

PenRad

MAMMOGRAPHY INFORMATION SYSTEM
... for facilities with greater expectations...

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PenRad

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Intuitive

PenRad's unique turnkey solution was designed for and by radiologists and technologists. It complements and enhances productivity for the radiologist, technologist and the office. PenRad's intuitive approach makes it easy to use and learn by incorporating interactive graphical screens that use a tap-not-type method to enhance and automate data collection for patient interviews, exams and procedural report generation. This emulates work-flow instead of conforming to a computer system, ultimately increasing productivity.

Eliminates Dictation & Transcription

Radiologists instantaneously generate reports to their specifications and technologists gather pertinent patient information with simple taps to a computer screen to produce concise, easy-to-read interpretive and procedural reports with graphics to enhance communications with colleagues and patients, in a mail-ready or faxable format.

MQSA Compliance

The system database maintains patient histories, quality assurance, marketing reports, and statistics for patient management. It collects data to help with MQSA compliance and utilizes the ACR lexicon to interface with NMD, ending the need to process additional forms and reports. Utilizing PenRad for tracking will help insure compliance.

Narrative Report Generation

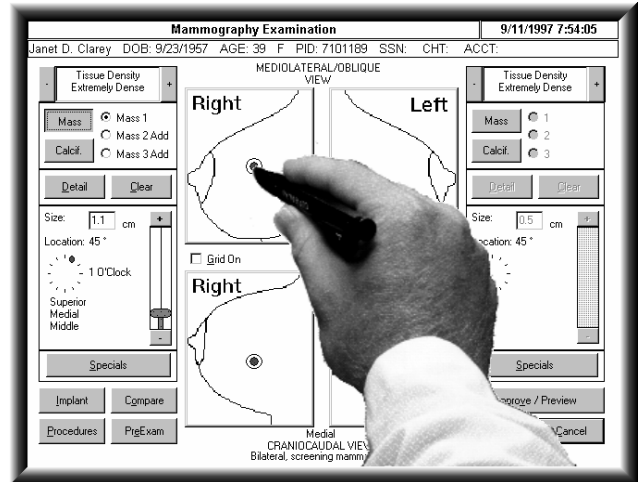
The PenRad system eliminates duplication and reduces turnaround time and errors. PenRad automatically generates complete narrative interpretive and procedural reports by the radiologist, thus eliminating dictation, transcription and review while automatically tracking patients, abnormalities and recommendations for recalls and the generation of statistical, facility utilization and marketing reports.

Financial Rewards

PenRad is designed to save your practice time and money. For example: Relate a five dollar figure to each patient for processing transcription, review by radiologist, secondary tracking, reporting, copying, and addressing. PenRad eliminates this expense, and offers additional benefits to add to the bottom line. Return on investment will be obtained within months depending on volume.

Advanced Technology

A PenRad system is configurable and expandable by using advanced software and hardware thus eliminating the concern for obsolescence. By using a client/server architecture, PenRad allows for multiple workstations, mobile van support, remote updating, networking with other hospital systems, auto-faxing and bi-directional HL7 interfaces.



Womancare **MAMMO INFORMATION FOR:**
 PenRad Mammography Center
 14332-21st Ave N, Plymouth, MN 55447
 Phone (612) 475-3388 Fax (612) 475-2815
 Mary P. Famiano
 28670 Jenkins
 Plymouth, MN 59230
 home: (612) 550-7864
 PATIENT ID: 26035
 SSN: 470-01-2781
 DOB: 9/8/1933
 AGE: 62

ATTENTION:
 George R. Facelle MD
 Anoka Clinic
 34678 West James Place
 Anoka, MN 55456
 office: (612) 345-4354 fax: 545-6677

BILATERAL DIAGNOSTIC MAMMOGRAM: 6/14/1996

MEDIOLATERAL VIEW

Right Left

CRANIOCAUDAL VIEW

FINDINGS:
 Comparison is made to exam dated: 3/15/1994 Fremont Medical Center.
 The tissue of both breasts is predominately fatty.
 Scattered benign appearing calcifications are present in both breasts.
 There is a 1.6 cm mass with a microlobulated margin in the right breast at 4 o'clock in the anterior depth. Compared to previous films, this mass is new.
 No significant masses, calcifications, or other findings are seen in the left breast.

IMPRESSION: ABNORMAL MAMMOGRAM - ADDITIONAL IMAGING REQUIRED
 The mass in the right breast at is not readily classifiable. An ultrasound examination is recommended for the mass.

James E. Edwards MD

 eelpenrad:6/21/1996
 Imaging Technologist: Patty A. Ferdickson RT(R)(M), Penrad Clinic
 Patient letter sent: Need at'l imaging
 Birads: 0 Additional Imaging Required

Features and Benefits of the PenRad Mammography System

Tap not Type Input Method	User Friendly Interfaces	One Button Normals
Eliminates Dictation & Transcription	Reduces Errors	Captures Patient Data Once
Paper-less Patient Files	Eliminates Duplication	Increased Productivity
Automated Reports	Instantaneous, Complete Reports	Eliminates Report Reviews
Mail Ready/Auto Fax Correspondence	Window-Ready Envelopes	Instant Turnaround Time
Multiple Statistical Reports	Tracks Resolved/Unresolved Exams	Advanced Tracking
Auto Recall, Reminder, Recall letters	Interactive Patient Interviews	Bar-code Awareness
Instant Patient Recognition	Improves & Facilitates QA and QC	Simplifies Management
Valuable Marketing Tool	Calculates Depth, Clock & Quadrants	Auto Breast Density Selector
Addendum and Dictation Capabilities	Specific Detailing of Abnormalities	Auto Recall Interval Selector
Internalized Film Tracking	No Film Sequencing	No Film Mix-Ups
Improved Compliance With MQSA	Utilizes ACR Lexicon	Interactive Graphics
Breast Related Procedures & Reports	Pathology Results & Statistics	Configurable & Expandable
Open Database Connectivity	Advanced Software & Hardware	Instant Access to Exams
Graphical Exams Enhance Communications	Common Voice Radiologist Reports	Quick Payback
Automated Patient Correspondence	Compliments & Enhances Work-flow	Automated QA and QC
Saves Time and Increases Productivity	Offers Competitive Advantage	Advance Text Generation
Monitors Personnel Performance	Emulates Workflow	Networkable to Other Sites

Comprehensiveness

PenRad is the most comprehensive mammography information, medical auditing and tracking system available and instantly generates and tracks complete interpretive reports for mammography and all breast related procedures.

Ease Of Use

All PenRad products are designed by and for radiologists and technologists to emulate workflow, increase productivity, reduce turnaround time, create instant efficiency, accuracy and cost savings, while increasing staff and facility utilization.

The PenRad Advantage

The PenRad system provides you with a competitive edge in a growing marketplace. PenRad's solution decreases your workload, increases your efficiency and offers immediate turnaround time for exams. It emulates workflow and automates tasks while eliminating worksheets, duplication, secondary data input, transcription and correlation of exams and patient letters. No other system offers such advanced technology and efficiency.

PenRad's unique design benefits the Patient, Technologist, Radiologist and Administrative office personnel. More importantly, PenRad benefits your financial performance. By incorporating PenRad's multifaceted automation process, costs related to dictation, transcription, duplication, errors, and manually tracking and recording data for reporting purposes are virtually eliminated.

PenRad provides an up-to-date portfolio of your practice with an extensive administrative reports package. These are valuable tools for QA & QC, MQSA, medical audits, outcome analysis, personnel statistics, marketing, strategy and financial planning.

PenRad manages behind the scenes as a guardian angel, helping ensure MQSA compliance while increasing the productivity and profitability of your mammography practice. PenRad will save you time and money.

PenRad Complementary Products

PenRad has other productivity enhanced products that complement radiology departments and breast centers. An appointment package that offers one-glance scheduling and appointment reminder letters and an QA/QC radiology package that automates QA/QC for processors, imaging machines, darkrooms, repeat analysis, etc.

PenRad Software and Architecture Technology

PenRad software offers innovative real-time and real-world features to complement, enhance and automate Breast Centers. The user interface (GUI) is graphical and incorporates drag and drop technology to automate data entry with use of a mouse or touch screen. PenRad limits the use of dropdown menu selection items to facilitate full display and full description of selections for one-glance viewing for additional efficiencies.

The software platform is Microsoft and is based on the client server architecture where the database and the associated PenRad program files required reside on the server or master workstation. A client workstation requires a shortcut icon to the PenRad program and an ODBC connection to Microsoft SQL server engine that services requests from the client workstation. With MS SQL server as the database engine, replication is supported for mobile van systems and roll-up servers. The PenRad program uses OLE automation to communicate with Microsoft Word for the generation of correspondences for unlimited formatting capabilities. Administrative report generation (100 plus standard reports) is facilitated by SQL queries to the database and uses Crystal reports for formatting. The PenRad AutoFax system is a NT/2000 service that typically resides on the server and utilizes the support modem line that supports faxing of PenRad reports from any of the PenRad client workstations. PenRad offers bi-directional interfaces to HIS/RIS systems using its own NT/2000 service software that resides on the server and communicates via TCP/IP to the HIS/RIS. The interface software can be easily configured, set-up and changed to match differences, requirements, protocols and formatting between HIS/RIS vendors.

The program is networked to the client workstations using any Windows supported network protocol software. Windows terminal server technology (thin client) is also supported for client workstations. 10 baseT network topography is recommended however, remote facilities can use intranet, ISDN, DSL, or T1 connections. The only network traffic that the program produces is SQL packets less than 2k during standard operation as data is written or read from database. Network traffic increases during printing to support logos, images and graphics.

PenRad's software operates on the Microsoft Windows 95/98/NT/2000 operating systems and performance is maximized with NT/2000 because of its 32 bit software architecture. Server requires NT/2000 operating system. The application is multi-threaded and permits multi-tasking such as reading film ID, printing, report generation, etc. The Windows platform provides almost unlimited configurations of hardware, printers, networks and options.

The system is automatically scalable for stand-alone, enterprise or integrated solutions as facility needs expand.

The system has a separate training database for testing or for new users to become familiar with the features available.

The software products are developed utilizing Microsoft C++, Microsoft Foundation Classes, OLE and ODBC for SQL communication by PenRad, to operate in a Microsoft Windows NT environment as a stand-alone or client server.

PenRad On-Line Support and Upgrades

PenRad's Mammography software license covers site and individual workstations for unlimited users. An annual renewable maintenance licensing agreement covers phone tech support and PenRad Mammography module upgrades after the first year. PenRad provides instantaneous on-line support via modem or internet in the maintenance licensing agreement. Pass-code and network security measures are applied. PenRad uses the PC Anywhere (third party software) program to support facilities so the facility's screen is on the support screen for interactive instructions, upgrades, modifications or demonstrations. Database, back-up and system maintenance is automatically processed as a nightly scheduled task.

PenRad's Turnkey or Software Only Solutions

PenRad can offer a turn-key solution as well as a software only component, or a combination of software and limited hardware. PenRad typically supplies the server, workstations, LCD touch screens, label printers, laser bar-code scanners, laser printer, and the Microsoft software. Facilities may elect to supply the server, workstations and Microsoft software and purchase the PenRad software and label printers, laser bar-code scanners and LCD touch screens from PenRad. PenRad offers a depot service for equipment supplied.

