

Screening Mammography: Achieving Same Day Access

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Access to Screening Mammography

- In our practice, access for screening mammography at Tansey Breast Center was a frequent source of complaints from referring clinicians and patients.
- Screening mammograms were performed at:
 - Tansey Breast Center (multidisciplinary, free-standing Breast Center, performs screening and diagnostic mammograms, located across the street from the Ochsner Medical Center main campus hospital and clinic)
 - Two satellite primary care clinics in suburban areas (perform screening mammograms only)



Access to Screening Mammography

- Screening mammography is not an “emergency” procedure where same day access was felt to be medically necessary.
- Nonetheless, access for screening mammograms at Tansey Breast Center did not meet Radiology Department or institution-wide expectations.



Screening Mammogram Access at Tansey Breast Center – 1/08 – 6/09

Screening Mammogram Access	1 st Available Appointment	3 rd Available Appointment
	23.5 days	38.8 days



Access to Screening Mammography

- The 2009 “Access to Screening Mammography in New York City: Facility Wait Times, Locations, and Proximity to Transportation” Report to the Council of the City of New York.
- In New York City, access for screening mammograms:
 - Within 1 week: 62% of facilities
 - 1-2 weeks: 11% of facilities
 - 2-4 weeks: 18% of facilities
 - >4 weeks: 14% of facilities



Access to Screening Mammography

- Studies have shown a link between long waiting times and patient non-attendance for healthcare appointments in general and for screening mammography specifically(1-3).
- Research about the link between travel burden and health care utilization is less consistent than wait times(4-12).



Access to Screening Mammography

- Our staff routinely accommodated requests for same day screening mammograms.
- Nevertheless, having to contact our department to get a same day appointment was perceived as an inconvenient barrier by patients and clinicians.
- Earlier access was available at the satellite clinics but patients were generally unwilling to travel for sooner appointments.
- In late 2008, mammography volumes justified adding another screening unit at main campus.



Same Day Access for Screening Mammograms – Our Model



Same Day Screening Mammography - Goals

- Make same day access available every day
- Eliminate barriers that might lead to non-compliance
- Focus on convenience
- Minimize hiring of additional personnel



Same Day Screening Mammography - Goals

- Improve efficiency by eliminating disruptions due to patients who arrive earlier or later than appointment time
- Reduce lost productivity caused by “no show” appointments
- Streamline processes as much as possible



Same Day Screening Mammography - Location

- We wanted to put the new unit in the main campus rather than Tansey Breast Center to minimize distance.
- There was insufficient space in the Radiology Department for equipment, waiting rooms, and changing areas.
- Exam volumes (and dissatisfaction) were greatest from Internal Medicine and Ob-Gyn clinicians.
- Internal Medicine allowed our department to use of two adjacent rooms near the front entrance and check-in area for waiting room and mammography room.



Same Day Screening Mammography – New Work Flow

- Patients leave clinician's office with electronic or written order for screening mammogram or self-refer without an order.
- Clinician's office staff does not need to book an appointment time.
- Signs guide patients from the clinic offices directly to mammography area.
- No additional "check-in" is required.



Same Day Screening Mammography – New Work Flow

- Upon arrival, signs instruct patients to enter their names on a HIPAA compliant sign-in sheet, change their clothes, and complete a questionnaire.
- Mammographic examinations are performed on a first-come, first-served basis.
- “Self-service” is used as much as possible to reduce need for ancillary personnel.
- One exception: patients must be able to stand and change unassisted to have their mammograms in this unit.



Same Day Screening Mammography – New Work Flow

- To limit the amount of time the technologist must spend addressing patient issues, pamphlets direct patients who are “outliers”:
 - Patients who cannot wait and want to schedule an appointment at Tansey or a satellite clinic.
 - Patients who have a clinical problem and need a diagnostic mammogram (not a screening).
 - Phone line was dedicated at Tansey to assist these patients.



Same Day Screening Mammography – New Work Flow

- Staffing – 1 mammographic technologist, 8:30 am to 5:00 pm, Monday through Friday.
- Assignment is rotated among mammography technologists who work at Tansey and the satellite clinics.
- 1 additional technologist was hired.



