

US Oncology News

www.usoncology.com

JULY / AUGUST 2007

High-tech's new heights

Technology and the people behind it
make a difference in patients' lives



US Oncology®



agement of patient treatment plans, calculating the exact amount of radiation exposure each patient receives. "Once the treatment plan is created, we review it with the radiation oncologists. When it is acceptable to them, we finalize the plan, and then the radiation therapist delivers it."

Precision counts

Radiation screening and technology have come a long way in the last few years, allowing radiation therapists to pinpoint a cancerous area and deliver exacting treatment with less impact to other healthy cells.

"Image guided radiation therapy (IGRT) allows therapists and physicians to ensure precise delivery of radiation according to the patient's tumor position on that day, by imaging patients and their anatomy immediately prior to daily treatment," said Farrar. "Because the technology allows us to visualize internal structures and tumor position every day, higher doses of radiation can be delivered to smaller treatment fields. As a result, the

overall side effects are lessened."

Mike Marino (above-left, with **Mark Hobb**, radiation therapist), chief radiation therapist at **Texas Cancer Center-Sherman**, likens the newest radiation technology, stereotactic radiosurgery (SRS), to highly specific surgery.

"The precision of the radiation we are using is exactly the same as if we were going in and using a scalpel, but we are doing it every day for six to eight weeks," he said. "So we need to have that same precision every day."

Because radiation technology has become so advanced, radiation therapists can now effectively treat everyone from the mildly to severely sick, the young and the old.

"Advances in our field have made daily radiation treatment safer and more effective for all types of cancers," said Farrar. "We can greatly reduce the damage to healthy tissue near the tumor because of the increased accuracy and fewer side effects of radiation treatments today."

Educational background

Those aspiring to be radiation therapists in today's fast-paced medical arena are smart, educated and comfortable with technology.

"Therapists are frequently learning new methods and adapting the latest technology so better cancer care can be provided for patients," said Farrar. "This field is growing rapidly and the profession has become highly technical."

THE PEOPLE

Radiation therapists

When an oncology patient is told he or she needs radiation, a radiation therapist will be the one to administer the treatment. Radiation therapists play a central role in treating cancer patients, a role that requires medical expertise, technology know-how and compassionate people skills.

"Therapists work side-by-side with a radiation oncologist, who at initial consult time determines the course and type of radiation most beneficial for each patient's diagnosis," said **Megan Farrar** (above, far right), chief radiation therapist for **New York Oncology Hematology** in Albany.

"We have two radiation oncologists in our practice; each has a set of patients and slight subtleties in treating these patients," said **Reggie Sanon** (far right), a former radiation therapist and currently a dosimetrist with **Florida Cancer Institute-Springhill**.

With this experience, he knows first-hand how all the pieces fit together. As dosimetrist, he oversees the man-



To keep pace, radiation therapists must attend college specifically for radiation therapy, and in many cases, be licensed and certified in the state where they provide treatment. In addition to all the book knowledge, successful radiation therapists must also employ the use of critical thinking skills in just about every aspect of their job; mental agility is a must.

"You can teach anyone how to position patients and turn the beam on to treat them," said Marino. "But we have to know what's going on in that beam and the areas we are treating. We need to understand the internal anatomy, critical structures and how they are affected by that beam."

Because of the subtle intricacies and constant technology and treatment changes in the job, it can take a while for a radiation therapist to become "seasoned."

"You can't expect to come out of school and just treat a patient in a very rote style," said Marino, whose main duties focus on managing the administrative side of radiation oncology treatment, including the management of other radiation therapists. "You have to constantly be thinking. You can never be too comfortable with what you are doing. In order to keep things fresh and new, our therapists rotate from treatment area to treatment area on a consistent basis."

Sanon has a degree in radiation therapy, and took additional training in dosimetry. "In order to plan, dosimetrists have to understand all aspects of radiation therapy treatment, so it makes it easier to have been a radiation therapist," he said.

Building relationships

The challenges in being a radiation therapist encompass many activities beyond just treating patients, including meeting deadlines, putting in long hours and learning to leave work at work.

"We have close bonds with patients because we see them every day for several months. At times, it's difficult to see patients complete their course of treatment because of the attachment that easily develops between patient and therapist," said Farrar.

Marino agrees. "It can be hard to make the transition," he said.

Overshadowing these challenges, however, the work is infinitely rewarding.

"We have the satisfaction of patients coming back and telling us, 'Thank you for taking care of me,'" said Sanon. "It's satisfying and rewarding to see the patients' progress."

Marino points out that many radiation therapists will tell you that the reason they got into the field is because of the opportunities to build relationships with patients.

"You are more than someone who just administers treatment," he said. "You become a friend and confidant and support to patients."

It's an important role, especially given the vulnerable condition cancer patients are in when they first meet radiation therapists.

"You are able to provide daily support and comfort to patients and their loved ones during an extremely difficult time," said Farrar. "Our profession is challenging, inspiring and rewarding all at the same time."

Some patients may find that when cancer treatment is over, the relationship with their radiation therapist may be just beginning. "I have patients who I still talk to years after they've been treated," Farrar added. ▲

