

Operation Innovation: A New Level of Care and Service for Breast Cancer Screening, Detection, and Treatment

By Richard Rajaratnam, MD, FRCS, FACS

Terry Belmont

Koklian Lim

Vita Willett

Annie Lee, MD

Edward Tyau, MD

Dong Quach, MD

Ozzie Martinez, MPH

Operation Innovation Team members
Nicole Baril, MD, General Surgery
Rowena Bartolome, RN, PHN, Population Care Management/Clinical Strategic Goals Director
Terry Belmont, Senior Vice President
Robert Blair, MPH, Assistant Medical Group Administrator
Alice Chan, MD, Radiology/Diagnostic Imaging
Danny Chang, MD, Chief of Radiology/Diagnostic Imaging
Julie Creech, Department Administrator of Appointment Services
Beth Curry, RN, Department Administrator of General Surgery
Jill Duplechan, RN, Assistant Medical Group Administrator
Marcia Finnicum, Mammography/Diagnostic Imaging Supervisor
Frank Flowers, MD, Chief of Family Medicine
Karin Jones, MD, Ob/Gyn
Nancy Kingston, MPH, Department Administrator of Health Education/Preventive Medicine
Annie Lee, MD, Radiology/Diagnostic Imaging
Koklian Lim, Medical Group Administrator
Shawn Malott, MPH, Project Manager I
Ozzie Martinez, MPH, Senior Project Manager
Zoann Peterson, Assistant Department Administrator of General Surgery
Ales Pindur, MD, Department of Pathology
Leigh Ann Pearson, Appointment Center Supervisor
Jim Podzimek, RN, Director of Family Medicine
Stephen Provonsa, MD, MPH, Physician-in-Charge of Preventive Medicine and Population Care Management Medical Director
Dong Quach, MD, Chief of Pathology
Al Quitral, Assistant Department Administrator of Diagnostic Imaging
Richard Rajaratnam, MD, FRCS, FACS, Area Associate Medical Director
Enna Serna, MD, Family Medicine
Terence Shum, MD, Internal Medicine
Neil Thamawatanakul, Planning & Analysis
Jim Thomas, Department Administrator of Radiology/Diagnostic Imaging
Edward Tyau, MD, Chief of Surgery
Vita Willett, Director of Hospital Operations

Introduction

Nationally, a woman's lifetime risk of being diagnosed with breast cancer is 13.2%. Breast cancer is the second leading cause of cancer death in women.¹ Research has shown that early and prompt breast cancer screening, detection, diagnosis, and treatment can save lives.²⁻⁴ Operation Innovation was conceived and implemented at Kaiser Permanente (KP) by a multidisciplinary group of physicians, health care professionals, bargaining unit staff, and administrators from the KP Riverside Service Area to improve breast cancer screening, detection, and treatment services for members and patients.

Operation Innovation includes two distinct-yet-related components: mammography outreach and timely diagnosis of breast cancer. Interventions to promote mammography screening focused on reaching internal performance goals as well as external benchmarks, including the clinical strategic goals set by the KP Southern California Region (KPSC) as well as the Health Plan Employer Data and Information Set (HEDIS) measurements set by the National Committee for Quality Assurance (NCQA). To support and complement activities encouraging mam-

... early and prompt breast cancer screening, detection, diagnosis, and treatment can save lives.²⁻⁴

Richard Rajaratnam, MD, FRCS, FACS, Area Medical Director. E-mail: richard.g.rajaratnam@kp.org.

Terry Belmont, Senior Vice President, Hospital Health Plan, Inland Empire Service Area. E-mail: terry.a.belmont@kp.org.

Koklian Lim, Medical Group Administrator, KP Riverside. E-mail: koklian.lim@kp.org.

Vita Willett, Director of Hospital Operations, KP Riverside. E-mail: vita.m.willett@kp.org.

Annie Lee, MD, Physician Champion. E-mail is annie.x.lee@kp.org.

Edward Tyau, MD, Chief of General Surgery. E-mail: edward.tyau@kp.org.

Dong Quach, MD, Chief of Pathology. E-mail: dong.a.quach@kp.org.

Ozzie Martinez, MPH, Senior Project Manager. E-mail: osvaldo.martinez@kp.org.

mography screening, additional steps were taken to reduce the number of days from “time of suspicion” to “time of diagnosis.” Targeted “days wait” performance goals are set annually by the Southern California Permanente Medical Group (SCPMG) Regional Chiefs of Radiology/Diagnostic Imaging and General Surgery. A distinguishing aspect of the project is its comprehensive and collaborative approach to delivering breast cancer care and services for our members and patients.

In November-December 2003, the KP Riverside Service Area’s baseline screening mammography rate for the target group was 79.1% while the leading medical center in the

KPSC had a rate of 84.4%. In response, Riverside assembled a multidisciplinary team of KP health care professionals to develop an outreach intervention plan. The team reviewed literature and best practices, assessing their potential to increase initial and ongoing mammography use, before selecting three specific outreach methods: “Mammography Call Outreach,” “Focused Mammography Outreach,” and “Mobile Mammography Outreach.” As of April 2005, Riverside’s breast cancer screening rate had reached 89.8%, the highest in the KPSC, outpacing the other service areas in the Region by a mean of about 8%. Riverside’s

performance also exceeds national and external benchmarks, such as HEDIS measurements.