PenRad Training

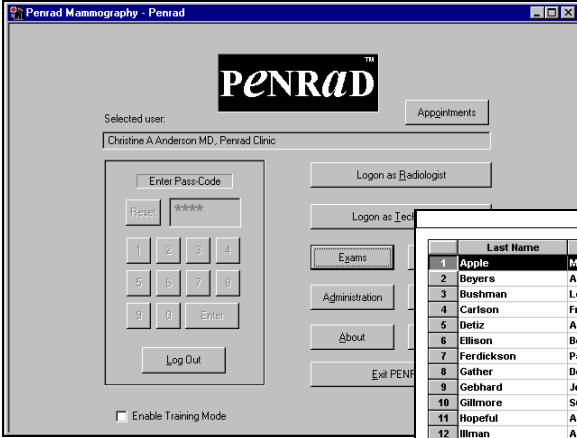
PenRad offers a comprehensive factory training program which includes policy and procedures strategy for the facility and the mentors (recommended lead radiologist and technologist, and breast imaging manager) that in turn teach the users. Also on-site training and "go-live" training and staffing programs are available.

Mammography Product Introduction

The following sections in this brochure outline many of the standard features and functions of the mammography product. The system has built-in flexibility to allow facilities to customize many of the features.

Separate brochures are available for sample administrative reports, appointment package and the QA/QC module.

Logging In and Out of System



PenRad provides security, if required, to access the application in the form of individual pass-codes. Technologists and Radiologists each log into PenRad by selecting their name from the respective database files. Once entrance to PenRad has been granted, several of PenRad's screens may be set up with limited access. PenRad has a complete training database to allow for training of new personnel by tapping the training button.

Technologist List						1/20/1996 20:03	
Last Name	First Name	Middle	ID 1	ID 2	Location		
1 Apple	Mary	Jill	171968		Penrad Clinic		
2 Beyers	Ann	T	5654654				
3 Bushman	Lexi	Andrew	219442	551760			
4 Carlson	Franklin	Ann	266916	599234			
5 Detiz	Anna	Wendy	314390	646708			
6 Ellison	Beth	Lexi	361864				
7 Ferdickson	Patty	Franklin	409338	741656			
8 Gather	Dee	Ann	02				
9 Gebhard	Jean	M	01				
10 Gillmore	Susan	Anna	456812	171968			
11 Hopeful	Ann	Beth	504286	219442			
12 Illman	Anna	Patty	551760	266916			
13 Johnson	Betty	Susan	599234	314390			
14 Johnson	Mary	E	6467565				
15 Johnson	Mary	T	34533				

Radiologist List						1/20/1996 19:57	
Last Name	First Name	Middle	PID	Affiliation			
1 Anderson	Christine	A	231121	Penrad Clinic, Plymouth MN			
2 Anderson	Christine	A	231121	Penrad North Clinic, Plymouth MN			
3 Baker	Thomas	C	2131121	Penrad Clinic, Plymouth MN			
4 Baker	Thomas	C	2131121	Penrad North Clinic, Plymouth MN			
5 Carsen	Leo	F	324432	Penrad Clinic, Plymouth MN			
6 Carsen	Leo	F	324432	Penrad North Clinic, Plymouth MN			
7 Dother	Robert	G	348934	Penrad Clinic, Plymouth MN			
8 Dother	Robert	G	348934	Penrad North Clinic, Plymouth MN			
9 Dunn	Edward	J	232232	Penrad Clinic, Plymouth MN			
10 Dunn	Edward	J	232232	East Memorial Medical Center, Mont			
11 Dunn	Edward	J	232232	Penrad North Clinic, Plymouth MN			
12 Edwards	James	E	32222	Penrad Clinic, Plymouth MN			
13 Edwards	James	E	32222	Penrad North Clinic, Plymouth MN			
14 Fishman	Peter	B	35333	Penrad Clinic, Plymouth MN			
15 Fishman	Peter	B	35333	Penrad North Clinic, Plymouth MN			
16 Greenmore	Diane	I	345333	Penrad Clinic, Plymouth MN			

The system allows automatic log out of the application when a workstation is left unattended for a predefined amount of time from the reading schedule or the main screen. This helps maintain security and patient confidentiality. When the workstation automatically logs out, the main screen is displayed indicating that the system entered the auto logout mode. To re-access the system, the user selects their name and enters their personal pass-code. The system will not log out of an exam in progress.

Technologist Maintenance

Technologist List						1/20/1996 20:03	
Last Name	First Name	Middle	ID 1	ID 2	Location		
1 Apple	Mary	Jill	171968		Penrad Clinic		
2 Beyers	Ann	T	5654654				
3 Bushman	Lexi	Andrew	219442	551760			
4 Carlson	Franklin	Ann	266916	599234			
5 Detiz	Anna	Wendy	314390	646708			
6 Ellison	Beth	Lexi	361864				
7 Ferdickson	Patty	Franklin	409338	741656			
8 Gather	Dee	Ann	02				
9 Gebhard	Jean	M	01				
10 Gillmore	Susan	Anna	456812	171968			
11 Hopeful	Ann	Beth	504286	219442			
12 Illman	Anna	Patty	551760	266916			
13 Johnson	Betty	Susan	599234	314390			
14 Johnson	Mary	E	6467565				
15 Johnson	Mary	T	34533				

A database file is maintained on each technologist. This file includes demographic information and provides the means to assign and/or change the pass-code. A technologist may be assigned to several facilities which would allow statistical data to be generated for each site.

Technologist Maintenance		7/2/1999 20:38:18	
<input type="checkbox"/> Check if no longer active			
Last Name	Anderson	Office Phone	(365)454-6540x1222
First Name	Dee	Home Phone	
Middle Name	Ann	ID Number 1	
Last Title	RT(R)IM	ID Number 2	
First Title		Active Date	05/13/1997
Change Location	Penrad Clinic, 14332- 21St Ave. N., Plymouth, MN 55343		
<input checked="" type="checkbox"/> Master user rights			
Enter Your Pass-Code (Max 10 digits)			
****		Save New Pass-Code	Change Pass-Code
<input type="button" value="1"/> <input type="button" value="2"/> <input type="button" value="3"/> <input type="button" value="4"/> <input type="button" value="5"/> <input type="button" value="6"/> <input type="button" value="7"/> <input type="button" value="8"/> <input type="button" value="9"/> <input type="button" value="0"/>			
<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>			

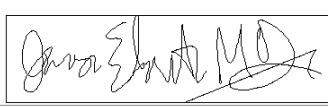
A technologist can be specified as a master user to allow access to maintenance items, administrative reports and access to correct an exam.

Radiologists Viewing Preferences and Maintenance

Radiologist List					1/20/1996 19:57
1	Last Name	First Name	Middle	PID	Affiliation
1	Anderson	Christine	A	231121	Penrad Clinic, Plymouth MN
2	Anderson	Christine	A	231121	Penrad North Clinic, Plymouth MN
3	Baker	Thomas	C	2131121	Penrad Clinic, Plymouth MN
4	Baker	Thomas	C	2131121	Penrad North Clinic, Plymouth MN
5	Carson	Leo	F	324432	Penrad Clinic, Plymouth MN
6	Carson	Leo	F	324432	Penrad North Clinic, Plymouth MN
7	Doher	Robert	G	348934	Penrad Clinic, Plymouth MN
8	Doher	Robert	G	348934	Penrad North Clinic, Plymouth MN
9	Dunn	Edward	J	232232	Penrad Clinic, Plymouth MN
10	Dunn	Edward	J	232232	Penrad North Clinic, Plymouth MN
11	Dunn	Edward	J	232232	Penrad Clinic, Plymouth MN
12	Edwards	James	E	32222	Penrad Clinic, Plymouth MN
13	Edwards	James	E	32222	Penrad North Clinic, Plymouth MN
14	Fishman	Peter	B	35333	Penrad Clinic, Plymouth MN
15	Fishman	Peter	B	35333	Penrad North Clinic, Plymouth MN
16	Greenmore	Diane	J	345333	Penrad Clinic, Plymouth MN

A database file is maintained on each radiologist. This file includes demographic information, pass-code, and electronic signature. Radiologists may be assigned to multiple facilities to allow statistical data to be generated for each site.

Radiologist Maintenance		10/21/1997 8:50:20	
Last Name:	Anderson	Office Phone:	[612]457-8956x
First Name:	Christine	Home Phone:	[612]655-4747
Middle Name:	A	Cell Phone:	[]-[]-[]-[]-[]-[]
Last Title:	MD	Fax Phone:	[]-[]-[]-[]-[]-[]
First Title:		Pager Phone:	[]-[]-[]-[]-[]-[]
Office Contact1:		Voice Mail:	[]-[]-[]-[]-[]-[]
Office Contact2:		ID Number 1:	[]-[]-[]-[]-[]-[]
<input type="checkbox"/> Resident radiologist <input type="checkbox"/> Left/Right breast display <input checked="" type="checkbox"/> Master user rights		ID Number 2:	[]-[]-[]-[]-[]-[]
Medical Facility Affiliations:			
Medical Facility	Address	City	
Penrad Clinic	14332-21st Ave. N.	Plymouth	
Penrad North Clinic	16120 - 46th Ave N	Plymouth	
<input type="button" value="Add Affiliation"/> <input type="button" value="See Details"/> <input type="button" value="Remove Affiliation"/>			
<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>			

Radiologist Signature		9/7/1997 10:53:09
Enter Your 4-Digit Pass-Code		
****	<input type="button" value="Reset"/>	<input type="button" value="Save"/>
[1] [2] [3] [4] [5] [6] [7] [8] [9] [0]	<input type="button" value="Change"/>	<input type="button" value="OK"/>
Sign your name as it would appear on report		
		
<input type="button" value="Save"/>	<input type="button" value="Change"/>	<input type="button" value="Clear"/>
<input type="button" value="Cancel"/> <input type="button" value="Help"/>		

The system automatically inserts separate phrases into the exams to indicate the exam has been read by a resident and reviewed or attended by a staff radiologist for clarification and reimbursement. Residents are only able to approve an exam for 2nd read. All exams must be approved by a staff radiologist.

Mammography Examination		10/20/1997 15:38:37
Carol A. Adams DOB: 10/7/1939 AGE: 58 F PID: 232360 SSN: 472365561 CHT: ACCT:		
Tissue Density Scattered Fibro.		
Right	Left	
Right	Left	
Medial CRANIOCAUDAL VIEW Bilateral, screening mammogram		

A radiologist can be specified as a master user to allow access to maintenance items, administrative reports and access to another radiologist exam for correction.

Mammography Examination		10/20/1997 15:39:46
Carol A. Adams DOB: 10/7/1939 AGE: 58 F PID: 232360 SSN: 472365561 CHT: ACCT:		
Tissue Density Scattered Fibro.		
Left	Right	
Left	Right	
Medial CRANIOCAUDAL VIEW Bilateral, screening mammogram		

Display of the images on the detailed mammography exam screen are automatically displayed based on each radiologist's preference. Images can be displayed so right is on right or right is on left. This reduces errors and increases productivity.

