Benefits of Offering IORT:

Offering IORT expanded Rose Medical Center’s comprehensive breast care program and enabled the facility to attract new patients. Since implementation of the Xo/ft System, the number of patients with breast cancer treated at Rose Medical increased from 2011 to 2012, turning around a 2 year declining trend (tumor registry data). Implementing new, innovative technology also positions Rose Medical Center as a leader in their community, increasing patient referrals. To date, Rose Medical Center has treated 53 patients with IORT utilizing the Xo/ft System.

Growth in other treatment services has also resulted from offering IORT with the Xo/ft System. Breast surgeries grew 16% from 2011-2012, and outpatient grew 20%. Additionally, radiation treatments grew 1.5% but unique patients went up by 14% due to interest in this treatment option. New patients who did not qualify for IORT still choose to receive EBRT at Rose Medical resulting in a steady increase in EBRT and other cancer treatment services since implementing IORT.

Conclusion:

Rose Medical Center is proud to offer this progressive treatment to Denver area patients. Betsy Hunsicker, Chief Operating Officer at Rose Medical Center notes that, "IORT is revolutionary and changes the way we treat breast cancer. Rose Medical Center is committed to offering innovative technology to best treat patients in our community."

Well known as a Denver institution for more than 60 years, Rose Medical Center has earned a reputation as Denver’s “Baby Hospital,” while also becoming a leader in comprehensive women’s services, internal medicine, heart and vascular care, bariatric surgery and sports medicine. Rose Medical Center has been recognized frequently for outstanding clinical outcomes and patient safety.

An acute care hospital with 422 licensed beds, Rose Medical Center cares for more than 160,000 patients annually with a team of 1,300 dedicated employees, 100 volunteers and more than 1,200 physicians.

Case Study Objective:

This case study demonstrates how Rose Medical Center provides better care and expanded treatment options for its breast cancer patients through the use of Intraoperative Radiation Therapy (IORT) with the Xoft Axxent Electronic Brachytherapy System. The case study will also show how the hospital increased awareness of this innovative, progressive therapy through social media.

Breast Cancer Treatment in as Little as ONE Day:

In November 2011, Rose Medical Center became the first hospital in Denver to offer Intraoperative Radiation Therapy (IORT) with the Xoft System. IORT is a localized form of brachytherapy that allows patients to undergo single fraction radiation therapy at the time of lumpectomy and avoid five to seven weeks of daily external beam radiation treatments. Brachytherapy is a treatment that involves the precise placement of a radiation source internally, allowing for an appropriate dose of radiation to be directed at the tumor site, while sparing normal healthy tissues in the surrounding area. The Xoft System delivers a single dose of radiation in as little as eight minutes in a standard hospital operating room. IORT is particularly beneficial to patients who may find it difficult to comply with the demands of traditional External Beam Radiation Therapy (EBRT) as it provides the same treatment benefits without the inconvenience of daily visits to the hospital for five to seven weeks.

In order to qualify for IORT, patients must meet specific selection criteria. Dr. Schwartzberg carefully selects patients presenting with a well-defined single focus Invasive Ductal Carcinoma. In addition, the lymph nodes must be clear of disease, and the final specimen should have a clean margin of 2mm.

Community Awareness for the Availability of the IORT System:

Making patients in the Denver community aware of the availability of IORT at Rose Medical Center through marketing efforts was critical to the success of the program. The Rose Medical Center marketing team focused on educating patients and referring physicians through broadcast coverage, patient brochures distributed in physician’s waiting rooms and offices as well as health fairs and grand rounds.

Rose Medical Center also employed an innovative approach to raising awareness about its new IORT system—social media. The marketing team used Twitter to broadcast a live IORT procedure to its followers (largely consisting of patients) demonstrating the ease with which the treatment is delivered. With more than 17,000 followers on Twitter, the number of possible impressions was vast. Rose Medical Center gained 43 new Twitter followers as a direct result of the linked live procedure. The marketing team extended the reach of the live tweets by posting them on the “Rose Knows Health” blog, which had more than 200 views after the surgery footage was posted. Rose Medical Center’s new IORT marketing strategy bolsters the hospital’s reputation as a cutting-edge breast care destination.

IORT supports Rose’s mission of offering their patients more treatment options. Dr. Schwartzberg remarks that her patients are thrilled to have the opportunity to receive the IORT procedure. For most patients, cosmesis is excellent. The surgery site has minimal edema, which is expected, and resolves quickly. Delivering the complete course of radiation in one dose at the time of surgery also allows patients in need of chemotherapy the opportunity to receive treatment earlier.

A peer-reviewed, Phase III, randomized clinical study demonstrated that single-fraction radiation treatment, delivered at the time of surgery resulted in recurrence rates comparable to present day Whole Breast External Beam Radiation Therapy (EBRT) in patients with early stage breast cancer.

IORT is highly recommended by physicians at Rose Medical Center for suitable patients. Dr. Schwartzberg strongly advocates the procedure, stating that it “better tailors treatment for early-stage breast cancer patients.”

IORT also allows patients to return to their daily life much faster than they could with traditional radiation therapy. IORT is completed at the time of lumpectomy surgery and eliminates the need for any post-operative radiation therapy. One of Dr. Schwartzberg’s patients received IORT and returned to work the following day. Her employer was unaware of her breast cancer diagnosis because the procedure required virtually no recovery time and the physical and cosmetic side effects were minimal. In Rose Medical’s IORT study, 39 out of 40 patients treated with IORT were pleased with the cosmetic outcome of the procedure.

“Radiation treatments grew 1.5% and unique patients increased by 14%”

One day radiation treatment may influence more patients to elect breast sparing surgery over mastectomy.

Return on Investment for IORT

Breast Surgeries (from 2011-2012) -16%

Outpatient throughput grew +20%