A KPSC report distributed in July 2003 provided preliminary baseline data on the time elapsed from initial suspicion of breast cancer to diagnosis. KP Riverside Service Area statistics showed that only 32% of the cases examined were diagnosed within the recommended target of 14 days from the initial suspicious findings. The median number of days from suspicion to diagnosis was 19 (range 2-52 days). A multidisciplinary team designed new processes to reduce the wait time along with the unnecessary anxiety and number of “sleepless nights” that patients experienced. The team’s efforts focused on improving access, service, and patient satisfaction. Compared with baseline, the 2004 yearend results were impressive: 79% of patients were diagnosed within 14 days, with a median of 9 days. As with mammography outreach, the Riverside Service Area has become a KPSC Regional leader in shortening the time-to-service period that follows screening mammography. This accomplishment is particularly noteworthy because the number of procedures performed increased from 23,217 (in 2003) to 27,410 (in 2004).

Program Objectives, Scope, and Significance

The objectives of the first component of the program, the Mammography Outreach Project, was to increase the number of screening mammography procedures among the target group of female patients aged 50-69 from a baseline of 79.1% to 90% by the end of 2004. The objective of the second component of the program, the Timely Diagnosis of Breast Cancer Project, was to reduce the number of days from sus-

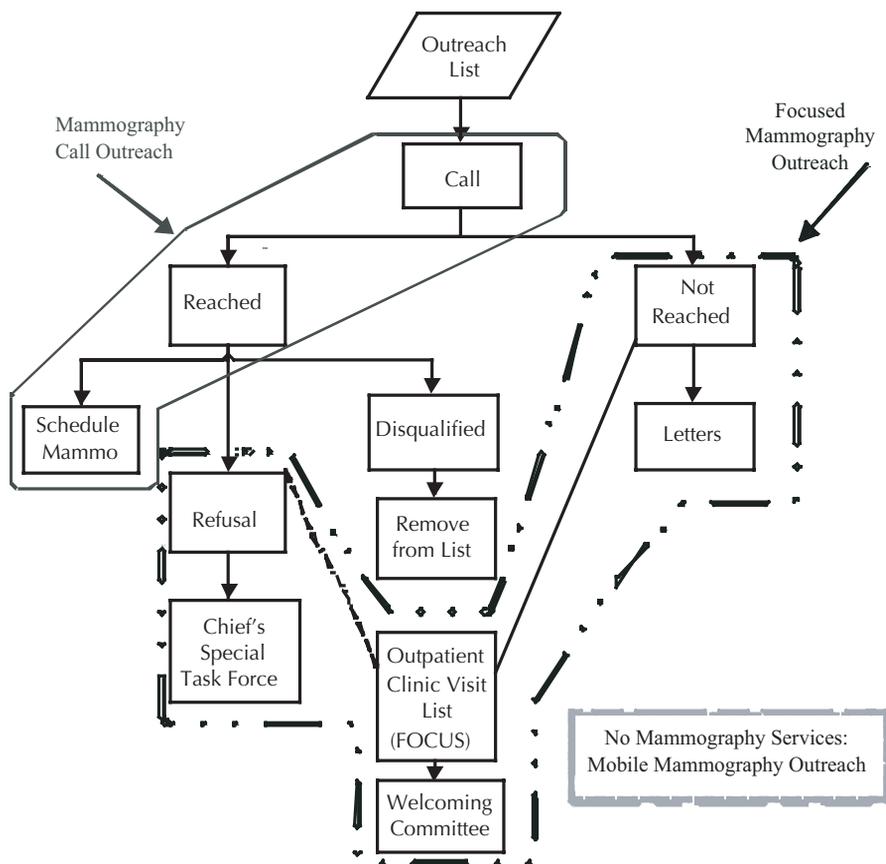


Figure 1. Mammography Outreach Program flowchart.

picion of abnormality to diagnosis of breast cancer from a baseline of 32% diagnosed within 14 days to a target of 80% diagnosed within 14 days by the end of 2004.

Scope of Quality Issues and Member Impact

Mammography outreach was initiated in January 2004 to aggressively meet and exceed the KPSC Clinical Strategic Goal performance targets for breast cancer screening. Outreach efforts were directed toward patients who met the HEDIS criteria: women aged 50-69 years who had been enrolled in the Health Plan continuously for two years and had not received a mammogram within the past 18 months. The target population was estimated at 17,000 eligible women. Before initiation of the project, eligible women were encouraged to obtain a mammogram through a variety of mechanisms, including automated reminder letters generated by a local mammography database (PENRAD) and an "M" prompt on an electronic system that flagged the patient's Clinic Processing Record at the point of service, thus reminding clinicians and staff that a mammogram was needed for that patient. Other ongoing educational and awareness interventions included posters, flyers, and pamphlets; Breast Cancer Awareness Month activities; incentives for staff to identify at-risk women at the point of service, to refer these women for mammography, and to schedule the mammogram; and employee "Get Your Mammogram" campaigns.

Because existing methods were no longer having a sufficient impact, the Mammography Outreach Project designed new structures and processes to:

- identify at-risk women and en-

courage them to be screened through targeted/motivational telephonic messages and personalized communications at the point-of-service

- identify nonresponders and nonacceptors for focused outreach efforts using stage-matched, tailored communications and materials; and
- provide access to screening mammography services in an outlying KP facility through a mobile mammography service.