Hospital & Clinic Maintenance

Hospital List					6/20/2000 9:37:26
1	Name	Unit	Street	City	
1	Passavant Womens Clinic		5434 Passavant Blvd	Minneapolis	
2	Passavant East Clinic		6622 River Trail Drive	Nashua	
3	Passavant Main Street Hospital		183 Portage Bolts Estates		
4	Passavant Memorial Hospital		9692 Hebrew Blvd.		
5	Passavant Out-Clinic		3 Regent Saloon Avenue		
6	Passavant Womens Clinic North	156165	6100 Zenith Lane		
7	Patterson Medical Center		2223 Hilltop Ave Nw		
8	Paul Larson Clinic	Radiology	128 Oak Street		
9	Penrad Clinic	Unit1	14332- 21st Ave. N.		
10	Piedmont Breast Health Center		1968 Peachtree Road NW		
11	Plymouth Medical Center		152 S. Peony Blvd.		
12	Pronger Smith Medical Associates		34443 West Hill Street		

A separate database file is maintained for each hospital or clinic that you may send or receive correspondence.

Hospital/Clinic Maintenance		6/20/2000 9:37:01	
Name:	Penrad Clinic	Phone:	[612]475-3388
Unit:	Unit1	Fax Phone:	[]-[]-[]-[]-[]-[]
Mail Stop:		Scheduling Phone:	[612]475-4024
Address:	14332- 21st Ave. N.	ID Number:	[]-[]-[]-[]-[]-[]
City:	Plymouth	ID Number 2:	[]-[]-[]-[]-[]-[]
State:	MN	Contact:	[]-[]-[]-[]-[]-[]
Zip Code:	55343	<input type="checkbox"/> Auto - Fax referring physician letters	
County:	Hennepin	Logo File Name:	Penrad.wmf
Country:	U.S.A.		
<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>			

The hospital/clinic file contains demographic information for addressing exams, correspondence, scheduling numbers and provides the capability to auto fax. With AutoFax checked, facilities can receive exam reports automatically based on system preferences. Example: only fax exams requiring immediate work-up.

Doctor Maintenance

Doctor List					5/20/1996 8:10:06
	Last Name	First Name	Middle	PID	Affiliation
1	Babar	Kristi	B	10224	Passavant Womens Clinic North, S. Har
2	Bach	Peter	J	10043	Moth Hospital, Plymouth MN
3	Backer	Tomas	Q	10001	Concordia Hospital Central, Maple Gro
4	Backer	Tomas	Q	10001	Concordia Hospital Main, Savage MI
5	Backer	Tomas	Q	10001	Concordia Hospital East, Plym
6	Backer	Tomas	Q	10001	Concordia Hospital West, Ha
7	Backus	Edward	D	10003	Metropolitan Surgical Assoc
8	Backus	Edward	D	10003	Minneapolis Medical Special
9	Bagatell	Rochelle	A	10225	Passavant Womens Clinic No
10	Bagnell	Kristi	B	10226	Mounth Sunai Hospital, Dean
11	Baldon	Javier	R	10227	Mounth Sunai Hospital, Dean
12	Bailey	Edith	A	10228	Concordia Hospital East, Plym
13	Bain	Philip	A	10229	Wright Clinic, Crossville MN
14	Baird	Sue	E	10230	East Memorial Center, Main
15	Baker	Jean	M	10231	Concordia Hospital West, Ha

Search by: Name ID1 Auto

Search [ba] Backsp Clear First Name Begin Search Total Found: 15

To locate, select search criteria, tap letter buttons, then press 'begin search'.

Buttons: Add New, Edit/View, Select, Close

A database file is maintained for each referring physician and surgeon that may be associated with your facility. A referring physician may have multiple affiliations.

Doctor Maintenance		7/2/1999 19:26:11
<input type="checkbox"/> Check if no longer active		
Last Name	Able	Office Phone: () - x-10005
First Name	Robert	Home Phone: () -
Middle Name	W	Cell Phone: () -
Last Title	MD	Fax Phone: () - <input type="checkbox"/> Auto fax letters
First Title		Pager Phone: () -
Office Contact1		Voice Mail: () -
Office Contact2		ID Number 1: 205
Physician Type	1 - OB GYN	ID Number 2:
Medical Facility Affiliations		
Medical Facility	Address	City
East Most Medical Center	15722 Northwest Blvd.	Bryan MN
Able Clinic	2121 Oak Street	Plymouth MN
Rolling Acres Clinic	3445 Rolling Acres Drive	Belle Plaine MN
Buttons: Add Affiliation, See Details, Move Affiliation		
Buttons: OK, Cancel, Help, Delete Doctor		

The physician's name, facility, address, and telephone/fax number may be automatically inserted into the exams and patient letters.

The option exists to have correspondence faxed to a "personal" fax number verses affiliation fax number.

Change Doctor

Change Doctor					8/28/1997 14:30:10
	Last Name	First Name	Middle	PID	Affiliation
1	Aaronsen	Peter	A	20154	Managed Health Care Partners, Belle Plaine MI
2	Abbott	Jon	T	20	Penrad Clinic, Plymouth MN
3	Abbott	Linda	O	90	Bass Lake Clinic, Plymouth MN
4	Abbott	Linda	O	90	Central Hospital, West Dale MN
5	Able	Robert	W	205	Brainerd Regional Hospital, Brainerd MN
6	Able	Robert	W	205	East Most Medical Center, Bryan MN
7	Able	Robert	W	205	Kammam Hospital, Palm Road MN
8	Abrams	Steven	A	256	North Metro Medical, Plymouth MN

Replace With

	Last Name	First Name	Middle	PID	Affiliation
1	Udall	Cummins	M	12120	Hennepin Clinic LTD., Minneapolis MN
2	Uhall	Lasky	A	12121	Northport Medical Center, Brooklyn Center MN
3	Underwood	Thompson	M	12122	Southdale Medical Clinic, Minnetonka MN
4	Unger	Leroy	J	10002	Rolling Acres Clinic, Belle Plaine MN
5	Unger	Mona	A	12123	Faill Hill Medical Clinic, Minnetonka MN
6	Unless	Christopher	O	20	United Physicians, Maple Grove, Maple Grove

Search by: Last Name, First Name ID1

Search [u] Backsp Clear First Name Begin Search Total Found: 10

To locate, select search criteria, tap letter buttons, then press 'begin search'.

Buttons: Select Dr. to replace (top list), Select new Dr. (bot list), Replace selected, Close, Help

From time to time, referring physicians may retire, or move to a different facility and take their current patients with them.

The PenRad system provides a means to automatically update your database to reflect any changes in the physician/patient relationship. Example: Retiring physician's patients are all transferred to a new physician, or all of a physician's current patients are transferred with the physician to a new affiliation.

Mobile Van Support

Penrad Database Replication	
Computer Names	
Publisher:	450four
Subscriber:	PENRADSERVER3
Settings...	
Data Transfer Direction	
<input checked="" type="radio"/> Both Upload and Download	Synchronize
<input type="radio"/> Upload to primary system	Close
<input type="radio"/> Download to this system	
Changes	Conflicts
To Publisher: 0	During Upload: 0
To Subscriber: 0	During Download: 0
Applied script 'RADIOGRAPHY.dri'	
Applied script 'RADIOLOGISTS.dri'	
Applied script 'RADIOLOGIST_AFFILIATIONS.dri'	
Applied script 'REFERRING_DOCTOR.dri'	
Applied script 'REPORT_ARCHIVE.dri'	
Applied script 'RIS_PROCEDURES.dri'	
Applied script 'SCHEDULED_PATIENTS.dri'	
Replication Complete	
Events Received: 246	

Standard in the system is the ability to support mobile vans where the complete program and a copy of the database is transported into the field and used during the day to replicate the activity at the main facility.

When the van returns or dials into the system, the user taps the synchronize button and database elements added or altered are transferred to the main database and items added or altered are transferred to the laptop's database. This process is typically preformed in less than 15 minutes.

This same technology can also be applied and run on an automatic schedule for roll-up servers or facilities with low speed network connection service available to their remote sites.

Patient Maintenance

This module maintains and stores all demographic information, appointment information, last and next exam dates for reminder purposes, comparison film dates, and any associated physicians. It also provides instant access to any diagnostic or administrative notes and reports previously entered in the PenRad system. Access to this module may be obtained from most PenRad screens to view or make a change in the patient's file. Patient demographic information can be manually populated or automatically updated with a RIS/HIS HL7 interface. For each patient or exam a primary doctor is assigned with up to four additional CC doctors. Each CC doctor can have a copy of the exam printed and/or faxed automatically.

The patient list screen allows selection of patient by name, DOB, primary and/or alternate ID number.

Patient main screen displays patient demographic information along with appointment notes, doctors, etc., and provides access to previous exams, pathology data, referring doctors, custom letters, appointments and notes. It also facilitates printing of patient and terminal digit jacket (ColorFlex) labels.

Patient List 9/7/1997 8:34:40

1	Last Name	First Name	Middle	RD	DOB	Last Exam	Next Exam
1	Address	Mary	S	122633	3/29/1951	12/18/1996	9/29/1997
2	Adesso	Sharon	P	122841	12/27/1937	12/27/1996	12/27/1997
3	Aderson	Helena	L	123281	7/17/1917	5/14/1997	8/25/1997
4	Anderson	Louise	L	122169	9/22/1927	2/6/1997	2/6/1998
5	Askim	Lynda	Q	121933	5/8/1934	12/27/1996	12/27/1998
6	Avvig	Rose	H	122478	3/18/1936	5/14/1997	3/16/1997
7	Aymond	Helen	M	122413	4/2/1924	5/14/1997	5/14/1999
8	Bailey	Patricia	R	121955	11/25/1946	12/27/1996	12/27/1997
9	Belcher	Lola	S	121956	3/13/1934	12/27/1996	12/27/1998
10	Berdal	Judith	D	122351	1/7/1931	12/18/1996	12/18/1998
11	Bianchi	Joy	B	123454	1/7/1933	3/14/1996	9/9/1997
12	Block	Mary Ann		1212125	2/15/1944	12/26/1996	12/26/1998
13	Bode	Heidi	W	122914	9/21/1961	11/12/1996	11/12/1999
14	Bolton	Pamela	V	121958	10/6/1927	12/27/1996	12/27/1998
15	Borovick	Helen	B	121212121	7/8/1939	5/13/1997	5/13/1998
16	Bredemeien	Elsine	L	122368	7/13/1928	12/18/1996	12/18/1998

Search by: Last Name, First Name Patient ID Date of Birth

Search: 12

Address

Apartment:

Suite:

P.O. Box:

Street: Box 535

City: Plymouth

State: MN

Zip Code: 56757

County:

Country:

Patient address screen provides all necessary data points for printing correspondences.

