

STEREOTACTIC BODY RADIOTHERAPY

1. REASON FOR ISSUE: This Veterans Health Administration (VHA) directive establishes the necessary elements, structure, and guidelines for the safe implementation of stereotactic body radiotherapy (SBRT).

2. SUMMARY OF CONTENT: This is a new directive that specifically pertains to the credentialing, privileging, and training of radiation oncologists and their practices that provide SBRT at VHA Radiation Oncology Services' centers. **NOTE:** *Credentialing of SBRT is not done through the Credentialing and Privileging Offices.*

3. RELATED ISSUES: None.

4. RESPONSIBLE OFFICE: The VHA Office of Specialty Care Services, Radiation Oncology Program (10P11H) is responsible for the contents of this VHA directive. Questions may be directed to the National Director, Radiation Oncology Program at 804-675-6987.

5. RESCISSIONS: None.

6. RECERTIFICATION: This VHA directive is scheduled for recertification on or before the last working day of February 2024. This VHA directive will continue to serve as national VHA policy until it is recertified or rescinded.

CERTIFIED BY:

**BY THE DIRECTION OF THE UNDER
SECRETARY FOR HEALTH:**

/s/ Lucille B. Beck, PhD.
Deputy Under Secretary for
Health for Policy and Services

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NOTE: *All references herein to VA and VHA documents incorporate by reference subsequent VA and VHA documents on the same or similar subject matter.*

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STEREOTACTIC BODY RADIOTHERAPY

1. PURPOSE

This Veterans Health Administration (VHA) directive establishes national VHA policy for the delivery of stereotactic body radiotherapy (SBRT) in VA medical facilities with Radiation Oncology Services or Sections (ROS). **AUTHORITY:** Title 38 United States Code (U.S.C.) 7301(b).

2. BACKGROUND

In 2004, the Secretary of Veterans Affairs determined VHA ROS should be accredited. SBRT is a recently established radiation treatment modality for which separate guidelines and credentialing requirements have been established by the relevant professional societies. Safe, effective delivery of SBRT requires a team-based approach, performed by qualified radiation oncologists, therapeutic medical physicists, and radiation therapists. SBRT, which has been extensively reviewed by several professional radiotherapy societies, is recognized as an appropriate treatment modality for several tumor presentations.

3. DEFINITION

Stereotactic Body Radiotherapy. SBRT, also known as stereotactic ablative radiotherapy (SAbR), is a treatment technique used to deliver a highly focused and accurate radiation dose to defined target volumes outside of the brain where the entire course of therapy for an individual target is typically delivered in five fractions or fewer, a technique sometimes referred to as “oligo-fractionation.” **NOTE:** *While SBRT is commonly delivered in five fractions or fewer, the same techniques may be used to deliver six to ten fractions of precisely targeted high radiation doses. While not technically SBRT by definition, the same care should be taken when delivering these schedules as well.*

4. POLICY

It is VHA policy that VHA ROS radiation oncologists be properly trained, credentialed, and privileged and their practices be properly credentialed in order to safely and effectively administer SBRT to Veterans.

5. RESPONSIBILITIES

a. **Under Secretary for Health.** The Under Secretary for Health is responsible for ensuring overall compliance with this directive.

b. **Deputy Under Secretary of Health for Operations and Management.** The Deputy Under Secretary of Health for Operations and Management is responsible for:

(1) Communicating the contents of this directive to each of the Veterans Integrated Service Networks (VISNs).

(2) Ensuring that each VISN Director has the resources required to fulfill the terms of this directive in all the affected VA medical facilities within that VISN.

(3) Providing oversight of VISNs to assure compliance with this directive, relevant standards, and applicable regulations.

c. **Director, VHA National Radiation Oncology Program.** The Director, VHA National Radiation Oncology Program, is responsible for:

(1) Approving SBRT training programs acceptable for credentialing purposes within VHA.

(2) Approving SBRT physics credentialing programs acceptable for evaluating medical physics operations within VHA.

d. **Veterans Integrated Service Network Director.** The VISN Director is responsible for ensuring that operations at VA medical facilities within the VISN meet the requirements in this directive.

e. **VA Medical Facility Director.** The VA medical facility Director is responsible for ensuring staffing requirements of this directive are met; that is, where SBRT treatment is delivered, at least one properly credentialed Radiation Oncologist (RO), one Therapeutic Medical Physicist (TMP), and the appropriate number of Radiation Therapy Technologists are present for advanced SBRT delivery.

f. **Radiation Oncology Service/Section Chief.** The Radiation Oncology Service/Section Chief is responsible for:

(1) Ensuring the VA medical facility Director is immediately notified of any staffing issues that impede the requirements of credentialed Radiation Oncology team members for SBRT treatments.