Figure 1 shows sequence of procedures in the Mammography Outreach Project. The target of 90% was reached in May-June 2005. These interventions increased rates of screening mammography almost 12% within the target group at a reasonable cost.

After the screening mammography

is performed, any suspicious findings must be quickly diagnosed and reported to the patient. Regional Breast Cancer Patient Satisfaction surveys have repeatedly shown that prompt biopsy of suspicious breast lesions significantly improves satisfaction with breast cancer care.⁵ To shorten the time to diagnosis, the project team focused on improving and streamlining existing processes and designing new modes of operations. These changes included the following events:

- The Departments of Radiology/Diagnostic Imaging, Pathology, and General Surgery agreed on the importance of reducing wait times and agreed to methodology
- Radiologists committed themselves to reading mammograms in a timely manner and to re-

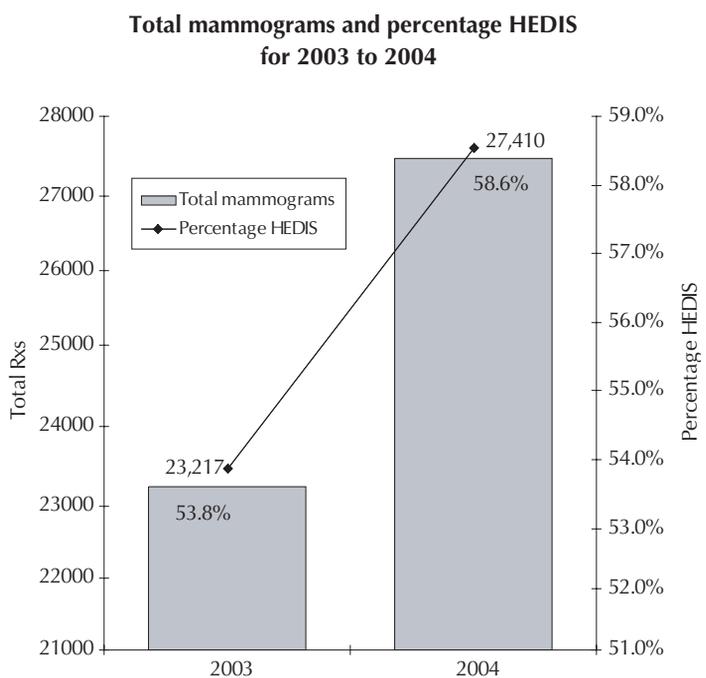


Figure 2. Numbers and percentages of mammograms performed in KP Riverside Service Area and percentage of these patients meeting HEDIS criteria for mammography, 2003-2004.

A few months after these services were first deployed, we observed a substantial reduction in wait time.

- turning patients within one-two days for a stereotactic breast biopsy (SBB)
- Dedicated surgical consultation appointments were created for postbiopsy patients with direct booking capabilities by Radiology/Diagnostic Imaging. Appointments are currently scheduled within three days after SBB, with a goal of providing same-day surgical appointment access for patients with suspect lesions
- Pathologists committed themselves to providing pathology reports within 48 hours after receiving the specimen; and
- Surgeons were matched with midwives and registered nurse practitioners to provide breast assessment training and to improve recognition of benign breast problems that did not require surgical consultation. This step resulted in more appropriate

referrals and reduced demand for unnecessary surgical consultations.

Multidisciplinary collaboration as well as implementation of new, improved operational designs have resulted in much more timely and effective care and service, improved patient outcomes, and enhanced member satisfaction. A few months after these services were first deployed, we observed a substantial reduction in wait time. At the end of 2004, 152 (79%) of 192 women had a wait time of 14 days or less. Productivity gains also enabled the project team to accommodate a 20% surge in screening mammography procedures resulting from the increased mammography outreach activities.

Program Measures of Quality and Impact

Regular, repeated screening mammography can identify breast can-

cer at earlier stages than might otherwise be diagnosed. Breast cancer that is found early can be treated more effectively and less expensively than breast cancer found at later stages. In 2003, a total of 23,217 screening mammograms were performed, whereas 27,410 procedures were performed in 2004. In addition, the population of patients who were program-eligible according to HEDIS criteria made up a greater percentage of overall screenings, rising from 53.8% in 2003 to 58.6% in 2004 (Figure 2). Within 12 months, the efforts of the Mammography Outreach Project contributed to a rate of increase from 79.1% at baseline (November-December 2003) to 87.4% of the target population (November-December 2004). By April 2005, the rate had risen to 89.8% of the target population (Figure 3). This outcome supports internal performance goals and exceeds the ex-