Patient Maintenance 9/22/1999 7:03:31

Loretta M. Hill DOB: 8/8/1939 AGE: 60 F PID: 223243649 SSN: 223243649 CHT: ACCT:

Last Name: Hill Age: 60 DOB: 08/08/1939 Gender: Female Marital St:

First Name: Loretta PID: 223243649 Alt PID: 36539

Mid. Name: M SSN: 223-24-3649

Race: Acct #:

Last Title: Chart #: Last Letter: Type:

First Title: Last Exam: 10/13/1998 Next Appt: 10/15/1999 2:30

Office Ph: Next Exam: 10/13/1999 Appt Type: BSCFN

Home Ph: 612/661-0539 Next Type: Mammogram Appt Room: MAMM2

Language: English Nat recall interval: 1 year screening Letter Sent:

'Owner' loc: Penrad Clinic, 14332-21st Ave. N., Plymouth, MN Confirm: no attempt

Next Exam #: Died: of of Awaiting Pathology

Insurance Info: Address: 230 Inwood., Plymouth MN 56256

Associated Doctors with Patient (tap to change or add)

Primary: Abbott, Linda O.; Bass Lake Clinic, 2323 33rd Ave N, Plymouth MN

Add 1: Cadoux, Alexander A.; Burg Hospital Women Clinic, 111 Dash Spurn Street, Ma

Add 2: Not selected.

PH Appt Note: Patient is in a wheelchair

Previous Exams

Notes

Associate Doctors with Patient 1/20/1996 19:46

To affiliate physicians to a patient press select, choose from list and then OK.
If physician is not on list then add by pressing new. To remove patient affiliation press remove.

Select Referring Doctor: Fisher, Lisa C.: Oakdale Clinic, Plymouth MN

Remove Referring Doctor:

Select Ordering Doctor: Jensen, Fredrick L.: Main Medical Center, Golden Va

Remove Ordering Doctor:

Select Surgeon 1: Not selected.

Remove Surgeon 1:

Select Surgeon 2: Not selected.

Remove Surgeon 2:

Select Additional Doctor: Not selected.

Remove Additional Doctor:

Patient doctor screen allows selection of up to 5 doctors for patient.

Previous exam screen allows the view and reprint of prior exams and the tracking and addition of outside films for comparison and film tracking.

Patient Notes 6/6/1999 15:06:32

Date	Ty	Notes
9/23/1998	H	REFERRING PHYSICIAN: JAMES C. EADES MD
6/6/1999	D	Cart Patient.

Notes to Add/View: Diagnostic Administrative Prev history sheets Complaints Imaging All

Note: You can NOT add notes if 'Prev History Sheets' or 'All' are selected.

Comparisons and Prior Exams 12/31/1999 19:02:24

Mrs. Elizabeth Y. AandalPH.D. DOB: 7/14/1937 AGE: 62 F PID: 420656 SSN: 470002582 CHT: ACCT:

Selected Imaging Dates for Comparison: Some films requested, not obtained

Prior Imaging Dates: 7/30/1999 Bilateral, screening mammogram, additional views Film, Penrad Clinic, Plymouth; 7/9/1998 Bilateral, screening mammogram Film, Penrad Clinic, Plymouth; 3/25/1996 Bilateral, screening mammogram Film, Penrad Clinic, Plymouth; 2/13/1995 Pre-System Film, James Clinic, Plymouth, MN; 4/15/1994 Pre-System Film, James Clinic, Plymouth, MN

Add Generic Imaging Date: Location: Date:

Change Location: This Location:

Select Exam Report for Review

Date	Description	Recall	Ris Proc#
7/30/99	Mammography Examination, AMENDED	1 year screening	
7/9/98	Mammography Examination	1 year screening	
3/25/96	Mammography Examination	1 year screening	

Patient note screen allows input or review of any extraneous data relevant to the patient's file. Notes are categorized by type. The patient notes screen is automatically updated whenever correspondence is generated for that patient i.e., recall, etc.

Patient Pathology

Pathology Examination 6/20/2000 9:44:03

Mary S. Ackley DOB: 3/19/1951 AGE: 49 F PID: 122353 SSN: 470004216 CHT: ACCT:

Abnom: Lesion 1 Add
 Lesion 2 Add
 Lesion 3 Add

NCI Stage: 1

Rad1 - Statistical Rad2 - Statistical

true positive
Christine Anderson
true positive
Leo F Carlsen MD

Exam Date: 06/20/2000 Grid On

Approve Add Text Help
Suspend Print
Cancel Preview

The pathology module allows for the input of data from a pathology report into the PenRad system. The PenRad pathology system calculates NCI Stage and statistical outcomes. This data is directly linked to the respective radiologists for medical audit reports and provides the statistical data required by MQSA.

Patient pathology can be added during the completion of the biopsy to capture statistics for the radiologist. The system, from the pathology exam, calculates independently and automatically true/false for both screening and diagnostic exam. The administrative reports system provides dozens of reports to allow facilities to monitor staff and follow-up protocols.

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14332 21st Ave N, Plymouth, MN 55447
Phone (612) 475-3388 Fax (612) 475-2815

REFERRING PHYSICIAN:
Lisa C. Fisher MD
Oakdale Clinic
1211-75th Ave. N.
Plymouth, MN 55441
office: (612) 520-2999 fax: 475-2815

PATHOLOGY INFORMATION FOR:
Mrs. Denise Kay Adams
16000 88th place South
Minneapolis, MN 55666
home: (612) 861-9812
PATIENT ID: 3347
DOB: 5/23/1940
AGE: 56

PATHOLOGY EXAM: 6/23/1996

MASS 1 RIGHT BREAST SIZE: 5 mm
LOCATION: 11 o'clock in the posterior depth
TYPE: BC - Benign Cyst
NIPPLE INVOLVED: No
MARGIN STATUS:
FLUIDY:
BUDD:
HISTOLOGY GRADE:

METHOD: Stereotactic core
PATHOLOGY: Benign

PROGESTERONE RECEPTORS:
ESTROGEN RECEPTORS:
NODES POSITIVE: 0
NODES REMOVED: 0
S PHASE PERCENT: 0

STATISTICAL OUTCOME: Screening false positive NCI STAGE: 1
ASSOCIATED EXAM: 7/31/1995 - Mammography Examination
PRIMARY TUMOR: T1b- More than 0.5 cm but not more than 1 cm in greatest dimension
REGIONAL LYMPH NODES: NO - No regional lymph node metastasis
DISTANT METASTASIS: MO - No distant metastasis

PHYSICIAN: James E. Edwards MD
jelepenrad: 6/23/1996

Pathology Lesion Detailing 6/20/2000 9:45:14

Mary S. Ackley DOB: 3/19/1951 AGE: 49 F PID: 122353 SSN: 470004216 CHT: ACCT:

Technique: **Stereotactic core**
Surgical Biopsy
Fine needle aspiration
Ultrasound FNA
Ultrasound guided biopsy
Other Biopsy

Progesterone Receptors: Positive Negative
Estrogen Receptors: Positive Negative

Nodes Positive: 0
Nodes Removed: 0
S Phase %: 0

Specify Lesion Type
Mass:
Calcification
Mass with calcification
Indeterminate
Cyst

Discovered by palpation
Discovered mammographically
Discovered by ultrasound
Discovered by physical exam
Discovered by referring physician
Discovered by patient
Discovered by technician

FLUIDY:
Diploid
Aneuploid

Histology Grade:
1
2
3

Nipple Involved:
Yes
No

Margin Status:
Uninvolved
Involved

Malignant ID: Invasive ductal carcinoma

Findings

OK Cancel Help

Lesion detail screen facilitates biopsy method, discovery type, and access to the finding selection screen for each abnormality.

Pathology Lesion Findings 6/20/2000 9:44:46

Mary S. Ackley DOB: 3/19/1951 AGE: 49 F PID: 122353 SSN: 470004216 CHT: ACCT:

Findings Description

AP - Apocrine Carcinoma	SF - Mesenchymal Tumors, Fibrosarcoma	Classification
CH - Carcinoma in children	HAP - Mesenchymal Tumors, Hemangiopericytoma	Benign
CEB - Carcinoma in ectopic breast	LMS - Mesenchymal Tumors, Leiomyosarcoma	Malignant
CM - Carcinoma in males	OS - Mesenchymal Tumors, Osteosarcoma	
CPL - Carcinoma in pregnancy and lactation	DS - Noninvasive, Intraductal carcinoma	
IN - Inflammatory Carcinoma	LS - Noninvasive, Lobular carcinoma in situ	
ICC - Invasive cribriform carcinoma	MAN - Occult carcinoma with axillary lymph node meta:	
ID - Invasive ductal carcinoma	Other malignant	
PIC - Invasive ductal carcinoma w/predominant intradPD	Paget disease of nipple	
IL - Invasive lobular carcinoma	BC - Skin tumors, Basal cell carcinoma of the nipple	
AC - Invasive, Adenoid cystic carcinoma	MMN - Skin tumors, Malignant melanoma of the nipple	
CEO - Invasive, Carcinoma with endocrine differentiation	NMS - Skin tumors, Neoplasms of mammary skin	
OMT - Invasive, Carcinoma with metaplasia	SCN - Skin tumors, Squamous cell carcinoma of the nip:	
OD - Invasive, Carcinoma with osteoid-like giant cells		
CHC - Invasive, Cystic hypersecretory carcinoma with invasion		
GRC - Invasive, Glycogen-rich carcinoma		
IP - Invasive, Invasive papillary carcinoma		
LPC - Invasive, Lipid-rich (lipid secreting) carcinoma		
MC - Invasive, Medullary carcinoma		
CC - Invasive, Mucinous carcinoma		
SJC - Invasive, Secretory (juvenile) carcinoma		
TC - Invasive, Tubular carcinoma		
LI - Leukemic Invasion		
HD - Lymphoid/Hematopoietic tumors, Hodgkin Disease		
LI - Lymphoid/Hematopoietic tumors, Hodgkin Disease		
NHL - Lymphoid/Hematopoietic tumors, Non-Hodgkin lymphoma		
PC - Lymphoid/Hematopoietic tumors, Plasmacytoma		
MPT - Malignant cystosarcoma phylloides		
AS - Mesenchymal Tumors, Angiosarcoma		
CD - Mesenchymal Tumors, Chondrosarcoma		
DPP - Mesenchymal Tumors, Dermatofibrosarcoma		

OK Cancel Help

Finding selection screen allows for specification of pathology type for each abnormality.

Statistical screen allows for independent and individual statistics for screening and diagnostic exams by radiologist along with association to exam.