Same Day Screening Mammography – New Work Flow

- No support personnel (receptionist, tech assistant, aide, etc.) are utilized.
- Technologist is in contact with supervisor or assistant supervisor at Tansey via the instant messaging feature on Ochsner's email system.
- Other resources (reporting system, radiologists, clerical staff, supervisor,...) are shared with Tansey Breast Center.



Same Day Screening Mammography – New Work Flow

- Originally, the technologist was scheduled with a “lunch break” at noon.
- Due to demand from clinicians and patients, staffing was changed to two technologists working one at a time with overlapping schedules so that continuous service is available throughout the day.



Same Day Screening Mammography



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Same Day Screening Mammography



Same Day Screening Mammography

- Immediately upon opening this unit, we achieved our goal of same day access every day for screening mammography.



Same Day Screening Mammography Utilization



Same Day Screening Mammography - Utilization

- Generally, in our department, decisions about acquiring new equipment were based on “pro forma” models of utilization with an expected number of scheduled appointments.
- Lack of schedule was a departure from standard business modeling used in our institution for equipment acquisition and staffing.
- We were expected to at least achieve the same volumes as at our screening mammographic units at the satellite clinics.



Same Day Screening Mammography – Utilization

- There was a learning curve as clinicians and patients learned about the new unit.
- Nonetheless, daily volumes at the same day unit exceeded those at the satellite clinics by 33% in the first full year (2010) and by 64% in the second year (2011).



Same Day Screening Mammography Volume Comparison

Average Number of Screening Mammograms/Day	2010	2011
Satellite Screening Mammography Units	13.21	12.88
Same Day Unit	17.58	21.08



Conclusions

- Same day access can be achieved for screening mammography.
- Modifications to work flow allowed us to achieve greater volumes with less staffing than screening units with traditional scheduled appointments.
- This model has been well received by patients and clinicians.
- Multidisciplinary and administrative support enabled us to adopt a different model that focused on patient convenience.



References

- 1. Arnon D. Cohen, et al., "Health Provider Factors Associated with Nonattendance in Pediatric Dermatology Ambulatory Patients." *Pediatric Dermatology* 24(2007):113-117.
- 2. Jacob Dreier et al., "Nonattendance in Obstetrics and Gynecology Patients." *Gynecology and Obstetric Investigation* 66(2008): 40-43.
- 3. S.R.Crump et al.(2000). "Factors related to Noncompliance with Screening Mammogram Appointments Among Low-Income African-American Women". *J Natl Med Assoc.* 92(5):237-246.
- 4. Jennifer E Brustrom, "Going the Distance: How Far Will Women Travel to Undergo Free Mammography?" *Military Medicine* 166 (2001): 347-340.
- 5. A.J.Maxwell, "Relocation of a Static Breast Screening Unit: Factors Affecting Attendance." *Journal of Medical Screening* 7 (2000): 114-115.
- 6. Maheswaran et al., "Socioeconomic Deprivation, Travel Distance, Location of Service, and Uptake of Breast Cancer Screening in North Derbyshire, UK." *Journal of Epidemiology and Community Health* 60 (2006): 208-212.
- 7. J.L. Bulliard, J.P. de Landtsheer, and F. Levi; "Profile of Women Not Attending in the Swiss Mammography Pilot Programme." *The Breast* 13 (2004): 284-289.
- 8. Elizabeth Tarlov et al., "Characteristics of Mammography Facility Locations and Stage of Breast Cancer at Diagnosis in Chicago." *Journal of Urban Health* 86(2008): 196-213.
- 9. Monica C. Jackson et al. "Impact of Geography on Mammography Use in California." *Cancer Causes Control* May 2009



References

- 10. Fahui Wang et al. "Late Stage Breast Cancer Diagnosis and Health Care Access in Illinois." *The Professional Geographer* 60(2008): 54-69.
- 11. Anneke T. Schroen and Megan E. Lohr, "Travel Distance to Mammography and the Early Detection of Breast Cancer." *The Breast Journal* 15(2009): 216-217.
- 12. Stephen Sutton et al. "Prospective Study of Predictors of Attendance for Breast Cancer Screening in Inner London." *Journal of Epidemiology and Community Health* 48 (1994): 65-73.