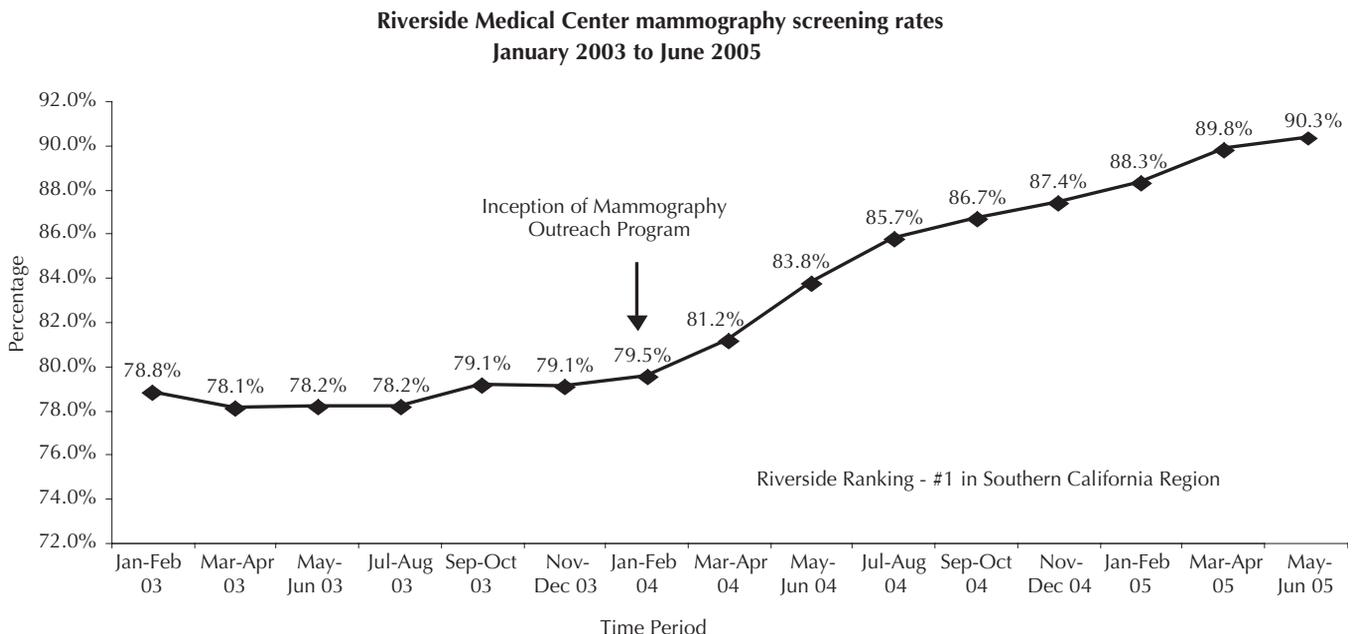


Figure 3. Rates of mammography in KP Riverside Service Area, 2003-2005.

ternal HEDIS 90th-percentile benchmark for screening mammography.

Costs for the mammography outreach project covered materials (including incentives, such as staff celebrations, recognition luncheons, bracelets, movie tickets, pins, drink vouchers, and Breast Care Packets) and administrative personnel (including a full-time senior project manager and a full-time physician lead, one or two receptionists to total 1 FTE, and a full-time administrative specialist). Services of clinical staff from the Departments of General Surgery, Radiology/Diagnostic Imaging, and Pathology were cost-neutral. An estimated budget was prepared for outreach activities, mobile mammography screening services, and data collection and analysis. Overall costs were kept to a minimum, but no cost-benefit analysis was done.

A timely diagnosis from first suspicion of breast cancer to receipt of pathology findings also is imperative for achieving the best possible clinical outcome. (Early, prompt breast cancer diagnosis is a key patient satisfier.) Diagnosing breast cancer in its earliest stages also contributes to reduced rates of morbidity and mortality as well as reduction of the physical, emotional, and financial costs associated with treating more advanced cancers. The KP Riverside Service Area was the KPSC Region's 2004 year-end leader for timely diagnosis from first suspicion to receipt of pathology findings: Of the target population, 79% received the diagnosis within 14 days or less from first suspicion (Figures 4,5). This achievement was obtained at no additional cost.

Program Design and Methodology

The Mammography Outreach Project evaluated and documented

barriers to promoting and accessing mammography services, conducted a literature search, and assessed best practices of the KP Baldwin Park Service area in Southern California. Three specific Mammography Outreach components and performance targets were developed to address barriers of product, price, place, and promotion, using a variety of systems and types of support to obtain and analyze data measuring outcomes for each project component.

For the Mammography Call Outreach segment of the program, the KP Inland Empire Planning and Analysis Department provides a monthly list of eligible patients drawn from several data sources: foundations, PENRAD, the KP Encounter Coding System (ECS), and the KP Radiology/Diagnostic Imaging Information System (RIS). The list is entered into a spreadsheet and is stored on a shared drive. Specially trained receptionists in the Appointment Call Center contact each eligible patient on the list by telephone. Data are logged, analyzed, and compiled into a Call Outreach Report Card and include the total number of patients called as well as the total number and percentage of patients scheduling or refusing to schedule an appointment and the percentage of patients called and not reached and the percentage of patients disqualified from the program.

The list of patients who have either not responded or refused to schedule an appointment are forwarded for Focused Mammography Outreach. Follow-up outreach data are logged and analyzed, and a similar report card is generated, documenting the total number of patients with second and third contact number who scheduled an appointment, the number of patients who continue to refuse an appointment, and the

		Riverside	Region
Qtr 1	Denom	49	549
	Numer	41	182
	Rate	84%	33%
	Median	9.0	23.0
Qtr 2	Denom	52	504
	Numer	38	165
	Rate	73%	33%
	Median	8.0	22.0
Qtr 3	Denom	50	675
	Numer	43	271
	Rate	86%	40%
	Median	8.0	18.0
Qtr 4	Denom	41	467
	Numer	30	196
	Rate	73%	42%
	Median	9.0	17.0
2004	Denom	182	2195
	Numer	152	814
	Rate	79%	37%
	Median	9.0	20.0

Figure 4. Percentage of patients with ≤14-day wait time from first suspicion of breast cancer to date of final pathology dictation.

number of patients disqualified from the program. In addition, the RIS is used to track the following data daily:

- total number of mammograms scheduled at all sites, including the Mobile Mammography Outreach Unit
- total daily number of mammograms performed at all sites
- total number of scheduled vs walk-in appointments
- mean wait time for mammography at the KP Riverside medical center
- the “did not keep” (DNK) appointment rate; and
- demand and capacity at all sites.