Statistics Based on Pathology to Last Exam 6/20/2000 9:42:56

Mary S. Ackley DOB: 3/19/1951 AGE: 49 F PID: 122353 SSN: 470004216 CHT: ACCT:

Change Radiologist: Christine Anderson

Select Last Exam Recommendation(s):
Normal interval follow-up BIRADS 1 & 2
Biopsy based on clinical assessment BIRADS 2
Short term follow up BIRADS 3
Cyst aspiration BIRADS 2
Clinical correlation BIRADS 2

Ultrasound BIRADS 0
Additional imaging BIRADS 0

Biopsy should be considered BIRADS 4 & 5
Needle localization BIRADS 4 & 5
Core biopsy BIRADS 4 & 5
Take action highly suggestive of malignancy BIRADS 5
Cytological correlation (FNA) BIRADS 4 & 5

CLASSIFICATION true positive

Select Pathology Finding:
Benign
Malignant

Select Pathology Results:
Within one year of last recommendation
More than one year since last exam recommendation

Select Exam to Associate to:
12/20/1998 Ultrasound Examination
10/27/1998 Mammography Examination
10/21/1997 Mammography Examination
12/18/1995 Mammography Examination
Pathology Examination

View short report View full report Clear

Breast Carcinoma NCI Staging Calculation 6/20/2000 9:41:40

Mary S. Ackley DOB: 3/19/1951 AGE: 49 F PID: 122353 SSN: 470004216 CHT: ACCT:

Primary Tumor (T)
TX - Primary tumor cannot be assessed.
T0 - No evidence of primary tumor.
Tis - Carcinoma in Situ
T1 - Tumor 2 cm or less in greatest dimension
T1a - 0.5 cm or less in greatest dimension
T1b - More than 0.5 cm but not more than 1 cm in greatest dimension
T1c - More than 1 cm but not more than 2 cm in greatest dimension
T2 - Tumor more than 2 cm but not more than 5 cm in greatest dimension
T3 - Tumor more than 5 cm in greatest dimension
T4 - Tumor of any size with direct extension to chest wall or skin
T4a - Extension to chest wall
T4b - Edema (including peau d'orange) or ulceration of the skin of the breast or satellite skin nodules confined to same breast
T4c - Both (T4a and T4b)
T4d - Inflammatory carcinoma

Regional Lymph Nodes (N) [Clinical]
NX - Regional lymph nodes cannot be assessed (eg, previously removed)
N0 - No regional lymph node metastasis
N1 - Metastasis to movable ipsilateral axillary lymph node(s)
N2 - Metastasis to ipsilateral axillary lymph node(s) fixed to one another or to other structures
N3 - Metastasis to ipsilateral internal mammary lymph node(s)

Distant Metastasis (M)
MX - Presence of distant metastasis cannot be assessed
M0 - No distant metastasis
M1 - Distant metastasis (includes metastasis to ipsilateral supraclavicular lymph node(s))

The Calculated Stage is 1

OK Cancel Help

Staging screen calculates NCI stage.

Recall/Reminder/Past Due Patient Letters

Print Recall And Past Due Letters										9/7/1997 9:17:22	
Status	Name	PID	DOB	Last	Next	Mths	Letter	Recall Type			
138	Pitts, Dorothy, P.	47150	6/9/1933	10/24/96	10/24/97	12s	Mammogram	O/Ho			
139	Pocla, Stella, C.	223248571	6/6/1921	10/24/96	10/24/97	12s	Mammogram	Hall			
140	Pohlkamp, Carla, I.	44833	8/11/1925	10/18/96	10/18/97	12s	Mammogram	Gain			
141	Pohlkamp, Charlotte, S.	45389	4/11/1927	10/9/96	10/9/97	12s	Mammogram	Parh			
142	Praska, Lucille, Y.	23122	11/14/1944	10/9/96	10/9/97	12s	Mammogram	Parh			
143	Prondzinski, Donna, E.	23127	8/27/1938	10/9/96	10/9/97	12s	Mammogram	Pact			
144	Puklo, Dorothy, Q.	47130	6/9/1933	10/24/96	10/24/97	12s	Mammogram	Lann			
145	Quam, Marie, V.	104799	2/4/1945	10/28/96	10/28/97	12s	Mammogram	Quar			
146	Quam, Marlyce, T.	223244978	9/9/1935	10/28/96	10/28/97	12s	Mammogram	Qual			
147	Quam, Marlyce, W.	223244981	6/6/1935	10/28/96	10/28/97	12s	Mammogram	Qual			
148	Quanbeck, Sarah, A.	023144	8/22/1925	10/28/96	10/28/97	12s	Mammogram	Qual			
149	Quannud, Julia, B.	090145	6/20/1913	10/28/96	10/28/97	12s	Mammogram	Qual			
150	Quannud, Virginia, V.	002399	12/11/1916	10/28/96	10/28/97	12s	Mammogram	Qual			
151	Quast, Alvera, I.	43333	6/12/1916	10/28/96	10/28/97	12s	Mammogram	Qual			
152	Quast, Ann, I.	42574	9/17/1919	10/28/96	10/28/97	12s	Mammogram	Qual			

Click cursor on rows to select or deselect for printing.

Sort By: Name Referring Site/Refer PID

Set Criteria/Load Records: Today From date: 09/28/1997 ? Show: All recalls Followups Screenings Select Letter & Load: 1 - Recall Select for print/ reprint: Print List Clear Selections

Today Thru date: 10/28/1997 ? Load Patients Select All Select Unprinted

Report Generation and Printing: Ignore patients with appointment. Start Abort Pause Continue Edit Patient Commit & Exit Cancel Help


The system provides the capability to automatically generate mail-ready formatted correspondence to each patient notifying them that they are due for their annual screening, short term or biopsy follow-up. In addition, a series of sequential letters can be sent for second reminders as past due or final notification. Final notifications can remove patient from recall.

For each recall group (screening, follow-up and biopsy follow-up) a separate series of letters can be used such as screening reminder and final letter, follow-up reminder, past due, final, etc.

If the patient has an outstanding appointment, the recall, reminder or past-due letter will not be printed if an appointment is within the plus or minus date range specified in the system configuration to eliminate duplicate patient correspondence and expense.

The next recall date and exam type are automatically set by the radiologist during the exam (i.e. follow-up; short term, screening biopsy and next exam type; mammography, ultrasound, etc.)

The text of recall type letters may be customized by the facility along with the sequence. Each letter can be printed in the patient language based on the patient language selected in the patient maintenance screen by using a separate letter template, versus substituting words so the letter is grammatically correct for the language. Letters are populated with a series of bookmarks and free text.

Womancare 
PenRad Mammography Center
 14332-21st Ave N, Plymouth, MN 55447
 Phone (612) 475-3388 Fax (612) 475-2815

6/23/96


Mrs. Denise Kay Adams
 16000 88th Place South
 Minneapolis, MN 45666

Dear Denise,

Thank you for previously coming to our office for an examination on 7/22/95. Our records indicate a recommendation that you should be seen again on or about 7/23/96.

Please call and schedule an appointment.

Your previous physician, if provided us, is listed below. Please contact their office if you have any questions:

Womancare 
PenRad Mammography Center
 14332-21st Ave N, Plymouth, MN 55447
 Phone (612) 475-3388 Fax (612) 475-2815

Mrs. Denise Kay Adams
 16000 88th Place South
 Minneapolis, MN 45666

Custom Write Letters

Add Text for Write Patient or Referring Physician Letter		2/25/2000 8:26:51	
Michelle Q. Aheimer DOB: 6/6/1932 AGE: 67 F PID: 223245961 SSN: 223245961 CHT: ACCT:			
Letter Name:	Letter body text		
<input type="radio"/> mammo appt	Dear [PATIENT_SALUTATION],		
<input type="radio"/> Neg Bx letter	[BOLD+ICERTIFIED LETTER		
<input type="radio"/> Neg p letter	[TODAY] [BOLD+]		
<input checked="" type="radio"/> Positive Bx letter	Your biopsy results have indicated that the area of concern is cancerous. We highly recommend that you contact [REFER_NAME] as listed below for consultation.		
<input type="radio"/> questionnaire	[STD_SEND_TO]		
<input type="radio"/> Request outside film	If you have any questions please contact us. [SITE_PHONE]		
	[SITE_NAME_ONLY]		
Letter to:	Patient record note		
<input checked="" type="radio"/> Patient	Certified positive biopsy letter sent.		
<input type="radio"/> Refer. physician			
<input type="radio"/> Hospital			
Add / Edit Phrases:	Clear Text	View	Add Sp. Add Comma Sp. Add Period Sp.
Add Edit Delete	Body Note Both	Print	Print & update pt note Close Help

The custom letter feature allows facilities to create a series of custom letter templates for the patient, referring doctor or hospital/clinic in addition to the patient recall and appointment letters. Letter templates can be saved, edited and reused. Each letter template is generated by using a combination of bookmarks and free text. When a letter is printed, a note can be automatically added to the patient note field documenting the correspondence.

There are over 20 bookmarks available with multiple formats which automatically add data such as site logo, patient address, date, last and next exam date, recall type, patient information, patient salutation (Mrs. Byers), referring physician full name (Dr. Roger Olson) and last name (Olson), referring physician address (Dr's name, and address), phone for facility, and site name.

In addition to the ability to mix free text and bookmarks in the templates, templates may use and mix special formatting commands such as boldface font, italic font, all capital letters, etc , and change font type and size.

Printing of Exams and Patient Exam Letters

Print Completed Exams							6/20/2000 9:47:50
Status	Name	PID	DOB	Date	Procedure		
1	Deltz, Lisa, P.	104297	12/06/1922	6/2/2000	Bilateral, screening mammogram		
2	Smith, Ann, A.	47389089	3/12/1933	6/12/2000	Bilateral, screening mammogram		
3	Smith, Mary	45263475	4/12/1942	6/12/2000	Bilateral, screening mammogram		
4	Stephens, Judith, O.	750798	09/07/1944	6/7/2000	Bilateral, screening mammogram		

Click cursor on rows to select or deselect for printing

Sort By: Name Referring Site/Refer PID Exam Date

Select for print/reprint:

Report Generation and Printing:

Patient exam reports along with corresponding letters to the patient may be printed individually as the radiologist approves an exam, or they may be batch printed in a specified order at a later time in mail-ready format using double windowed envelopes eliminating the need for pre-printed envelopes or labels.

The exam narrative report is determined by the selections made by the radiologist. Each exam report may contain your facility letterhead along with the referring physician's name, address, and telephone/fax number. Reports may include graphics which include outlines or images of the breast indicating location of any abnormalities. This increases the value of correspondence between your department and referring physicians.

When there is more than one physician associated with an exam a printed copy can be produced in mail-ready format for each with customizable statements specifying primary doctor and that a courtesy copy is being sent by patient request.

To automate the separation of reports, statements for multiple copies can be included for film jacket, medical records, profession services, etc. and automatically added to the report. The individual number copies of each report type can also be specified such as 3 mammogram and 4 biopsy reports.

Separate patient exam letters are available for negative, abnormal, additional imaging, short term follow-up, etc. along with any special cases your facility may choose such as a biopsy letter.

The text of each patient letter is determined by the facility and may automatically insert information pertaining to past and future exam type and dates, referring physicians, scheduling numbers, etc.

Patient exam letters can be printed in the patient's language automatically, based on the language selected in the patient maintenance screen by using a separate template versus substituting words for correct grammatical language format.

The flexibility exists to have a "2 page" patient letter for certain letter types for abnormal exams where the second page is a check-off form that is retained by the facility for phone contact, follow-up, scheduling, surgery, etc.


