only one staff person in a discipline should identify remote, web-based, or other approaches for securing peer review. Disciplines can participate in team meetings, retrospective review of work completed or education sessions after conferences. APEx encourages practices to perform peer review prospectively and/or concurrently on complex high-dose and low-volume cases.

EI 14.1 – Informed consent for RPT	The practice staff secures informed consent for treatment by: **14.1.1:** Providing information regarding risks and benefits of treatment. **14.1.2:** Obtaining consent before the pre-treatment procedure begins. **14.1.3:** Verifying consent is current (within 60 days prior to the first treatment). **14.1.4:** Requiring a date and signature from the patient (or authorized legal representative) and the physician (or their designee).
Requirements	14.1 must be specific to RPT.
Recommendations/Notes	For 14.1.1, education on risks and benefits of treatment may be documented on the consent form or as part of the comprehensive patient evaluation (1.1). Risks and benefits should be specific to the treatment delivered. For 14.1.3, an alternative to 60 days is accepted if the practice has a documented policy specifying the timeframe. For 14.1.4, appropriate designees may include members of the clinical team.
EI 14.2 – Translation services	Translation services. **14.2.1:** The practice staff has a process for communicating with patients who have language barriers. **14.2.2:** The practice staff has a process for communicating with patients who have communication barriers other than language.
Requirements	14.2 must include how the practice staff communicates with patients with barriers.
Recommendations/Notes	14.2.1 examples include referring patients to a translation service or providing a translator and should apply to informed patient consent as well as all other forms of communication with patients. Practices can use certified medical interpreter services and provide patient materials and signage in languages relevant to the ROP's community, and/or translation by phone. Family, friends, or minors should not be used as interpreters of clinical information. Policies should also include how the practice provides culturally appropriate care to patients of diverse groups. 14.2.2 examples include hearing impairment and low functional, cognitive, and behavioral abilities.

EI 14.3 – Patient education	Patient education.
	14.3.1: The staff reviews treatment related side effects with the patient before treatment begins and at least one time during the course of treatment. **14.3.2:** Patient education includes options for treatment and the rationale for each option (e.g., surgical, chemotherapy, or choices of radiation modality/techniques). **14.3.3:** Patient education includes the intent of treatment (curative/palliative). **14.3.4:** Patient education includes information on what to expect during the treatment process. **14.3.5:** Patient education includes management of treatment related side effects (e.g., nausea, dry mouth, fatigue, shortness of breath, nutrition support, and other side-effects suitable for self-care), and instructions related to radiation safety after being released from treatment.
Requirements	14.3.1 must be documented within the medical record before any pre-treatment procedure and at least once during a long course of treatment.
Recommendations/Notes	14.3 is to facilitate communication and eventually patient-provider partnership through education activities on treatment intent, procedures, and potential side effects and management. Practice staff should educate the patient on the treatment process (including planning and treatment). For 14.3.2, the patient should be informed of all treatment options, both within and outside the practice. Documentation should state that the patient was educated on the benefits and risks of each treatment and that the education was provided by the physician. For 14.3.5, the management of treatment related side-effects applicable to their treatment area should be provided. Education should include any side effect that a patient can administer self-care. • For RPT treatments examples include hygiene, distancing, managing radioactive waste at home, etc.

EI 14.7 – Outcomes reporting	The patient experience is:
	14.7.1: Collected, at least annually, using a survey and/or other tool(s). **14.7.2:** Evaluated and acted upon to improve patient experience.
Requirements	14.7 must include how patient experience data is collected, evaluated, and used for practice improvement.

Recommendations/Notes	The practice staff may use tool(s) from a third-party vendor or developed in-house.
	• The patient experience measurement and evaluation should include:
	  ○ The staff and facility.
	  ○ Treatment.
	  ○ Management of pain and other side effects.
	  ○ Survivorship support.
	  ○ Patient perception of quality and safety.
	
	Patients should have the opportunity to register complaints anonymously, as well as directly with staff. The practice staff should inform patients of the opportunity to provide feedback.