The data are compiled and trended every two weeks and also include the total number (percentage) of mammograms performed biweekly and the total number (percentage) of mammograms received by the HEDIS group biweekly. The data are presented at a biweekly team meet-

ing for analysis. Systems support, modifications, or both are made according to outcomes achieved.

For the Timely Diagnosis of Breast Cancer component of the program, the Riverside team assessed existing processes and best practices of the KP Orange County Service Area, then developed performance targets for improving care, service, access, and member satisfaction related to diagnosis wait times. Key stakeholders on the team included representatives from General Sur-

gery, Radiology/Diagnostic Imaging, Pathology, Family Medicine, and Obstetrics and Gynecology. The team systematically analyzes retrospective data extracted from review of patient medical records. Internal retrospective audits of timeframe data on patient medical records and KP Patient Data System (KPDS) and Outpatient Appointment System (OPAS) also are conducted to determine dates of first suspicion, final mammogram interpretation by mammo-radiologist, sterotactic or image-

guided biopsy, definitive diagnosis by pathologist, and first surgical consultation.

Continuous assessment of the data identifies barriers and ensures that gains are both maintained and improved. Quality assurance data are recorded, maintained, and reviewed annually with the mammo-radiologists. These data include the total number of mammograms interpreted each year, the call-back rate within national guidelines, the biopsy rate within national guidelines, and the total number of cancers detected within national guidelines. An Improvement Action Plan is submitted by any radiologist who substantially deviates from established standards of care.

Program Improvement Activities

For the Mammography Outreach Project, improvement was data-driven and focused on several tasks:

- proactively identifying eligible patients and making personalized outreach contacts;
- proactively identifying nonresponders and those refusing a mammogram for more focused outreach communications; and
- improving access to mammography services through increased capacity of existing equipment and providing mobile mammography services in an underserved community.

As part of the Mammography Call Outreach component, approximately 300 telephonic attempts are made each week, with approximately 30–40% of those contacted scheduling a mammography appointment at the first call. Each month, the Focused Mammography Outreach project makes 80 phone calls and sends 500 letters to members who were not reached previ-

QTR 4	Median days for:	Riverside	Region
GOAL	First suspicion date to path 'dictation' date	9.0	17.0
RAD	Abn mam done date to final dictation date	2.5	9.0
BX	Final mam dictation date to path 'dictation' date	8.0	8.0

QTR 3	Median days for:	Riverside	Region
GOAL	First suspicion date to path 'dictation' date	8.0	18.0
RAD	Abn mam done date to final dictation date	3.0	9.0
BX	Final mam dictation date to path 'dictation' date	7.0	8.0

QTR 2	Median days for:	Riverside	Region
GOAL	First suspicion date to path 'dictation' date	8.0	22.0
RAD	Abn mam done date to final dictation date	3.0	8.0
BX	Final mam dictation date to path 'dictation' date	6.0	9.0

QTR 1	Median days for:	Riverside	Region
GOAL	First suspicion date to path 'dictation' date	9.0	23.0
RAD	Abn mam done date to final dictation date	4.0	11.0
BX	Final mam dictation date to path 'dictation' date	7.0	10.0

2004	Median days for:	Riverside	Region
GOAL	First suspicion date to path 'dictation' date	9.0	20.0
RAD	Abn mam done date to final dictation date	3.0	9.0
BX	Final mam dictation date to path 'dictation' date	11.0	9.0

Figure 5. Median number of days for 2004 KPSC breast cancer clinical strategic goals.

ously by telephone. As a result, the Mammography Outreach Project contributed to raising the screening mammography rate by approximately 1% per month. Improvement in overall rates has been statistically correlated to the Mammography Outreach Project initiatives.

Project innovations include focused and personalized communication strategies, a “Welcoming Committee,” and a mobile mammography screening unit. Published results of mammography outreach efforts have shown that tailored interventions are successful at encouraging mammographic screenings.^{6,7} For women who declined to schedule a screening after being contacted by phone, reasons for this refusal were recorded. As part of the Radiology Chief’s Special Task Force, the Mammography/Diagnostic Imaging Unit Supervisor makes follow-up, motivational phone calls to each of these women to personally address their fears, concerns, and other barriers and to encourage them to schedule an appointment (Figure 6). As part of the Welcoming Committee operations, a FOCUS list is generated weekly that cross-references patients eligible for a screening mammogram who also have a medical office visit scheduled. Each patient is called, and an attempt is made by an Appointment Call Center receptionist to schedule the patient for mammography at a time near the already-scheduled visit. Nonresponding patients are greeted on the day of their visit by a member of the Welcoming Committee and are offered a priority mammogram appointment and a special Breast Cancer Awareness gift. Members of the Welcoming Committee—specially trained employees of the Radiology/Diagnostic Imaging/Mammography Unit—greet approximately 30 to 50 women each week.