Foreign Patient Letter Language

Patient Maintenance		2/18/2000 10:52:00
Loretta M. Hill DOB: 8/8/1939 AGE: 60 F PID: 223243649 SSN: 223243649 CHT: ACCT:		
Last Name: Hill	Age: 60 DOB: 08/08/1939 ?	Gender: Female Marital St: []
First Name: Loretta	PID: 223243649	Alt PID: 36539
Mid Name: M	SSN: 223243649	
Race: []	Acct #: []	
Last Title: []	Chart #: []	Last Letter: [] Type: []
First Title: []	Last Exam: 10/21/1999 ?	Next Appt: 10/24/2000 11:00
Office Ph: []	Next Exam: 10/20/2000 ?	Appt Type: BSCRN
Home Ph: (612)661-0539	Next Type: Mammogram	Appt Room: MAMM2
Language: English	Next recall interval: 1 year screening	Letter Sent: []
'Owner' to: English	4332-21st Ave. N., Plymouth, MN	Confirm: no attempt
Next Exam: Spanish	Died: [] of: []	<input type="checkbox"/> Awaiting Pathology
Insurance: Italian	290 Inwood, Plymouth MN 58256	
Associated: Hmong	ap to change or add	
Primary: Abbott, Linda, O, 90, Bass Lake Clinic, Suite 330, 2323-33rd Ave N, Plymouth, MN		<input type="button" value="Print Addr Label"/>
Add 1: Cadoux, Alexander, A, 10446, Burg Hospital Woman Clinic, Suite 600, 111 Dash		<input type="button" value="Print Patient Label"/>
Add 2: Not selected.		<input type="button" value="ColorFlex Label"/>
PlAppt Note: Patient requires assistance when changing		
<input type="button" value="Edit"/>		
<input type="button" value="Previous Exams"/>	<input type="button" value="Indicated Prob."/>	<input type="button" value="Add Pathology"/>
<input type="button" value="Notes:Yes"/>	<input type="button" value="Med & Risk Hist."/>	<input type="button" value="Breast Hist."/>
<input type="button" value="OK"/>	<input type="button" value="Cancel"/>	<input type="button" value="Help"/>

The system can produce patient letters for exams, reminders and follow-up letters in various languages automatically based on the language specified in the patient maintenance screen. Otherwise English is used for correspondences.

When the radiologist selects the letter to accompany the exam or when reminder letters are generated, the letters are produced using a custom language template, that determines proper sentence structure for the language versus word substitution.

Standard languages available: English, Spanish, French, German, Hmong, Polish, Russian. Other languages can be added by the facility by creating Microsoft Word templates.

Womancare 
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 14332-21st Ave N, Plymouth, MN 55447
 Phone (612) 475-3388 Fax (612) 475-2815

6/23/96

Mrs. Denise Kay Adams
 16000 88th Place South
 Minneapolis, MN 55666

Dear Mrs. Adams,

Thank you for coming to our office for your examination.

Your mammogram is normal. We have notified your physician of your mammogram results.

Your next mammogram should follow the American Cancer Society guidelines. Women over age 40 should have a screening mammogram every 1 year. Together with your physician determine a screening schedule appropriate for you depending on your risk factors.

The best ways to detect any early signs of breast cancer is to have an annual physical examination by your physician and conduct your own monthly breast examination.


If you notice any significant changes in your breast, contact your physician immediately.

Sincerely yours,
 Penrad Clinic

FOR WOMEN ONLY
How to do BSE (a self-exam)

Breast cancer may be cured if you find it early. The best cancer check is a mammogram. When your doctor checks your breasts, ask about this.

Use the shower check.

1. Check your breasts about one week after your period.
 2. Press firmly with the pads of your fingers. Move your left hand over your right breast in a circle, like this:

 3. Now check your left breast with your right hand in the same way.
 If there are any lumps, knots, or changes, tell your doctor right away. Breast cancer may be cured if you find it early.

FOR MORE INFORMATION CALL THE AMERICAN CANCER SOCIETY TOLL FREE 1-800-455-2262
 © 1996 AMCS

Committing Exams and AutoFaxing

Status	Name	PID	DOB	Exam Date	Description	Referring Phy
1	Bergeron, Mary, Q.	7101029	04/05/1953	8/12/1997	Bilateral, screening mammi	Abbott, Jon
2	Holmes, Bernice, I.	7101000	09/14/1924	8/11/1997	Bilateral, screening mammi	Abbott, Jon
3	Johnson, Margaret, L.	7101010	07/20/1921	8/11/1997	Bilateral, screening mammi	Abbott, Jon
4	Lipes, Sally, R.	22324786	03/03/1925	8/10/1997	Bilateral, screening mammi	Abbott, Jon
5	Lippert, Edwina, E.	101400	03/17/1933	8/10/1997	Bilateral, screening mammi	Abbott, Jon
6	Mittel, Betty, W.	7100973	03/01/1932	8/11/1997	Bilateral, screening mammi	Abbott, Jon
7	Mortenson, Shirley, W.	7101119	04/07/1945	8/12/1997	Bilateral, screening mammi	Abbott, Jon
8	Nelson, Phyllis, A.	7100979	01/05/1935	8/11/1997	Bilateral, screening mammi	Abbott, Jon
9	Letexier, Marion, E.	7100993	07/05/1935	8/11/1997	Bilateral, screening mammi	Cabber, Karl
10	Irwin, Irene, Iona	101572	07/11/1938	8/11/1997	Bilateral, screening mammi	Dill, Gretchen
11	Lippold, Norma, C.	55333	10/03/1956	8/10/1997	Bilateral first ever, screenir	Facelle, George
12	Hasagenson, Marian, Louis	3441	01/03/1930	8/14/1997	Left, magnification	Geshbart, Richard
13	Hadley, Jo, L.	35279667	05/24/1953	8/11/1997	Bilateral, screening mammi	Hasagenson, Ole
14	Nagle, Maureen, L.	54659	06/04/1954	8/11/1997	Bilateral, screening mammi	Inboden, Jean
15	Michael, Annie	341462987	06/07/1912	8/11/1997	Bilateral, screening mammi	Kalmeyer, Gary
16	O'Donnell, Shateen, H.	223248401	12/12/1922	8/11/1997	Bilateral, screening mammi	Lauer, Robert

Sort By: Name Referring Site/Refer PID

Select for fax and/or commit: Name Referring Site/Refer PID

Print List Clear Selections
Select All Select Unprinted

Start Abort Rebase Continue Edit Patient Commit & Exit Cancel Help

Exams remain available on the schedule until committed to the database. At that time, all the information that the radiologist selected while creating the exam is made available for statistical purposes, the exam is removed from the reading schedule and the patient file is updated with the exam, next recall date and exam type. After being committed, exams require amending to be altered.

With the AutoFax option enabled, the reports are automatically faxed to the physicians associated with the exam, and to the facilities of the physicians or to the personal fax number of the physician if specified.

Faxable exams are automatically grouped by fax number for efficiency to avoid individually dialing each exam. An automatic cover sheet is generated indicating attached exams itemized by patients and physicians. In addition, an automatic fax-log is maintained by exam indicating send time, successful, fail, etc. The system retries faxing if fax is busy and remains on list until successful. Faxing can be automatically deferred until specified time. Facility logo can be automatically added to correspondence when pre-printed stationary is used.

The system automatically includes a customizable statement that states faxed copy original to follow. The option also exists to only fax exams that require immediate follow-up.

During the commit process the report, status, etc. is uploaded to the RIS/HIS system.

Resolved/Unresolved Exams and Print Physician Exam Letters

Status	Name	PID	DOB	Exam	Next	Letter	RI	Exam Descri
79	Burke, Carol W.	744867	12/11/1925	5/10/00	5/10/00	now		Mammography Exam
80	Burke, Carol W.	744867	12/11/1925	5/10/00	5/10/00	now		RIGHT Stereotacti c
81	Cahill, Renee I.	725071	8/5/1936	3/8/00	3/8/00	now		Ultrasound Examinat
82	Carpenter, Alda L.	743156	7/12/1913	4/25/00	4/25/00	now		Ultrasound Examinat
83	Carter, Amy T.	743395	11/12/1917	4/27/00	7/27/00	3mfu		Mammography Exam
84	Catino, Clara B.	725213	3/6/1931	3/14/00	3/14/00	6mfu		Mammography Exam
85	Catino, Dorothy E.	47120	9/9/1933	3/14/00	3/14/00	now		Mammography Exam
86	Catino, Ok Cha B.	223248480	3/3/1931	3/14/00	3/14/00	now		Mammography Exam
87	Caton, Olga C.	223248481	12/12/1930	3/14/00	3/14/00	now		Mammography Exam
88	Caulill, Judy I.	223241944	5/5/1944	3/14/00	3/14/00	now		Mammography Exam
89	Cayley, Judy M.	223241948	12/12/1944	3/8/00	3/8/00	now		Ultrasound Examinat
90	Ceccacci, Rosemarie I.	725223	7/21/1935	3/2/99	3/22/01	3mfu		Mammography Exam
91	Cooper, Darlene H.	45987	2/10/1930	5/12/00	5/12/00	now		Mammography Exam
92	Crawford, Fran H.	823977	6/18/1938	3/23/00	12/21/00	9mfu		Mammography Exam

Sort By: Name Referring Site/Refer PID Oldest Rad

Select Resolution Letter and Queue Type: UNRESOLVED examination letters RESOLVED examination letters

Show: All followups Immediate FU Other FU

Select for print/teprint: Print List Clear Selections
 Select All Select Unprinted

Report Generation and Printing: Show All Owners

Start Abort Rebase Continue Preview Exam Resolve 1 High lighted Exam Edit Patient Commit & Exit Cancel Help

Prior unresolved exams can be resolved by the radiologist when doing the current study. Only master users have access to this screen from the administration screen. For exams where the follow-up study is not performed, the system provides a means to automatically generate correspondence along with a copy of the exam to the referring physician pertaining to the unresolved exam.

This process can be done as a batch process or by individual exam. Exams can be sorted and separated by physician, recall type, etc. for letter printing and resolving.

When exam is resolved it is removed from the unresolved list. Any action taken regarding unresolved or resolved status is recorded with date stamp, staff name and letter type is automatically noted in the patient file.

Correspondence can be formatted for mail-ready envelopes and may include automatic second page as a return check sheet to allow the physician to indicate what action has been taken. Letter templates are populated with a series of bookmarks and free text.

Womancare

PenRad Mammography Center
14332 21st Ave N, Plymouth, MN 55447
Phone (612) 475-3388 Fax (612) 475-2815

MAMMO INFORMATION FOR:
Mary P. Famiano
28670 Jenkins
Plymouth, MN 55230
home: (612) 550-7864
PATIENT ID: 26035
SSN: 470-01-2781
DOB: 9/8/1933
AGE: 62

ATTENTION:
George R. Facelle MD
Anoka Clinic
34678 West James Place
Anoka, MN 55456
office: (612) 345-4354 fax: 545-6677

6/23/96

Our records indicate you as the referring physician for the patient listed above.

We have been tracking possible problems for this patient that were detailed on an ultrasound examination performed on 5/21/96.

This letter is to notify you we have not been able to rectify this exam as being complete and require your assistance to resolve this exam as required by MQSA. Please contact us.

