RENEWED ENERGY IN BREAST CANCER CARE

Steve Kemper writer  Peter Baker photographer
A year ago, Mehra Golshan, MD, MBA, arrived as the Deputy Chief Medical Officer for Surgical Services and the interim director of Yale Cancer Center and Smilow Cancer Hospital’s Breast Cancer Program, interim chief of Breast Surgery, and quickly infused it with energy and key recruits, including a new director of The Breast Center at Smilow Cancer Hospital and new chiefs of breast surgery and medical oncology. “There’s lots of change and excitement building on the exceptional work that was already happening here,” said Dr. Golshan.

That's partly what drew him to Yale after 18 years as a breast cancer surgeon at Harvard’s Dana-Farber Cancer Institute and Brigham and Women’s Hospital. He wasn’t looking to leave. Then Nita Ahuja, MD, MBA, FACS, Chief of Surgery at Yale New Haven Hospital and now Interim Director of Yale Cancer Center and Interim Physician-in-Chief for Smilow Cancer Hospital, invited him to visit Yale. The people, the culture, and the openness to new ideas altered Dr. Golshan’s career path.

One of the current priorities is “next day” access for patients newly diagnosed with breast cancer. Patients can be scheduled to see a breast cancer specialist the next day at Smilow Cancer Hospital or within the Smilow Cancer Network. “Many patients with a new diagnosis are scared and worried, and they want to see someone as soon as possible,” said Dr. Golshan. “We are affording them that, which is truly patient-centered care.”

Dr. Golshan has worked on discontinuing traditional “wire localization,” in which a radiologist inserts a thin wire into the breast as a guide on the day of surgery. “The wires can be broken, moved, or bent, and they create discomfort,” explained Dr. Golshan. Now the wires are replaced with Radio Frequency Identification tags that can be inserted in advance, which lessens discomfort for the patient as well as bottlenecks in the surgery schedule.

Dr. Golshan brought his own novel research interests to Yale, which include using molecular markers with mass spectrometry and intraoperative MRIs during surgery to determine in real time whether a breast tumor has been completely removed. Surgeons and patients must often wait a week for the pathology report. If part of the tumor was missed, the patient must then return for a second operation. “My research is about making that a thing of the past,” explained Dr. Golshan.

His biggest impact is likely to be the people he has helped recruit to join the current team. First, he brought in Rachel Greenup, MD, MPH, who left Duke after eight and a half years to become Chief of Breast Surgery at Yale. Dr. Greenup says that for her the “big draws” of Yale and Smilow were the people, their dedication to aligning research with clinical care, and the range of opportunities she saw to bridge evidence with patient-centered care. She is brimming with ideas and plans.

Many NCI-designated cancer centers, she notes, serve a relatively homogenous population. By contrast, Yale is committed to providing high-quality breast cancer care to an “incredibly diverse population,” and makes that care locally accessible through its expanding network of breast cancer treatment centers. “Smilow provides exceptional cancer care to individuals from across many races, ethnicities, and socioeconomic backgrounds,” Dr. Greenup said, “this offers a real-world view of patient experience and outcomes that can inform our continued improvements in breast cancer care delivery.”

That meshes perfectly with her passion around health equity and reducing the burden of cancer care. One of breast cancer’s impacts, she said, can be financial catastrophe. “We often address the medical side effects of cancer and physical toxicity of treatment,” she said, “we now recognize that many of our best therapies are associated with psychosocial consequences that impact patients both during treatment and into survivorship. These include significant financial costs, high healthcare use, and disruption to employment for patients and their families.”

She is now working on improving communication with patients about the financial costs and burden of care to support shared decision-making. She believes that transparency around these contemporary challenges will improve patient-centered treatment planning, and may reduce overtreatment and the associated costs, a double win. She also hopes to embed prospective and ongoing “financial navigation” across the Smilow Network. Society often confuses more expensive and/or intensive care with better quality, she adds, and the result can be a wasteful system that is also costly for patients. Changing that through value-based care models that target more efficient and more meaningful care, is another of her research interests.

She and Maryam Lustberg, MD, MHS, the newly appointed Director of the Breast Center at Smilow and Chief of Breast Medical Oncology, are planning a specialized breast cancer program for young women whose concerns often differ from those of older women. For instance, treatment can affect a young woman’s fertility and her ability to carry a pregnancy. Younger women may also need different types of psychosocial support as they juggle careers, motherhood, and cancer treatment. Additionally, there are opportunities to design individualized programs for older people with breast cancer through dedicated partnerships with the nationally recognized Yale Geriatrics Program. A focus on serving the diverse needs of the community will be facilitated by ongoing partnerships with the Equity Research and Innovation Center (ERIC) at Yale led by Dr. Marcella Nunez-Smith, as well as the Center for Community Engagement and Health Equity.
Dr. Lustberg, another of Dr. Golshan’s recruits, arrived on July 1. She is nationally and internationally known for her work on survivorship and on reducing the toxicities associated with breast cancer treatments. She spent fourteen years at The Ohio State University and the James Cancer Hospital, where she was director of the Breast Cancer Survivorship Program and had no plans to leave. An invitation from Dr. Golshan and a visit to Yale changed that.

