

Building a Center of

Faulkner Hospital's Model for Comprehensive Breast Health Care

Healthcare innovations typically launch from major medical centers and then branch out through the nation's community hospital network. An exception is the comprehensive model for breast health care that began nearly four decades ago at Faulkner Hospital, the 150-bed community teaching hospital partner of Brigham and Women's Hospital in Boston. In 1971, Faulkner Hospital opened the first dedicated breast-imaging center in New England. Over the years, Faulkner Hospital has continued to develop a breast care center of excellence with the addition of several multidisciplinary service lines, including:

- The Faulkner Breast Centre (featuring dedicated breast surgeons), which opened in 1988
- The 1997 installation of the first dedicated breast MRI in the Northeast
- The first Dana-Farber Cancer Institute licensed treatment center in a community setting, which opened in 2006
- Faulkner Hospital expansion to comprehensive plastic and reconstructive surgery services in 2007
- The first hospital in the Boston area to have state-of-the-art high definition digital technology in all of its 16 operating rooms in August 2007.

Each of these service lines is a separate financial entity. The Faulkner-Sagoff Centre is the hospital-based breast imaging center of the Faulkner Hospital and is staffed by radiologists who are members of the Radiology Division of the Brigham and Women's Physician Organization (BWPO). The Faulkner Breast Centre is a private surgical specialty practice affiliated with Brigham and Women's Hospital/Faulkner Hospital and located on the Faulkner Hospital campus. Breast Centre surgeons are credentialed at Faulkner Hospital, Dana-Farber Cancer Institute, and Brigham and Women's Hospital and are faculty at Harvard Medical School. Medical oncologists are on staff at Dana-Farber Cancer Institute and credentialed at Faulkner and Brigham and Women's Hospital. They too are Harvard Medical School faculty and are located on the Faulkner Hospital campus. Brigham and Women's Plastic Surgery at Faulkner Hospital is a satellite practice of the Brigham and Women's Hospital Division of Plastic Surgery. Surgeons are BWPO members and are also Harvard Medical School faculty.

Faulkner Hospital patients move seamlessly



Top, Surgeon, Dr. Margaret Duggan (left) is Medical Director of The Faulkner Breast Centre. Radiologist, Dr. Elsie Levin, directs the Faulkner-Sagoff Breast Imaging and Diagnostic Centre.

Above, The first in New England, the breast imaging and diagnostic service at Faulkner Hospital was founded in 1971. Located in Boston's Jamaica Plain neighborhood, Faulkner Hospital is the community hospital partner of Brigham and Women's Hospital.

Excellence

by **Susan Dempsey,**
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through the continuum of care as a result of collaborative networking between these service lines. Providers and patients are not impacted by the financial independence of each service line. Referrals between providers, personal interactions among colleagues and with patients, and clinical information are available to everyone.

The program's electronic medical records system that connects breast care providers is a significant component in providing seamless care across multiple sites of service. The Faulkner Breast Centre's operative notes are available on the Partners HealthCare Longitudinal Medical Record System. Providers anywhere in the Partners system can look at their patients' breast and other radiology images, pathology reports, and oncology clinic notes. For more information, see box on page 37.

Providers also communicate through a variety of regularly scheduled clinical team meetings. Breast surgeons at the Faulkner Breast Centre meet weekly with the Breast Surgery Group at Brigham and Women's Hospital and Dana-Farber Cancer Institute. Faulkner Hospital-based breast oncologists (medical oncologists who focus only on breast cancer) also meet weekly with Dana-Farber/Brigham and Women's Cancer Center breast radiation oncologists.

When a patient presents an unusual clinical question, the entire multidisciplinary team is mobilized. Breast imagers and breast pathologists present the digital images and pathology respectively, and the entire team will discuss the clinical challenge and make an individualized plan for the patient. Additionally, Faulkner Breast Centre staff meet weekly with the staff oncologists, nurse practitioners, and clinical social workers at the Dana-Farber/Brigham and Women's Cancer Center at Faulkner Hospital to discuss patients' treatment and follow-up.

Members of the Faulkner Breast Centre team are also committed to educating the next group of surgeons in the management of breast cancer. This is accomplished through daily interaction in the operating room and on the wards with the surgical residents from Brigham and Women's Hospital, and medical students from Tufts University School of Medicine to understand acute care decisions and, in the clinic setting, to evaluate new cancer patients and understand their treatment options and disease biology. Didactic teaching conferences are also offered. The Faulkner Tumor

Top, 16 new, state-of-the-art ORs at Faulkner Hospital feature high-definition video distribution within the operation room or around the facility in real time, advanced wireless touch panel and microphone devices with embedded high-speed Ethernet networking protocols, voice-activated, and hands-free operation of medical equipment directly from the sterile field for faster, easier procedures. High definition video technology benefits patients by increasing the visual detail available to surgeons.

