

Pro-Qura

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In 1999

the Seattle Prostate Institute (SPI), located at Swedish Medical Center in Seattle, Wash., created a program called Pro-Qura to promote high standards of care among physicians offering permanent radioactive seed implant services (brachytherapy) to

patients with early-stage prostate cancer. The Pro-Qura program draws on the combined experience of SPI's physicians who, in 1985, were the first prostate brachytherapy team in the United States to adopt the new technology of transrectal ultrasound (TRUS), which allows clinicians to view the inside of the prostate in real time.

Pro-Qura's goal is to provide independent evaluations of prostate implants in a way that, over time, will improve the overall quality of prostate brachytherapy services throughout the United States. The Pro-Qura model continues to evolve and was designed to build collaborative relationships between brachytherapy leaders and community-based specialists. It is dedicated to developing uniform standards of care and a network of physicians with the knowledge and skill to offer high-quality seed implantation services.

Pro-Qura had its origin in Seed Plan Pro, a treatment planning service for radiation oncologists who performed prostate implant procedures. In the late 1990s, advances in radiation physics hardware and software allowed the production of highly accurate dose-volume histograms (DVH), a postoperative evaluation tool that analyzed the strength and distribution of radiation coverage over an intended target area. By determining how well an implant matches the technical specifications of its pre-treatment plan, precision DVH analysis helps predict the treatment's ability to produce long-term disease control and the likelihood of certain side effects and complications. DVH analyses can also spot weaknesses in practitioners' techniques that can be improved with appropriate education and mentoring. Practitioners soon recognized that DVH analysis was an excellent quality assurance tool, and Seed Plan Pro changed its focus from treatment planning to treatment evaluation. After a number of changes in its program design and service packaging, Seed Plan Pro evolved into the Pro-Qura quality assurance program.

Pro-Qura is a network of radiation oncologists and urologists whose brachytherapy services meet the stringent evaluation criteria set by Pro-Qura's multispecialty Advisory Board. Currently, more than 150 physicians participate in the network, and Pro-Qura is becoming recognized as an important resource for patients trying to locate highly qualified practitioners.

How Does Pro-Qura Work?

Physicians who want to affiliate with Pro-Qura must send postimplant documentation of their procedures (CT scans and X-rays) to Pro-Qura for DVH analysis. Each case is evaluated by a Pro-Qura physician and radiation dosimetrist. The pretreatment plan is compared to the postoperative record of where the seeds were actually placed, the differences are analyzed, and a written assessment and recommendations are sent to the physician.

When 20 implants have met Pro-Qura's evaluation criteria, the physician is offered the opportunity to establish a formal affiliation. A written agreement is signed that specifies that the physician agrees to submit all subsequent postoperative documentation to Pro-Qura for dosimetry analysis and quality evaluation. Physicians can prepare their own pretreatment plans (that map the placement of the seeds in the prostate), or Pro-Qura will provide this service upon request.

Pro-Qura charges its affiliated physicians for pre-op and post-op dosimetry services according to prevailing industry reimbursement practices. The physicians, in turn, pass these charges along to patients and their insurers.

Benefits to Physicians and Patients

There are a number of advantages to participating in the Pro-Qura program. Affiliated physicians (and their addresses and biographies) are listed on both the Seattle Prostate Institute and Pro-Qura web sites, and physicians can use their affiliation status in marketing materials with Pro-Qura's written consent. In addition, all the members of an affiliate's brachytherapy team have access to Pro-Qura specialists who can provide advice, technical assistance, and updates on the latest improvements in the team member's area of expertise.

Another important program feature is Pro-Qura's quarterly quality assurance meetings that address topics of interest to all brachytherapy team members: physicians, physicists, dosimetrists, nursing staff, ultrasonographers, and managers. All aspects of implantation practices and procedures are discussed at these meetings, including the management of complications and the identification of unsatisfactory implants. Billing and coding updates and changes in government regulations are discussed, and advances in treatment techniques and outcomes can be shared months before they appear in the medical literature. Questions, problems, and improvements developed at Pro-Qura affiliate sites are also brought forward. The minutes of these meetings are reviewed by representatives of each team specialty and sent to all affiliates and staff.