“I like to say I came for the people,” she said, echoing Drs. Golshan and Greenup. “I could sense great possibilities for innovation and multidisciplinary partnerships.”

She envisions the Smilow breast cancer care as a constellation of cohesive multidisciplinary services from diagnosis to the entire treatment trajectory faced by patients and caregivers. All these services need to be coordinated so patients can access them easily, locally, and without getting overwhelmed. “For instance, travel can be a huge burden,” she said. “Patients prefer not to come on multiple days to multiple locations. They want a package of personalized, streamlined treatments and services targeted to their specific needs based on the latest evidence of breast cancer care.”

Dr. Lustberg intends to work with the entire breast cancer team, Yale’s COPPER (Cancer Outcomes, Public Policy, and Effectiveness Research) Center, and the Yale School of Management to create better models of care delivery. In addition, she plans to extensively collaborate with the preclinical scientists throughout Yale Cancer Center who are doing innovative work to understand the biologic heterogeneity of breast tumors.

“There are opportunities for great synergy here,” Dr. Lustberg said. “My vision is to work collectively with these groups to improve the care for people diagnosed with breast cancer, and to make sure that for those who finish treatment, we address any acute toxicities that have developed—a particular area of my research. I feel it’s really all one thing,” she added. “To deliver good care we have to find the best treatment for each patient but also deliver it in a way that’s the least toxic. A good oncologist must be aware of both aspects.” In addition to partnerships with scientists and clinicians, active partnerships with patients will be a key priority as The Breast Center at Smilow Cancer Hospital expands.

The fourth member of the core team was already at Yale: Meena Moran, MD, Chief of Breast Radiation Oncology. Dr. Moran is an expert in the field of breast radiation oncology and has dedicated her career to developing standards and guidelines, both nationally and internationally, and closer to home at Yale, for breast cancer patients. Over the last five years Dr. Moran has standardized breast radiation treatments across the Smilow Cancer Hospital Network. A patient who receives radiation treatment gets the same level of expertise and state-of-the-art technology, techniques, and treatment algorithms across each site. To centralize the process, every patient with breast cancer treated with radiation therapy undergoes a peer review of their case and their treatment plan, which is conducted on a weekly basis by Dr. Moran and the Yale Therapeutic Radiology breast team. “This level of peer review and standardization across all of our sites is unique to our breast program and ensures that every patient can be confident they are receiving the same level of care and expert review, at the facility that is closest and most convenient to their home,” she said.

Dr. Moran’s standardization initiatives have included ensuring that all sites use certain treatment protocols, such as

Andrea Silber, MD
Breast Oncologist
when to treat/not treat the adjacent lymph nodes, implementation of techniques such as ‘Deep Inspiration Breath Hold’ or prone breast boards (which help to protect a patient’s heart and lungs from radiation), and protocols to ensure that all patients are offered the shortest treatment duration possible. The conventional breast radiation course is typically 6-7 weeks. “The vast majority of our patients are now being treated in 3-4 weeks,” said Dr. Moran. “We have high-level data showing that the outcomes for most patients getting treated to the whole breast without lymph nodes is identical with 3-4 or 6-7 weeks, and many patients meet the criteria.” But across the country, approximately 60% of patients who are eligible for the shorter duration breast radiation are still getting longer courses. “That is where the standardization of our treatment algorithms is a real benefit for all breast cancer patients at Smilow.” The data are equally clear about other aspects of breast cancer, such as deciding between a lumpectomy and radiation versus a mastectomy for early-stage breast cancer. There is no difference in survival with either approach, and a patient can conserve her breast without compromising her cure rate, so long as the patient also gets endocrine therapy and radiation.

Similarly, in her quest for establishing guidelines, Dr. Moran co-chaired a large initiative to settle a contentious debate: what margin of healthy tissue must exist around an excised tumor to prevent the need of a second surgery? After a meta-analysis of all available data, the answer was clear: “Because patients do so well after lumpectomy and radiation and systemic therapies afterwards, the relapse rates are no different whether the margin is one millimeter or four millimeters. That guideline has really changed the paradigm of how margins are evaluated and has resulted in a significant decrease in the national re-excision rates. In fact, Dr. Greenup published a cost analysis estimating the millions of dollars that Medicare will save in health care costs from the decrease in re-excisions resulting from our guideline.”

Together, the breast cancer researchers and physicians across the Smilow Cancer Hospital Network are expanding breast cancer care far beyond surgery and post-surgical therapy. They are using a multidisciplinary approach to find new ways to save patients time, money, and emotional distress while maintaining excellent breast cancer outcomes.