Above, Surgeons work closely with the Faulkner Breast Centre's multidisciplinary team, which includes a nurse practitioner, a breast cancer specialist social worker, clinical nurse specialists, and support staff.

Board meets monthly to discuss selected cases in general surgical oncology. Breast cancer cases are spotlighted quarterly. Students present the case and the residents present didactic discussions regarding the diagnosis. The multidisciplinary team is present to review the case management.

Best Practice Model

Accredited by the American College of Surgeons Commission on Cancer, Faulkner Hospital is known for initiating what has become a “best practice” model for sensitive, supportive, education-focused patient care.

The genesis of breast services at Faulkner Hospital is rooted in the early 1970s, a time when a national women’s advocacy movement was impacting many social institutions, including medicine. Women were becoming educated and assertive healthcare consumers, inspiring an ethic of patient-centered care, which proposed that healthcare providers and services should be sensitive to the needs of patients as whole persons—physically, emotionally, spiritually, and economically. This ethic is a cornerstone of breast care services at Faulkner Hospital.

Thoughtful consideration of the stress that breast cancer screening and diagnosis creates for patients has shaped Faulkner’s clinical practices. Standard practice includes:

- Elimination of long waiting periods for test results
- Same-day diagnostic screening
- Dedicated education and support staff
- Onsite access and seamless transition and coordinated scheduling to multidisciplinary services
- Community-based access to clinical trials.

Faulkner’s best practice model begins with routine screening services. Every mammography appointment includes a face-to-face meeting with a radiologist to discuss results, questions, and, if there is a positive finding, to go over next steps. For patients with positive findings, breast ultrasound and biopsy can be provided the same day.

The Faulkner-Sagoff Breast Imaging Centre sees 140 screening and 55 diagnostic cases daily, and approximately 70 breast MRI cases weekly. The Centre has eight GE digital mammography units, and three GE ultrasound units. The Aurora® 1.5T Dedicated Breast MRI System with Bilateral 3D SpiralRODEO™ is the first and only FDA-cleared, fully integrated MRI system designed specifically for breast imaging that creates an elliptical, homogenous field of view to see full coverage of both breasts, chest wall, and axillae in a single scan. Core biopsy or vacuum-assisted biopsy devices are accommodated. The unit’s table design incorporates feet-first entry, which improves patient comfort and allows greater access to the breasts for biopsy intervention.

Patients diagnosed with cancer are referred directly from the Faulkner-Sagoff Centre to the Faulkner Breast Centre, and can generally schedule their first appointment within 48 hours. These two days offer patients and their families time to absorb the diagnosis and prepare to hear about next steps. Alternatively, any primary provider can

refer, or patients can self refer. In the case of primary provider referral or self-referral to the Faulkner Breast Centre, a patient’s films are reviewed by imagers at the Sagoff Centre to offer a second opinion. Diagnoses are also confirmed by a Faulkner Hospital pathologist’s review of slides from outside hospitals.

Presenting Options

At the first Faulkner Breast Centre appointment, the patient and whomever she brings for support meet with one of the Centre’s three dedicated breast surgeons for about an hour. This meeting includes a medical history review, breast examination, review of films with the patient, and review and explanation of the patient’s pathology report. The majority of patients are operable upon presentation and can choose between breast conserving surgery or mastectomy. In keeping with the Breast Centre’s emphasis on patient education and advancing the cause of modern approaches to breast cancer treatment, each option is explained fully. Everyone’s questions are addressed and patients are encouraged to take some time to think through their decision.

Breast Centre staff include a nurse practitioner, a breast cancer specialist social worker, clinical nurse specialists, and support staff. Education and support are considered integral aspects of patient care. Each incoming patient meets with

the nurse practitioner for a one-hour consultation, and the social worker is available for counseling and coaching about ways to talk with one’s children, other family members, and friends about the disease, and how to maintain open communications with a spouse or partner.

Reconstruction surgery is discussed when the extent of a patient’s disease requires or a patient chooses mastectomy. Patients are then referred to one of the Hospital’s onsite plastic surgeons. At Faulkner, both current and long-term quality-of-life issues are strongly considered when consulting patients about reconstructive surgical options following breast surgery.

The Brigham and Women’s Plastic Surgery Center also offers the most current microsurgical breast reconstruction techniques including DIEP (deep inferior epigastric perforator), SGAP (superior gluteal artery perforator), and SIEA (superficial inferior epigastric) flaps. These state-of-the-art perforator flaps use the body’s own tissue to restore natural contour after mastectomy without sacrificing abdominal or gluteal muscle.

