Implementation of Radioactive Seed Localization Program for Breast Lesions in Community Hospital to Improve Patient Outcomes and Satisfaction

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Cone Health Magnet Facilities
Annie Penn Hospital
Behavioral Health Hospital
Moses Cone Hospital
Wesley Long Hospital
Women's Hospital

BACKGROUND:

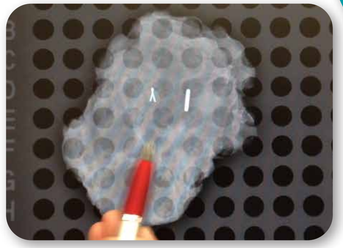
According to the most recently published statistics by the Center for Disease Control and Prevention, more than 200,000 women and more than 2000 men were diagnosed with breast cancer between 2007 and 2011. Of those women diagnosed with breast cancer, nearly 41,000 died, while more than 400 men died after being diagnosed.

According to the 2011 CDC report, breast cancer is the most common of all cancers in women, regardless of age and ethnicity. Reinforcing early detection and appropriate treatment of this potentially deadly cancer are essential to the health of both women and men.

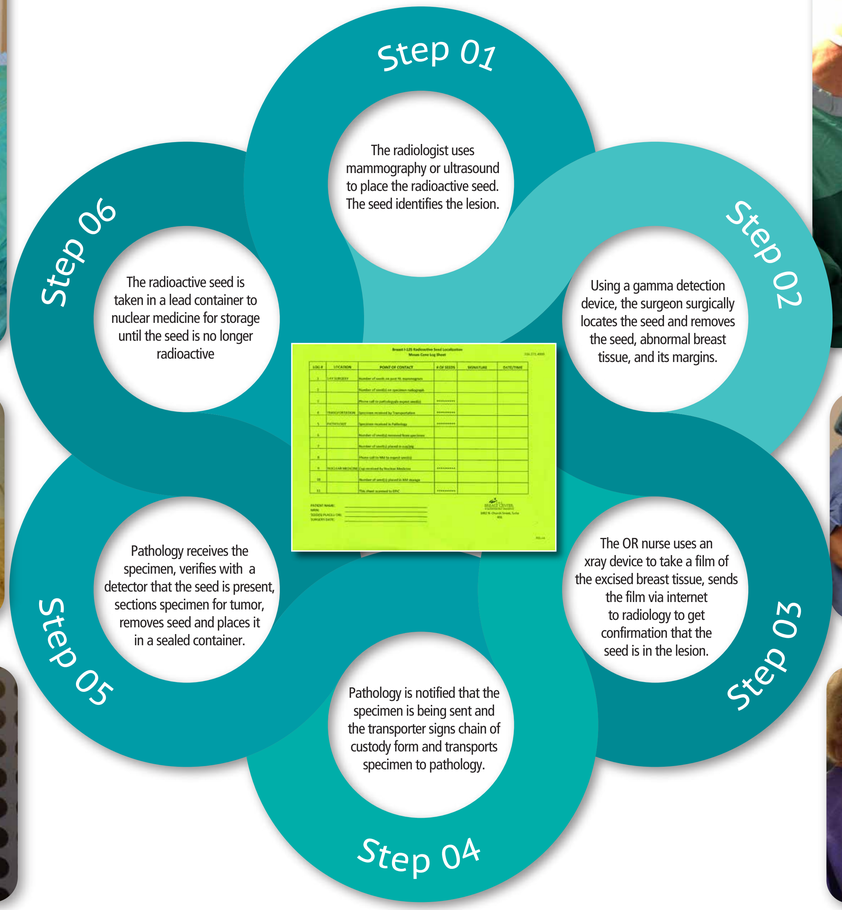
In a community hospital in the eastern United States, in an effort to provide exceptional patient care, an interprofessional team made a bold move to initiate a radioactive seed localization excision (RSLE) program for breast lesions—the second program in the state.

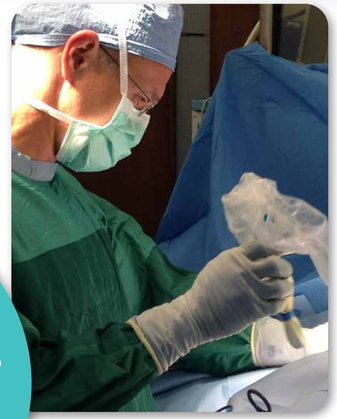
The team included:

- a local general surgery practice
- two radiology centers
- an ambulatory center's perioperative team
- pathology department
- nuclear medicine
- radiation safety.



SEED CHAIN OF CUSTODY





PROGRAM DEVELOPMENT:

- Program started 2 years prior to implementation with surgeon and radiologist training
- Ensured planned program met radiation safety standards
- Interprofessional team meetings
- Development of seed protocol
- Application to the state for approval of seed program
- Once approved, multiple test runs
- Training for interprofessional team
- Three proctored procedures for each radiologist and surgeon
- Ongoing evaluation

Education at the ambulatory surgery center consisted of members of multiple disciplines coming together to provide information about:

- Radiation safety
- Surgical technique
- Seed tracking
- Use of new equipment
- Application of new protocol

PROGRAM GOALS:

- Less patient discomfort
- Less patient anxiety and fear of dislodgment (previously required wire to localize mass)
- Improved accuracy of mass excision
- Potential of less breast volume excision
- Decreased patient physical limitations
- Reduction in re-excision
- Increased flexibility for surgical scheduling