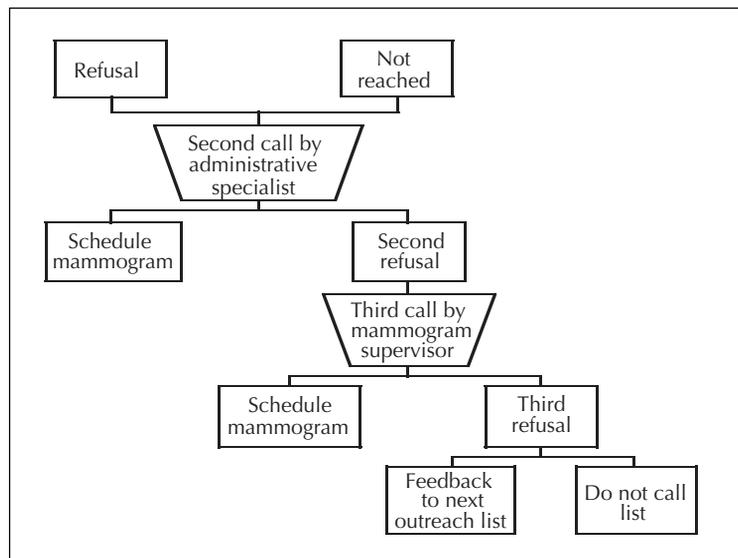


Figure 6. Mammography outreach procedures for Chief’s Special Task Force.

The Mobile Mammography Outreach component was instrumental in providing mammographic screening services in an underserved community where approximately 862 women of the HEDIS-eligible population would otherwise not have had access to this service. This mobile unit is the first of its type used in the KPSC Region. A licensed technologist performs six mammographic examinations per hour during an eight-hour shift. Films are developed at an accredited site and are delivered to the medical center for interpretation within 48 hours. Quality Assurance measures are guaranteed. The price per exam is \$42.50.

Radiology/Diagnostic Imaging provided the impetus and facilitated all aspects of the Mammography Outreach Project. Medical Group Administration provided leadership and direction to the project as well as financial support; Appointment Call Center called members, scheduled appointments, and tracked outreach outcomes; Planning and Analysis prepared a variety of queries to extract pertinent data on the target

group; and Preventive Medicine organized and reported the project outcomes. Staff from Radiology/Diagnostic Imaging and the Appointment Call Center received education on the goals and objectives of the Mammography Outreach Project, as well as standardized methods for scripting, consistent messaging, and documentation of members’ telephonic responses. A tour of the Mammography Unit was conducted for the Appointment Call Center staff.

In support of the regional goal for timely diagnosis of breast cancer, a cross-functional team from multiple departments and disciplines focused on creating new, improved methods to diagnose breast lesions in a time-efficient, cost-neutral manner. Through careful analysis of KPSC Regional and KP Service Area timeframe data, access data, and existing systems and processes, the team focused on methods to improve Radiology/Diagnostic Imaging capacity for interpreting mammogram results; processes/timeframe for obtaining stereotactic breast biopsy, timeframe for receiving final pathol-

The Mobile Mammography Outreach component was instrumental in providing mammographic screening services in an underserved community ...

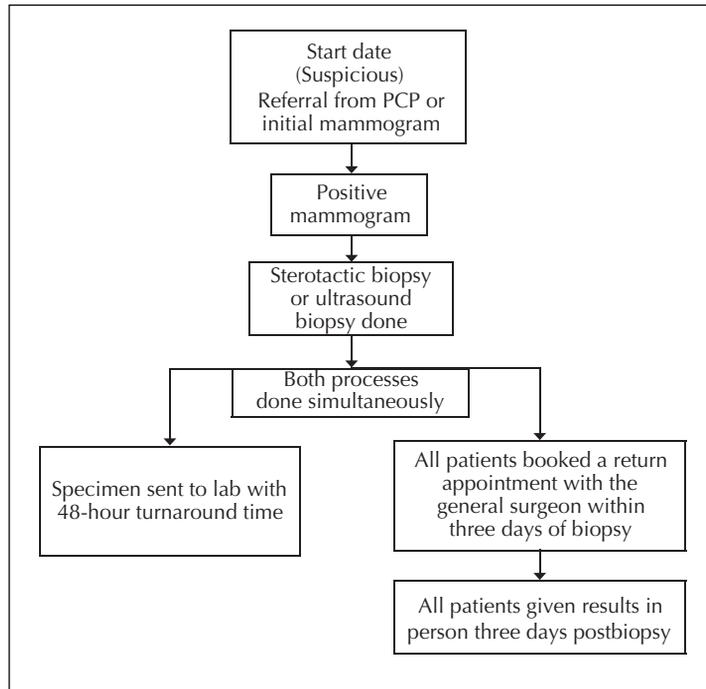


Figure 7. Procedure for timely diagnosis of breast cancer.

efficient and timelier processes to diagnose suspect lesions. Accomplishments of the team included improving the capacity of the Department of Radiology/Diagnostic Imaging to diagnose breast lesions and interpret examination results; ensuring that pathology reports are available within 48 hours after receipt of biopsy specimen; the Department of Radiology/Diagnostic Imaging directly booking postbiopsy patients to the Department of General Surgery schedule; and ensuring that the Department of General Surgery sees patients within three days after biopsy, with a goal of same-day access for patients with suspect lesions (Figure 7).