James E. Edwards MD

je.e.lli@penrad.6/23/1996
Imaging Technologist: Patty A. Ferdickson RT(R)(M), Penrad Clinic
Code: SI 0

Preliminary Exam (start of an exam)

Preliminary Exam 9/7/1997 10:16:14
 Ada D. Anderson DOB: 11/25/1975 AGE: 21 F PID: 223234134 SSN: 223234134 CHT: ACCT:

Select study type, exam type and/or procedure type that best describes this preliminary exam

- Mammogram
 - Bilateral
 - Bilateral first ever
 - Right
 - Left
 - Screening mammogram
 - Diagnostic mammogram**
 - Problem solving mammogram
 - Comparison mammogram
- Chest
- Abdomen
- Skeleton
- CT
- MRI

Exaggerated CC
 Cleavage
 Axillary tail
 Tangential
 Caudocranial
 Lateromedial oblique
 Mediolateral
 Mediolateral oblique
 Cranio-caudal
 Additional Views
 Post-reduction
 Post lumpectomy
 Post mastectomy
 Pre-radiation therapy
 Post-radiation therapy
 Pre-reduction mammoplasty
 Post-needle biopsy
 Post-excisional biopsy
 With Augmentation

Ultrasound
 Ductography
 Breast cyst aspiration
 Specimen radiograph
 Breast needle localization
 Stereotactic core biopsy
 Ultrasound guided biopsy
 Fine needle aspiration

Outside study
 Internal study
 Short-term follow-up to prior exam
 Internal follow-up

Bilateral, diagnostic mammogram, spot compression, magnification Exam Date: 09/07/1997 ? Today Tomorrow
 Exam Number: 43243

Change Clear Specified Technologist: Beth A Rogers, Penrad Clinic

Indicated Problems Med & Risk History Breast History Imaging Details

Notes Patient Maintenance Review Pre-Exam Compare

To Schedule To Exam Hold Exam Print Pre-Exam Cancel Help

The preliminary exam screen provides for the selection of exam type, specifies the exam date and imaging technologist. It provides an electronic patient history sheet displaying any indicated breast problems, risk factors, previous breast procedures, medical history, and clinical history from previous exams. Many facilities capture data interactively in the imaging room. Comparison film dates may be added and instant access to previous PenRad exam reports is provided.

A hard copy patient history sheet may be printed which will contain any past history previously entered into PenRad, which will allow a patient to review the information and make any additions or corrections.

Specifying indicated problems, breast history, medical and risk factors for an exam.

Pre-Exam 9/7/1997 10:21:38
 Judy Gudim DOB: 3/1/1949 AGE: 48 F PID: 225568 SSN: 123456 CHT: ACCT: 123456

Right • no prob. reported • no prob. reported Left
 • mole

Comparison Films Indicated Breast Problems Period Exams

6/3/1997 Bilateral, screening mammogram Film, Passavant Wor 10/1/1996 Pathology Examination
 7/11/1997 Pre-Penrad Film, Penrad Clinic, Plymouth, MN 10/1/1996 Ultrasound Examination
 10/1/1996 Stereotactic Core Biopsy Detailing
 6/3/1997 Mammography Examination

Medical History Previous Procedures Risk Factors

1st menstruation, 1962, age 13 Children Birthed: 4 LMP: 02/12/1997 ?
 1st full term pregnancy, 1971, age 22 # Breast Fed:
 Menopause: 1999, age 46 Hysterectomy:
 Ovaries Removed:
 Patient Height:
 Patient Weight:
 Check if has implants
 Hormonal Contraceptives onset last used DR duration
 Estrogen:
 Progesterone:
 Tamoxifen:
 Clear

Risk Factors
 Cancer elsewhere Post-menopausal
 Personal breast cancer history Nulliparous/never pregnant
 History of gynecological cancer Late child bearing (after 30)
 High risk lesion on previous biopsy, LCIS or atypical hyperplasia

Risk factors unknown
 No family history of breast cancer
 Weak (aunt, grandmother, cousin, etc.) had breast cancer
 Intermediate (mother, sister, post-menopausal) had breast cancer
 Very strong (pre-menopausal mother, sister or post-menopausal multiple first-degree relatives)

OK
 Notes Edit Patient Exit Help

Change Exam Bilateral, screening mammogram

Separate screens are provided for each category allowing you to maintain from year to year a complete history on your patient. Most selections are made with a touch of a button or phrase, or with a click of the mouse.

The medical and risk factor screen allow the selection of dates for information and selection of risk factors.

Patient Medical and Risk History 10/21/1999 21:36:57
 Krista Thomas DOB: 2/22/1953 AGE: 46 F PID: 00748450 SSN: 510589912 CHT: ACCT:

Medical History

1st Menstruation: 1956, age 13 Children Birthed: 4 LMP: 02/12/1997 ?
 1st Full Term Pregnancy: 1972, age 19 # Breast Fed:
 Menopause: 1999, age 46 Hysterectomy:
 Ovaries Removed:
 Patient Height:
 Patient Weight:
 Check if has implants
 Hormonal Contraceptives onset last used DR duration
 Estrogen:
 Progesterone:
 Tamoxifen:
 Clear

Risk Factors
 Cancer elsewhere Post-menopausal
 Personal breast cancer history Nulliparous/never pregnant
 History of gynecological cancer Late child bearing (after 30)
 High risk lesion on previous biopsy, LCIS or atypical hyperplasia

Risk factors unknown
 No family history of breast cancer
 Weak (aunt, grandmother, cousin, etc.) had breast cancer
 Intermediate (mother, sister, post-menopausal) had breast cancer
 Very strong (pre-menopausal mother, sister or post-menopausal multiple first-degree relatives)

OK
 Cancel Help

The breast related history screen displays previous breast exams or procedures generated in the system and facilitates the addition of exams or procedures conducted outside or prior to the installation of the system.

Patient Breast Related History 3/20/2000 7:03:26
 Helen L Hill DOB: 3/8/1939 AGE: 61 F PID: 748986 SSN: 283240096 CHT: ACCT:

Add Breast Related Procedure

- Mammogram (normal) Lumpectomy Not specified implant
- Mammogram needed add. Mastectomy Autogenous tissue reconstruct
- Additional imaging Mammogram Stereotactic biopsy Augmentation mammoplasty
- Stereotactic biopsy Radiation therapy Prespector implant
- Ultrasound Core Biopsy Neoadjuvant chemotherapy Retpectore implant
- Needle biopsy Excisional biopsy Seg resect and rad therapy Percutaneous silicone inject.
- Excisional biopsy Reduction Cyst aspiration Silicone gel implant Last physical brst exam
- Breast Needle Localization Fine Needle Aspiration Saline implant Recuring CA
- Mammo Specimen Radiograph Ductography Other type implant Silicone implant reconstruct
- Ultrasound Polyurethane implant Saline implant reconstruct

Breast Related History

Year	Description/Breast Impression	Date	Finding
1995, age 59	Mammogram (normal) B	05/16/1998	[U]right [U]known
1997, age 58	Mammogram (normal) B	05/13/1997	[U]left [M]benign
1996, age 57	last physical brst exam B		[B]both n/a

When (Year slider or exact date) 2000 Age 60 01/27/2000 ?

Notes Help
 Add Remove Print List OK Cancel

The indicated problems screen allows the specification and location of items related to the breast such as moles, lumps, biopsy scars. Items are added to this screen by tapping on the button and then tapping on the breast image. Comments can be added to an abnormality. Items with comments appear as yellow squares to distinguish from a regular abnormality. Users can also add custom abnormalities.

Indicated Problems 6/13/1999 13:51:02
 Judy Q. Flanagan DOB: 9/8/1944 AGE: 54 F PID: 750863 SSN: 283241973 CHT: ACCT:

Right • mole • bruise Left

mole	redness	discharge	biopsy scar	difficult exam	pain	no prob. reptd.	Size Ab.
skin lesion	tenderness	large lymph node	scar	calcifications	lump	lumpectomy	
skin thickening	ripple abnorm.	sebaceous cyst	implant scar	implant prob.	mastectomy	tattoo	
skin retraction	bloody disch.	mastectomy recon.	reduction scar	thickening	BE - neg.	(User Defined)	

Tech Clear

Side	Abnormality	Loc	Depth	Size (cm)	Comments
1 R	mole	5	0	1.0	
2 R	mole	1	0	2.5	
3 L	bruise	11	0	4.0	auto accident--bruised from seatbelt

Edit Comment Delete Abnorm. OK Cancel Help

Preliminary Exam (start of an exam) - Continued

Breast Imaging Main 3/22/2000 7:58:52
 Stephanie N. Alm DOB: 5/1/1927 AGE: 72 F PID: 8524207 SSN: 470011867 CHT: ACCT.

Overall Breast Dimensions:
 12 Depth (cm)
 18 Height (cm)
 15 Width (cm)
 45 Projection Angle of MLO

Film Usage:
 5 18x24 (cm)
 0 24x30 (cm)

Film Date & Time (24hr notation)
 Date: 03/22/2000 Time: 7:01

Enter reject type & count:
 Positioning: 0
 Patient motion: 0
 Light films: 1
 Dark films: 0
 Black films: 0
 Static: 0
 Fog: 0
 Wrong ID/DBI Exp: 0
 Mechanical: 0
 Miscellaneous: 0
 Rejected good films: 0
 Clear film: 0
 Wire localization: 0
 QC Films: 0

Machine:
 C 1 C 6
 C 2 C 7
 C 3 C 8
 C 4 C 9
 C 5 C 10

Dee Ann Anderson, Pennad Clinic Ltd

Buttons: Patient Notes, View Settings, Specified Technologist: Change, Clear, Send Patient to Flasher, Print Labels, Print Admin Labels, OK, Help

The breast imaging screen records and tracks the technologist for the exam and for MQSA. Direct interfaces can transfer patient information to the film flasher. Film usage, film size and machine data are automatically tracked. Label buttons can produce bar-code labels for film or jackets. In addition repeat analysis data can be captured at time of imaging to document records by machine, technologist and reject type.

The previous exam screen is used to specify comparisons or special circumstances for the exam being performed. This screen also facilitates review and reprinting of prior exams. If the user has master user rights, amendment of prior exams, the deletion of a prior exam, and the resolution of unresolved exams are executed from this screen. Previous imaging exam dates and exams are cataloged on this screen and can be transferred to the comparison window for association to the current exam. Outside films may be also added and used for comparison.

Comparisons and Prior Exams 2/29/2000 7:35:35
 Mrs. Elizabeth Y. AandalPH.D. DOB: 7/14/1937 AGE: 62 F PID: 420656 SSN: 470002582 CHT: ACCT.

Selected Imaging Dates for Comparison:
 Some films requested, not obtained

Prior Imaging Dates:
 7/30/1998 Bilateral, screening mammogram, additional views Film, Penn
 7/9/1998 Bilateral, screening mammogram Film, Pennad Clinic Ltd, Plyr
 3/25/1996 Bilateral, screening mammogram Film, Pennad Clinic Ltd, Ply
 2/13/1995 Pre-System Film, James Clinic, Plymouth, MN
 4/15/1994 Pre-System Film, James Clinic, Plymouth, MN

Buttons: Remove Selected, Add Text, Compare msg without dates, Use for Comparis, Remove, Check In/Out

Add Generic Imaging Date:
 Location: Add to History Only Exam/Film Type: mammogram
 Change Location Clear This Location Date: / / ? Add Compare Date ultrasound

Select Exam Report for Review

Date	Description	Recall	Ris Proc#	Notes
7/30/98	Mammography Examination, AMENDED	1 year screening		
7/9/98	Mammography Examination	1 year screening		
3/25/96	Mammography Examination	1 year screening		

Buttons: View Full, View Short, Print, Amend, Resolve, Delete Exam, Re-Edit, Help

The clinical text screen allows addition and review of the previous clinical reason to be included in the exam.

Add Text for Pre-Exam 6/13/1999 16:36:27
 Judy Q. Flanagan DOB: 9/8/1944 AGE: 54 F PID: 750863 SSN: 283241973 CHT: ACCT.

