Analyzing Patient Education Effectiveness for Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT)

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**Background**

- After a diagnosis of cancer, patients are given an overwhelming amount of information
  - Treatment options- Medical vs. surgical vs. radiation
  - Side effects of treatments
  - Prognosis and what to expect
  - Options for resources if necessary
- Receiving this diagnosis can be stressful and shocking, which also impairs the ability to understand and retain the information about treatment options
- Cancer patients typically recall less than 50% of medical information given to them in a patient doctor encounter, and less for older patients
- Radiation therapy is a critical part of treatment for many cancer patients including SRS and SBRT which can have unique side-effects.
- The goals and complicated process of radiation treatment can be confusing for patients in the vulnerable state of recent cancer diagnosis.
- At our academic affiliated, community-based, radiation oncology clinic, our providers have noted a need for assessment of SRS and SBRT patient education.
- Prior to this study, we did not have data on SRS and SBRT patient education effectiveness.

**Innovation Objectives**

- To fully investigate the patient experience of SRS and SBRT from the time of diagnosis to post-radiation follow up by creating a process map.
- To identify key process steps or concepts of SRS and SBRT that patients commonly misunderstand or find challenging.

**Methods**

- We worked with our radiation oncologists to understand and create a process map of the full treatment and education process of SRS and SBRT.
- Patients who received either SRS or SBRT therapy which began from October 2018-December 2018 from our providers, were called by phone and asked survey questions inquiring about:
  - Treatment side effects, whether the patient received information about their radiation treatment plan, return precautions, and overall satisfaction with education.

**Patient Experience Process Map**

- Patient is Diagnosed with Malignancy and recognized to be a Candidate for SRS or SBRT
- Consult Visit
  - Patient speaks with Radiation Oncologist about potential treatment, most of treatment education is done
  - Education handout is given to patient
  - Educational video is shown
  - Patient speaks with social work/nurse navigators about available social, and financial resources
- Actual Treatments
  - Patient interacts with Radiation Therapists while receiving treatments
  - Patient will have visit with Radiation Oncologist at least once during treatment
  - Anywhere from 1-5 treatment visits
- Follow up appointments
  - Patient checks in with Radiation Oncologist
  - Occur every 2 or 3 months depending on specific treatment
- Surveillance Recommended: Continued simultaneous follow up with Medical Oncologist and other possible specialists

**Discussion and Next Steps**

- Although most patients were very satisfied with their education, our study suggests patient education improvement is needed in the areas of:
  - Side effects, driving and return to work precautions, and under what circumstance to go to the ER or call the office.
- Future Directions would include using the information obtained by this study to put forth various standardized provider/patient educational sessions and check-points during the radiation process.
- As an example, we are currently creating a FAQ sheet for providers to review with their patients on simulation day detailing the areas listed above and potentially stimulating more conversation about these areas of typical patient confusion.
- Hopefully with a more standardized educational interventions, patient comprehension about SRS and SBRT will improve with the overall outcome of improving our patient’s holistic radiation experience.

**References**