Program Results and Transferability

The Mammography Outreach Project made a clear impact on rates of screening mammography among the target population of patients in the KP Riverside Service Area. In November-December of 2003, the KPSC Regional average attained by other KP Service Areas was 79.4% of the target group while the rate in the KP Riverside Service Area was 79.1%; as of April 2005, the overall KPSC regional rate averaged 82%, whereas the rate in the KP Riverside Service Area was 89.8% for the same period—a substantial increase. According to the HEDIS breast cancer screening findings from the NCQA (published in *The State of Health Care Quality: 2004*), a rate of 75.3% was achieved by commercial plans, 74% by Medicare, and 55.9% by Medicaid.⁸ With regard to the Timely Diagnosis of Breast Cancer Project, The KP Riverside Service Area was the KPSC Region's 2004 year-end leader: Of the target population, 79% received a diagnosis within the performance target timeframe of ≤ 14 days from first

The overall impact was comprehensive: In striving for a common purpose, team members enhanced their working relationships and showed leadership ...

ogy report; access to surgical consult for postbiopsy patients; and appropriateness of breast assessment referrals for surgical consults. During the period December 2003 through 2004, these collaborative efforts successfully reduced the median number of days waiting (patients' "sleepless nights") from 19 days to 9 days and increased from 32% to 79% the percentage of patients who received the diagnosis of breast cancer within 14 days after initial suspicion of breast cancer.

An innovative aspect of the Timely Diagnosis of Breast Cancer Team was its use of mammo-radiologists for quick, accurate interpretation of mammography examinations. These individuals are a special core group of dedicated radiologists who are the very best among their peers at mammogram interpretation, as measured by objective Service Area and national quality assurance standards and data. The team was also inno-

valative in its multifaceted approach and in its involvement with a wide variety of departments and disciplines. The team was focused in its efforts to collaborate and to assess and challenge existing practices that created unnecessary delay. The team also rapidly introduced improved processes to substantially reduce the time from first suspicion of breast cancer to diagnosis. The overall impact was comprehensive: In striving for a common purpose, team members enhanced their working relationships and showed leadership in raising the bar of excellence in the KPSC Region for timely diagnosis of breast cancer. Most important, their efforts substantially improved the care and service provided to our members and patients.

In a manner similar to that of the Mammography Outreach Project Team, the Timely Diagnosis of Breast Cancer Project Team assessed existing systems and designed more

suspicion of breast cancer.

Implementation of the Mammography Outreach Project was relatively barrier free. The two major problems encountered included accessing current and accurate data to conduct outreach efforts and, once these data were obtained, making telephonic contact with the target group on the initial attempt. Similarly, a major obstacle faced by the Timely Diagnosis of Breast Cancer Project team was access to up-to-date, accurate data for tracking and measuring results. This obstacle

was compounded by the need for manual review of medical records and electronic systems to extract the data. In addition, initial apprehension was expressed by the Department of General Surgery about allowing the Department of Radiology/Diagnostic Imaging to have direct booking capability into the Department of General Surgery daily schedule. After this process was established, no major problems occurred.

The ease of implementation and improved clinical outcomes were due in great measure to three elements:

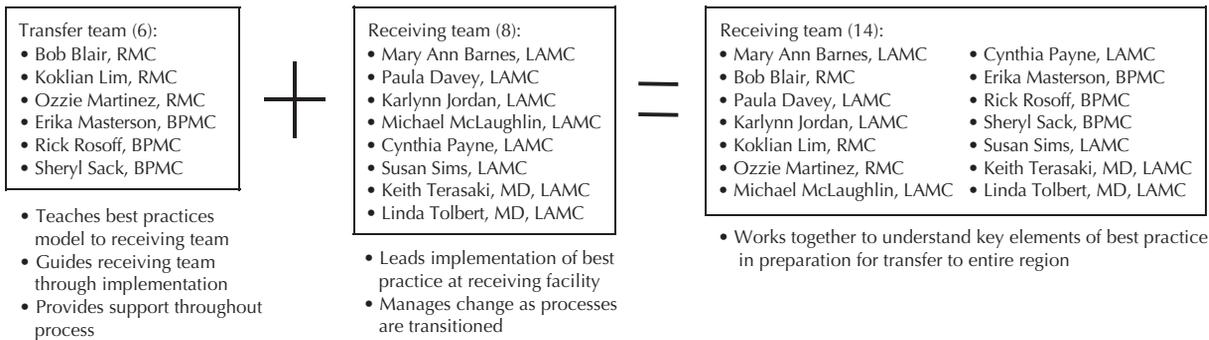
team collaboration; data-driven and evidence-based decision making; and the support of senior KP leadership. With the success of Operation Innovation, we have made a concerted effort to share our practices with other KP Service Areas in Southern California and nationwide. The Timely Diagnosis of Breast Cancer team presented our project to the Regional Breast Cancer Committee on April 12, 2005; and on April 29, 2005, the two leading medical centers in screening mammography rates (Riverside and

SCPMG best practice transfer SWAT structure

Breast cancer screening rate improvement

Area of focus MGA leads Chris Crisafulli, Koklian Lim, Greg Posner, Rick Rosoff	<ul style="list-style-type: none"> • Executive sponsorship • Monitor achievement of milestones 	Area of focus support Ruth Goldberg, Mitch Rutledge
---	--	---

