Vermont Radiation Oncologist Uses *Choosing Wisely* to Improve Patient Experience

Richard Lovett, MD, focused on radiation oncology in medical school because it allowed him to work with patients. Now 25 years into his practice, Lovett continues to seek treatments that match patients’ needs—he found an opportunity to do just that through the ABIM Foundation’s *Choosing Wisely* campaign.

An active member of the American Society for Radiation Oncology (ASTRO), Dr. Lovett attended the society’s national meeting in 2013. There, he learned about ASTRO’s first *Choosing Wisely* list of five potentially unnecessary procedures for physicians and patients to discuss and recognized the third item as something that could impact a group of his patients. ASTRO released a second list of five additional recommendations in fall 2014.

Dr. Lovett, the only radiation oncologist in Rutland, Vt., shared that when a patient’s cancer spreads from a localized tumor to the bone—often seen in late stages of the disease—on-site radiation to the bone metastases can be helpful.

"Usually, we treat the bones to control pain or prevent them from weakening to the point of fracture," Dr. Lovett said. "Radiation to treat bones could cause enough tumor cell death to allow the bone to repair itself or decrease the tumor burden."

Traditionally, physicians might have treated these tumors with extended courses of treatment requiring patients to come in for 10 or more fractionations, or doses of radiation.

ASTRO’s third *Choosing Wisely* recommendation suggests that physicians use shorter fractionation schemes for palliative bone metastases. The recommendation cites research that shows five or fewer fractionations can provide pain relief equivalent to 10 fractionations. Dr. Lovett shared this research and the *Choosing Wisely* recommendation with patients while discussing treatment options. His intervention was to consider the shortened fractionation scheme for every patient and to use this technique whenever feasible.

"I would say most people I proposed the shorter fractionation schedule to were open to that suggestion," he said. "Being in a rural state, there can be issues with a lengthy treatment course."

He added that it can be painful, costly and time consuming for patients to travel to appointments. The burden can increase with each additional trip, especially if a patient needs to travel with a loved one or caregiver.

To gauge possible benefits from adopting the *Choosing Wisely* recommendation, Dr. Lovett retrospectively looked at 17 consecutive patients he treated for bone metastases six months before the ASTRO list was announced. Then, he studied 20 consecutive patients treated six months afterward. In the second group, 16 out of 20 patients opted for shorter fractionation schemes. Dr. Lovett noted that none of the patients required retreatment as a result of the shorter fractionation scheme.

To calculate possible savings on treatment costs he compared billing amounts for technology and professional charges for a reduced fractionation scheme with charges for a typical scheme of 10 fractionations. He estimated that adopting the shorter schemes saved 84 treatments and more than $69,000 for the entire group. Each patient on average saved more than $4,300 in charges over the course of their treatment.

An area often overlooked in cancer care is the burden placed on patients and their families of simply getting to their appointments and how it affects their quality of life. Dr. Lovett studied mileage and caregiver costs to estimate monetary and time savings for patients treated with shorter fractionation schemes for six months. He calculated a savings for travel expenses averaging more than $75 for each patient. More important than the monetary savings was the savings of nearly four hours of commuting time—which does not include the hour spent in treatment itself. Dr. Lovett found that trips on rural roads can be painful for patients with
cancer pain.

"I think a lot of people will look at Choosing Wisely and agree with the lists, but they might want some more data about the real benefits," Dr. Lovett said. "That is the reason I studied these outcomes. There are a lot of other savings besides money."

Lovett created a poster to illustrate the impact one Choosing Wisely recommendation can have in a single provider practice. He plans to submit it prior to the next ASTRO annual meeting and share his findings with colleagues. In the meantime, he said he'll continue to discuss reduced fractionation schemes with patients and track results.