Karl Breuing, MD, leads the breast reconstruction team of surgeons associated with Brigham and Women’s Plastic Surgery at Faulkner Hospital. He explains the approach of their practice, “Our care philosophy emphasizes tailoring what we do to the individual needs of each patient. Getting to know our patients and their expectations is crucial. Among other things, we take into account a patient’s age, activity level, occupation, anticipated future and life circumstances as well as their physiological condition. Ultimately, to conserve future options, we do not want to burn any reconstruction bridges.” A pioneer in skin matrix

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Partners HealthCare LMR

The Partners Longitudinal Medical Record (LMR) is an internally developed, web-based ambulatory electronic health record that is used across the Partners HealthCare system and is a key component of Partners' High Performance Medicine initiative, which seeks to improve quality, safety, and efficiency. The system has been certified by the Certification Commission for Healthcare Information Technology as meeting criteria for functionality and security.

The Partners LMR system processes an average of seven to ten million web transactions per day, mostly the result of over 6,000 clinicians, physicians, and nurses retrieving information from the LMR and many other clinical applications. The LMR provides all medical, demographic, prescriptions, notes, and physician information for each patient as far back as his or her original records. Nothing is archived, and all information in patients' medical records is accessible online, in real-time, to the Partners HealthCare medical community.

With the LMR, Faulkner Hospital breast care clinicians can maintain patient records electronically, improve office workflow and efficiency, and share data with other clinicians to improve coordination of care and communications. Providers use the LMR to document patient problems, procedures, medications, allergies, health maintenance topics, and encounter notes. The LMR is also used to write prescriptions and for communication among providers.

reconstruction, Dr. Breuing offers the option of using biologic materials to mastectomy patients seeking prosthetic breast reconstruction. This technique eliminates the need for time-consuming tissue expansion in expander implant reconstruction, and also allows preservation of the latissimus dorsi muscle, otherwise needed for implant suspension, which is of particular benefit to young and physically active women.

Faulkner Breast Centre patients who are either inoperable at presentation or are good candidates for preoperative clinical trials open within the Partners HealthCare system are referred to the Breast Oncology division at the Dana-Farber Cancer Institute. These patients can return for surgery at Faulkner Hospital when their chemotherapy is complete.

A Unique Collaboration

Opened in 2006, the newly constructed Dana-Farber/Brigham and Women's Cancer Center at Faulkner Hospital is the first Dana-Farber Cancer Institute-licensed treatment center in a community setting. The center provides outpatient adult oncology treatment for breast, thoracic, and GI cancers. The center is a collaboration between Dana-Farber Cancer Institute and Brigham and Women's Hospital: Dana-Farber provides outpatient services and Brigham and Women's Hospital provides both inpatient care and outpatient care. The medical staff works as a team to provide evaluation and

advanced care. When needed, breast cancer patients receive seamless referral to The Breast Center Radiation Oncology Treatment Team at Dana-Farber/Brigham and Women's Cancer Center in Boston's Longwood medical and academic area, only three miles from Faulkner. A shuttle service is available between hospitals for patient convenience.

Elizabeth Liebow, vice president for Clinical Business Development at the Dana-Farber Cancer Institute describes the development of the Faulkner Hospital satellite clinic as "taking the best features of a top-notch community hospital and the advantages of a specialized cancer center and creating something new. The unit is licensed and accredited under Dana-Farber Cancer Institute and functions under the wider umbrella of Dana-Farber/Brigham and Women's Cancer Center."

The relationship between the Dana-Farber Cancer Institute and Brigham and Women's/Faulkner Hospital involves professional agreements to provide many ancillary and clinical services including social work, environmental services, and professional radiology and laboratory services. The Dana-Farber/Brigham and Women's Cancer Center's expansion into the community is the result of significant growth in clinical volume and a need for more treatment space. It is also the result of a strong belief in the benefits of a convenient and nurturing community-based setting.

As Dr. Daniel Morganstern, a Faulkner Breast Centre/Dana-Farber medical oncologist explains, "Sometimes there are limitations to how personal the care can be in larger settings. Our goal at the Faulkner clinic is to provide patients with the healing benefits of a smaller-scale community setting and a more personal experience." Breast cancer patients treated at the Dana-Farber/Brigham and Women's Cancer Center at Faulkner Hospital clinic have access to the latest cutting-edge therapies and clinical trials. In addition, the program offers patients all of the patient and family support and education services of the Dana-Farber Cancer Institute. Some of these services such as *Look Good and Feel Better* and *Lebed Method* exercise classes are offered onsite at Faulkner.

A Leader—Not a Follower

The program's long history and interwoven system of services and disciplines are complex, but Dr. Duggan describes this growth in simple terms: "The development of a center of excellence requires two basic elements. There must be a community need and care providers who have the expertise and, most importantly, the will to create and continuously provide the best and most current care possible. The right mix of ingredients for creating a center of excellence comes together at Faulkner Hospital."

"[Patients] who come here for screening, diagnosis, and treatment experience a certain level of comfort knowing they're being followed every step of the way. I've heard patients say that they've always felt safe here and that they've never felt alone. When I hear things like this, I know we're doing our job the way it's supposed to be done, with the patient at the forefront," concludes Dr. Duggan. ■

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