Transfer #1



Transfer #2

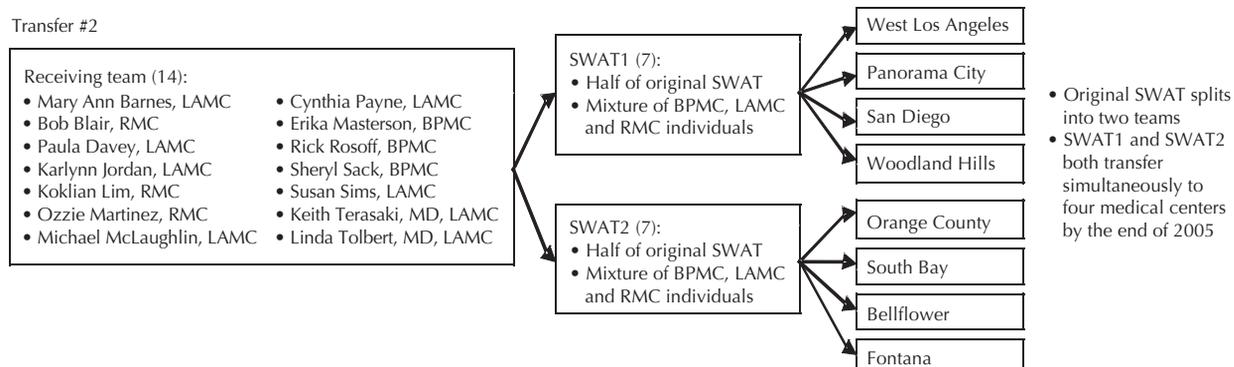


Figure 8. SCPMG best practices transfer SWAT structure for improving breast cancer screening rate.

The team accomplished this goal by developing and delivering creative, responsive breast cancer screening, detection, and treatment products and services ...

Baldwin Park) shared their best practices with members of the KP Los Angeles Medical Center (Figure 8). Post-training feedback from staff at the KP Los Angeles Medical Center indicates that they have substantially changed their practices to raise rates of screening mammography. (Results are expected to become manifest within two to three reporting periods.) In addition to the Los Angeles facility, the KP Riverside Medical Center also has shared the project with the KP medical centers in San Diego and West Los Angeles. The project will also be shared with KP medical centers in Woodland Hills, Fontana, South Bay, and Bellflower.

On behalf of the SCPMG leadership, the Mammography Outreach Project was presented to the Board of Directors on May 26, 2005. At the request of The Permanente Federation, our best practice was shared nationally via an interregional videoconference held on June 8, 2005. Information was presented on both the Mammography Outreach Project and the Timely Diagnosis of Breast Cancer Project. In addition, our comprehensive breast cancer screening, detection, and treatment

program was covered in an article published by the local (Riverside area) *Press Enterprise* newspaper.⁹

Conclusion

Operation Innovation owes its success to the commitment expressed by project team members to move our organization to an entirely new level of care and service. The team accomplished this goal by developing and delivering creative, responsive breast cancer screening, detection, and treatment products and services designed to protect the health of our members and patients and that met or exceeded internal performance indicators and external benchmarks for care. ❖

Acknowledgment

Figure 4 (Appendix D) adapted from 2004 Breast Cancer Clinical Strategic Goal—Quarter 3 Results prepared by Freda Melnick, Clinical Analyst, KP Southern California Region, 01-06-2005.

References

1. American Cancer Society. Cancer facts & figures, 2005 [monograph on the Internet]. Atlanta (GA): American Cancer Society; 2005 [cited 2006 Jan 6]. Available from: www.cancer.org/downloads/STT/CAFF2005f4PWSecured.pdf
2. Elmore JG, Armstrong K, Lehman CD, Fletcher SW. Screening for breast cancer [review]. *JAMA* 2005 Mar 9;293(10):1245-56.
3. Barton MB. Breast cancer screening. Benefits, risks, and current controversies [review]. *Postgrad Med* 2005 Aug;118(2):27-8, 33-6, 46.
4. Timins JK. Controversies in mammography [review]. *N J Med* 2005 Jan-Feb;102(1-2):45-9.
5. Kaiser Permanente, Organizational Research. Breast cancer patient satisfaction survey. 5th administration. [Pasadena (CA): Organizational Research; 2002].
6. Lipkus IM, Rimer BK, Halabi S, Strigo TS. Can tailored interventions increase mammography use among HMO women? *Am J Prev Med* 2000 Jan;18(1):1-10.
7. Yabroff KR, O'Malley A, Mangan P, Mandelblatt J. Inreach and outreach interventions to improve mammography use. *J Am Med Womens Assoc* 2001 Fall;56(4):166-73, 188.
8. National Committee for Quality Assurance. The state of health care quality: 2004 [monograph on the Internet]. Washington (DC): National Committee for Quality Assurance; 2004 [cited 2006 Jan 6]. Available from: www.idsociety.org/Template.cfm?Section=Home&CONTENTID=10298&TEMPLATE=/ContentManagement/ContentDisplay.cfm.
9. Schwartz M. Prevention for life: cancer in the spotlight. *The Press Enterprise* 2005 May 24.

An Unparalleled Level

Matching the superb technology of present-day medicine with an effective delivery system can raise US medical care to a level unparalleled in the world.

— Sidney R Garfield, MD, *Scientific American*, April 1970

This "Moment in History" quote collected by Steve Gilford, KP Historian