(2) Ensuring Radiation Oncology team members adhere to stated responsibilities, including required training, credentialing, presence at the treatment console, adherence to standard operating procedures (SOPs) for SBRT, and that all Radiation Oncology team members follow national professional society recommendations. These recommendations include the American College of Radiology (ACR) practice parameter for the performance of stereotactic body radiation therapy, Quality and Safety Considerations in Stereotactic Radiosurgery (SRS) and SBRT, and the American Society for Radiation Oncology's (ASTRO) Safety is No Accident. **NOTE:** See *Paragraph 9, References.*

(3) Approving SBRT delivery by ROs by ensuring RO's completion of specific SBRT training requirements and, where appropriate, waiving requirements. **NOTE:** See *Paragraph 7, Training.*

(4) Requesting approval from VHA National Radiation Oncology Program for any SBRT training programs acceptable for credentialing purposes within VHA and SBRT

physics credentialing programs acceptable for evaluating medical physics operations within VHA.

g. **Radiation Oncologist.** The properly credentialed RO is responsible for:

(1) Being present at the treatment console prior to delivery of each SBRT treatment fraction to approve final pre-treatment imaging for patient setup verification.

(2) Providing direct clinical care of the SBRT patient and quality oversight of all aspects of treatment delivery.

(3) Establishing authority for the TMP to direct the technical aspects of planning and delivery of SBRT.

(4) Establishing authority for the TMP to develop SOPs for SBRT and approving those SOPs.

h. **Therapeutic Medical Physicist.** The TMP is responsible for:

(1) Being available at the treatment console for consultation with the RO and providing advice or direction to Radiation Therapy Technologists (RTTs) whenever SBRT treatments are delivered.

(2) Establishing physics staff members' (for example, dosimetrist's or medical physics assistant's) authority to perform specific clinical physics duties related to SBRT treatment planning and delivery, in accordance with their competence.

(3) Developing and implementing comprehensive image guidance and motion management strategies for each disease site treated with SBRT to ensure safe, accurate, and efficient treatment delivery.

(4) Developing tolerance limits and action levels for SBRT treatment set up and delivery, in consultation with the RO.

(5) Documenting acceptance testing and commissioning data for all technical components of the SBRT program in compliance with the technical standards of SBRT.

(6) The Chief Therapeutic Medical Physicist is responsible for compliance with Imaging and Radiation Oncology Core (IROC) Credentialing and developing a comprehensive quality assurance program for SBRT in accordance with the technical standards. **NOTE:** See *Elements and Technologies of Stereotactic Body Radiotherapy (SBRT)*, available at:

[https://vaww.infoshare.va.gov/sites/radonc/Shared%20Documents/SBRT%20Handbook%20Appendix%20Elements%20and%20Technologies%20of%20Stereotactic%20Body%20Radiotherapy%20\(MH%20edits\).docx](https://vaww.infoshare.va.gov/sites/radonc/Shared%20Documents/SBRT%20Handbook%20Appendix%20Elements%20and%20Technologies%20of%20Stereotactic%20Body%20Radiotherapy%20(MH%20edits).docx). This is an internal VA Web site that is not available to the public.

i. **Radiation Therapy Technologist.** The RTT is responsible for safely delivering planned courses of SBRT. A minimum of two RTTs must be present at the treatment

console during delivery of SBRT; one observing the patient on camera and the other monitoring radiation treatment. **NOTE:** *The use of active motion management techniques in SBRT, such as breath-hold or optical-surface imaging, will require one additional RTT at the treatment console. See Information Bulletin: Appropriate Radiation Therapy Technologist Staffing Levels at Veteran Health Administration (VHA) Radiation Oncology Facilities, available at: www.va.gov/vhapublications/viewpublication.asp?pub_id=5678. This is an internal VA Web site that is not available to the public.*

6. QUALITY ASSURANCE REQUIREMENTS

a. Except as noted below, all credentialing requirements for radiation oncologists seeking to practice SBRT within VHA must be fulfilled at a VA medical facility or affiliate operating a fully credentialed SBRT program, which has been approved by the VHA Radiation Oncology Program office.

b. Radiation oncology practice accreditation is a necessary prerequisite to establishing an SBRT program. The accreditation must be through a nationally recognized and sanctioned organization with a validated accreditation program in radiation oncology, such as the American College of Radiology (ACR), the American Society of Radiation Oncology (ASTRO), or the American College of Radiation Oncology (ACRO).