Pro-Qura uses its extensive database of DVH analyses

to conduct detailed research on how dose levels influence the incidence of side effects and overall disease-free survival. The database is also being used to initiate studies in the increasingly important area of quality-of-life research.

The Pro-Qura staff believes that these continuous efforts to establish high standards of care, evaluate outcomes according to exacting criteria, and identify brachytherapy practices and procedures in need of improvement will translate into more appropriate and effective treatment, improved patient outcomes, and a

better quality of life for patients with prostate cancer and their families. ☞

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« Two Viewpoints »

Oncology Issues spoke to two practitioners who have been part of the Pro-Qura network for more than five years to discover what they think are the benefits of belonging to this kind of quality assurance program.

Kathleen L. Schutz, M.D., a radiation oncologist at the Medical X-Ray Center in Sioux Falls, S.D., was originally the director of San Francisco Brachytherapy, which had four centers in and around the Bay area. She was a Pro-Qura affiliate in California and remained one when she decided to go back into general radiation oncology and move to the Midwest.

"I'm an experienced practitioner," said Schutz. "I'm comfortable with the procedure and do my own prostate volume studies, but the feedback I get from Pro-Qura on the quality of my work is invaluable and allows me to continue to improve my technique. This is a relatively new procedure and the patients and the hospital need to know that the physicians who do it are experienced and meet some sort of standard of care that can be documented. Affiliation reassures people that their medical community is top of the line and meets national standards."

Schutz believes the Pro-Qura program's oversight is valuable for smaller hospitals that want to offer prostate seed brachytherapy but have no experience performing the procedure or don't do it regularly because of low patient volume.

Kenneth Lam, M.D., medical director of the cancer program at Huntington Memorial Hospital in Pasadena, Calif., said his hospital was the very first institution to be accredited by the Seattle Prostate Institute (SPI) and the first to be listed on the Pro-Qura and SPI web sites. They have been enthusiastic participants in the program ever since.

"You don't want people performing a new and exciting procedure without adequate supervision and quality assurance," Lam told *Oncology Issues*. "We

need appropriate quality assurance checks to make sure our patients receive quality care. At the same time, we can improve our skills and enrich our database. Concepts in the field of prostate cancer treatment are changing. The only way we can scientifically evaluate these changes is to make sure everyone is on the same page and adheres to the same standards. If we are following similar procedures, we can be much more accurate in reporting and expanding our knowledge.

"We have changed our treatment philosophy for prostate cancer in the U.S. We are now trying to treat the patient with the disease instead of just treating the disease. Medicine has not been good about quality of life, which is defined by the patient, not the doctor. Several prostate cancer treatments have the same medical outcomes (so there is no one 'right' therapy) but very different quality-of-life results."

Lam believes that being part of Pro-Qura brought both his hospital and the brachytherapy procedure itself respectability.

Pro-Qura's annual advanced prostate brachytherapy seminar in April drew particular praise from Lam. "It's open to everyone, even if they are not Pro-Qura members, and all the major cancer centers doing brachytherapy come. We get updates from all around the country. We can quote today's data, not yesterday's. There's also a quarterly quality assurance conference for affiliates where we present cases and share information. It definitely helps us go to the next level with our program."

Economically, Lam said that Pro-Qura affiliation is budget neutral for his institution. "We pay Pro-Qura to do our post-plans," said Lam, "but if we didn't, we'd have to hire another half-time physicist or dosimetrist to do the work. It would be more expensive and they wouldn't do as good a job. Of course, we are reimbursed by the patient's insurance for post-plan costs and that solves the money problem, but I don't think you can quantify the credibility and extra patient confidence that result from the affiliation." ☞



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