7. TRAINING

a. **Certification.** To qualify as a RO who delivers SBRT within a VA medical facility, the physician must be properly credentialed, including:

(1) Approval for SBRT delivery by the Service Chief, who has separately verified documented training in SBRT (as described under “Training” below); and

(2) Certification in either:

(a) Radiology, by the American Board of Radiology, as a physician who confines their professional practice to radiation oncology, or

(b) Radiation oncology or therapeutic radiology, by the American Board of Radiology, the American Osteopathic Board of Radiology, the Royal College of Physicians and Surgeons of Canada, or the Collège des Médecins du Québec.

b. **Training.** The Radiation Oncologist must obtain the following specific training in SBRT before requesting privileges to perform stereotactic procedures at a VA medical facility:

(1) **Formal didactic SBRT lecture courses or workshops equivalent to a minimum of 8 credit hours.** **NOTE:** *The RO Service/Section Chief may waive this requirement for Radiation Oncologists who are presently treating with SBRT and those who graduated after 2009 from an Accreditation Council for Graduate Medical*

Education (ACGME) residency training program in which training in SBRT has been properly documented.

(2) **Clinical observation of 3 SBRT cases.** Observation must include the following: patient immobilization, imaging for treatment planning, motion assessment (such as 4D computed tomography (CT)), motion management, and contouring of targets and organs at risk. Additionally, during treatment delivery, clinical observation must include image guidance with cone beam CT validation. **NOTE:** *The RO Service/Section Chief may waive this requirement for radiation oncologists who are presently treating with SBRT and those who graduated after 2009 from an ACGME residency training program in which training in SBRT has been verified with residency program director of the certifying institution.*

(3) **Completion of 3 clinical SBRT cases under the supervision of a SBRT-qualified Radiation Oncologist.** The supervising Radiation Oncologist must review and approve the clinical indications and approach, volumes, plan, image guidance, and daily setup of each case.

8. RECORDS MANAGEMENT

All records in any medium (paper, electronic, electronic systems) created in response to this directive must be managed as required by the National Archives and Records Administration (NARA) approved records schedules found in VA Records Control Schedule 10-1. If you have any question regarding any aspect of records management you should contact your facility Records Manager or your Records Liaison.

9. REFERENCES

a. 38 U.S.C. 7301(b).

b. ACR-ASTRO practice parameter for the performance of stereotactic body radiation therapy, available at: <https://www.acr.org/-/media/ACR/Files/Practice-Parameters/sbirt-ro.pdf?la=en>.

c. Elements and Technologies of Stereotactic Body Radiotherapy (SBRT), available at: [https://vaww.infoshare.va.gov/sites/radonc/Shared%20Documents/SBRT%20Handbook%20Appendix%20Elements%20and%20Technologies%20of%20Stereotactic%20Body%20Radiotherapy%20\(MH%20edits\).docx](https://vaww.infoshare.va.gov/sites/radonc/Shared%20Documents/SBRT%20Handbook%20Appendix%20Elements%20and%20Technologies%20of%20Stereotactic%20Body%20Radiotherapy%20(MH%20edits).docx). **NOTE:** *This is an internal VA Web site that is only available to ROS team members who have requested access and is not available to the public.*

d. Information Bulletin: Appropriate Radiation Therapy Technologist Staffing Levels at Veteran Health Administration (VHA) Radiation Oncology Facilities, dated October 11, 2016, at: vaww.va.gov/vhapublications/viewpublication.asp?pub_id=5678. **NOTE:** *This is an internal VA Web site that is not available to the public.*

e. Quality and Safety Considerations in Stereotactic Radiosurgery and Stereotactic Body Radiation Therapy (SRS/SBRT) (2011), available at:
[https://www.practicalradonc.org/article/S1879-8500\(11\)00216-5/abstract](https://www.practicalradonc.org/article/S1879-8500(11)00216-5/abstract).

f. Safety is No Accident; A framework for quality radiation oncology and care, available at:
https://www.astro.org/uploadedFiles/Main_Site/Clinical_Practice/Patient_Safety/Blue_Book/SafetyisnoAccident.pdf.