Phrase Categories:
 Lump
 Pain
 problems
 Reason for exam
 Stable

Clinical Text:
 Annual Screening

Category Specific Phrases Available for Rapid Insertion

Code	Description	Sort
1	Annual Screening	
2	Base line mammogram	
3	Follow on previous bx	
4	Bloody discharge	
5	Short term follow-up on previous exam.	

Buttons: Add / Edit Phrases, Clear Text, Add Space, Add Comma, Add Period, Import Clinical, Add, Edit, Delete, Clinical, OK, Cancel, Help

The coding screen allows the user to specify CPT and ICD9 codes for the exam. User selects items by tapping on category and selecting appropriate code. As an option, coding can be preformed automatically based on items selected in the exam.

Add Text for Select Procedure and Diagnostic Codes 6/13/1999 16:35:35
 Judy Q. Flanagan DOB: 9/8/1944 AGE: 54 F PID: 750863 SSN: 283241973 CHT: ACCT.

View & Select Type:
 CPT Procedure Codes
 ICD9 Diagnosis Codes

Selected ICD9 Codes:
 v76.12

Description:
 Not High Risk.

Categories:
 v76.12
 Diseases/Conditions
 Female Breast CA
 Male Breast CA
 Misc.

Category Specific Codes

Code	Description	Sort
1	v76.12 Not High Risk.	01
2	v76.11 High Risk.	02
3	v10.3 Personal History Breast Ca.	03
4	v16.3 Family History Breast Ca.	04
5	v15.89 Hx of Biopsy / Breast Benign Disease.	05

Buttons: Add / Edit Code List, Clear Selected Codes, Add, Edit, Delete, All, Last, OK, Cancel, Help

Scheduled Patients							6/26/2000 13:00:20	
Pos	Status	Patient Name	PID	DOB	Date	Procedure		
17		Frizzell, Jeanette R	750024	03/07/1942	06/22	Bilateral, screening		
18		Galovic, Karen O	751113	03/06/1945	06/23	Bilateral, screening		
19		Glatz, Karen V	751140	05/06/1945	06/23	Bilateral, screening		
20		Graham, Helen D	748962	04/08/1939	06/22	Bilateral, screening		
21	Complete	Gronowski, June T	751055	05/06/1944	06/22	Bilateral, diagnostic		
22		Haagenon, Veronica B	106030	07/06/1942	06/26	Bilateral, screening		
23	Printed	Hedges, Joan O	750210	04/07/1942	06/22	Bilateral, screening		
24	2ndRead	Hemmes, Deborah C	823339	07/26/1933	06/26	Bilateral, screening		
25	Complete	Hilt, Ilene R	330000004	11/16/1954	06/23	Bilateral, screening		
26	Arrived	Hick, Anne W	22324780	06/06/1963	06/26	Bilateral, screening		
27	Held	Jackson, Deborah M	727093	12/05/1950	06/26	Bilateral, screening		
28		Jacobs, Robyn O	223247422	10/10/1927	06/26	Bilateral, screening		
29	Complete	Jacobson, Karen H	75211879	04/04/1962	06/23	Bilateral, screening		
30	Complete	James, Kathy T	51559	10/08/1946	06/26	Bilateral, screening		
31	Printed	Jostling, Ellen Sue	7100008	11/10/1944	06/26	Bilateral, screening		
32		Johnson, Anne P	743706	09/12/1919	06/26	Bilateral, screening		
33	Complete	Johnson, Gail A	748376	07/08/1937	06/23	Bilateral, screening		
34		Kaiser, Julie I	750939	09/07/1944	06/22	Bilateral, screening		

Mammographic Exam

When the patient exam information has been entered and sent to the reading schedule, the exam is available for the radiologist. The first screen that appears when the patient is selected (either by bar code or manually) is the electronic patient history sheet (pre-exam) which is a recap of the patient information, pertinent history, comparative exams and on-line prior reports.

For a negative exam, a quick function exists to allow the radiologist to quickly move on to the next exam while generating a narrative report with tissue density, comparatives and recall interval. The radiologist's signature may be automatically included in the report. Recall interval and patient correspondence is automatically selected based on the patient's age and findings and can be changed by the radiologist. All exams may be held for second read allowing the second reader to select the exam and agree or disagree with first reader. Exams are automatically Bi-rads coded and can be manually overridden.

Pre-Exam 6/26/2000 7:34:18

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT:

Right Left

6/8/1998 Bilateral, screening mammogram Film, 6/16/1999 Mammography Examination - , 6/6/1997 Bilateral, screening mammogram Film, 6/8/1998 Mammography Examination - , 6/6/1997 Bilateral, screening mammogram Film, 6/8/1998 Mammography Examination - ,

Medical History **Previous Procedures**

1st menstruation, 1954, age 10 1996, age 52, last physical brst exam B No fam
Menopause, 1998, age 44 1997, age 53 Mammogram (normal) B
1998, age 54 Mammogram (normal) B
1999, age 55 Mammogram (normal) B

Exam Visit # 564654

Clinical Text Annual Screening

Change Exam Bilateral, screening mammogram

Approve Normal Mammogram Exam 6/26/2000 7:34:54

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT:

Physicians and Technologists: Specified Rad: Christine Anderson M.D., Pennad Clinic
Secondary Rad: Attending Tech: Imaging Tech: Sue A Bren, Pennad Clinic
Exam Type: Bilateral, screening mammogram

Tissue Density: Predominantly Fatty Scattered Fibroglandular Heterogeneously Dense Extremely Dense
Changes: NO significant changes. # Films Used: 5

Compared to: 6/8/1998, 6/6/1997

Recall Interval: No Recall (discretionary) 6 month screening
1 year screening
2 year screening
3 year screening
4 year screening
5 year screening

Additional BENIGN Breast Composition: Right Breast Left Breast
Cysts Densities Scattered densities Calcifications Scattered calcifications Vascular calcifications

Additional Mamm Text Summary Text Preview Proc/ Diag Codes

Exam Visit # 564654 Ex Date: 06/22/2000 ?

Approve Approve For 2nd Read Approve and Print Now Exit Help

For mammographic exams requiring detailing.

Mammograms that are not negative may be detailed by simply entering the required selections with the touch of a finger or pointer. Each abnormality may be individually plotted, sized, and described in detail with a recommendation by tapping on key words. Clock location is automatically calculated for radiologist. Masses are displayed round, calcifications displayed as squares.

Right Breast Mammography Mass Details 6/26/2000 7:38:04

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT:

Specify Abnormality: Shape Round Circumscribed High density
Focal asymmetric density Oval
Cyst Lobular
Density Irregular Indistinct Spiculated
Lesion Reniform
Nodular density
Architectural distortion
Intramammary node
Fibroadenoma
Hematomas
Lipoma
Tubular density

Abnormality most likely represents: Fibroglandular Tissue Post surgical scar Mastitis
Fibroadenoma Hamatoma Lymph n
Cyst
Intramammary node Abscess

Associated Findings: Skin retraction Nipple retraction Skin thickening Skin lesion Tubercular thickening Axillary adenopathy Architect. Distortion Hematoma Post-surgical scar

Special Circumstances: Add. views do NOT confir
No significance if not palp
Demonstr. by prior aspirat
Demonstr. by prior biopsy
Not on previous study
Visible only in the ML

6/8/1998, 6/6/1997

Add Text Compare OK Cancel

Left Breast Mammography Calcification Details 6/26/2000 7:39:04

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT:

Calcification Type: Fine Branching Amorphous Indistinct Tubercular thickening Axillary adenopathy Architectural distortion Hematoma Post-surgical scar

Associated Findings: Skin retraction Nipple retraction Skin thickening Skin lesion Tubercular thickening Axillary adenopathy Architect. Distortion Hematoma Post-surgical scar

Special Circumstances: Additional views do not confirm Confirmed as palpated Not included on previous study Visible only in the ML

6/8/1998, 6/6/1997

Compare

Mammography Examination 6/26/2000 7:36:20

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT:

Tissue Density Scattered Fibro. Films Used: MEDIO LATERAL/OBLIQUE VIEW Superior
Add Mass Add Calcification Detail Clear
Size: 0.4 cm Location: 45° 4 O'Clock
Inferior Medial Posterior
Specials

Right Left
Right Left
Inferior Lateral Medial
Implant Compare
Procedures Proc Exam
Add Text Clone Prev Exam
Grid On CRANIOCAUDAL VIEW
Bilateral, screening mammogram

Tissue Density Scattered Fibro. Add Mass Add Calcification Detail Clear
Size: 0.5 cm Location: 45°
Specials

BI-RADS: 0 Indeterminate
Manual Override

Approve / Preview Help Exit

Separate screens are available for detailing masses, calcifications, implant findings, and a special screen to accommodate generalized statements without the need for plotting. Prior exams may be reviewed and comparisons may also be specified. Exams can be cloned from prior years with a single tap of a button.

Implant Findings 6/26/2000 7:39:53

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT:

Right Breast Implant Type: Not Specified Saline Silicone gel Combination Pre-pectoral Retropectoral Post Mastectomy Dual lumen

Left Breast Implant Type: Not Specified Saline Silicone gel Combination Pre-pectoral Retropectoral Post Mastectomy Dual lumen

Right Breast Implant Findings: Name: Stable Intact Asymmetric Calcified Distorted Fibrosed Rough Free silicone Herniated Ruptured Capsular contraction Implant Removed New implant Implant replaced Intracapsular herniation Extracapsular herniation Silicone laden lymph nodes

Left Breast Implant Findings: Name: Stable Intact Asymmetric Calcified Distorted Fibrosed Rough Free silicone Herniated Ruptured Capsular contraction Implant Removed New implant Implant replaced Intracapsular herniation Extracapsular herniation Silicone laden lymph nodes

Associated Findings: Axillary adenopathy Architectural distortion Hematoma Post-surgical scar Supernumerary nipple Calcified suture

Special Case: Tubular density Solitary dilated duct Intramammary lymph node Asymmetric breast tissue Focal asymmetric density Gynecomastia Metallic objects Surgical Clips

Breast Composition: Density increased from prior Denity decreased from prior Density increased due to Rx Tissue changes due to hormone Rx Breast size increased Breast size decreased Fibrosytic changes Multiple cysts Benign mass

Benign density Multiple benign densities Benign scattered densities Scattered densities Benign calcification Multiple benign calcifications Benign scattered calcifications Scattered calcifications Benign vascular calcifications

Resolved: Prior mass no longer present Prior mass completely removed Prior calcification no longer present Prior calcification completely removed
Add'l imaging revealed superimposed tissue
Add'l imaging revealed an artifact
Add'l imaging conducted for calcification

No Mammographic Correlation For: Palpable abnormality (allow add eval req.) Palpable abnormality (negative exam allowed)
Bloody discharge Scar Non-bloody discharge Skin lesion Nipple abnormality Skin thickening Breast implant problem Skin thickening Pain Redness
Large axillary lymph nodes

Recommendations for Specials: Biopsy Imaging Aspiration Clinical correlation Ultrasound Ductography Surgical consult IF previous show no change Clinical follow-up

Compare 6/8/1998, 6/6/1997

OK Cancel Help

Mammographic Detailed Exam - Continued

Approve / Preview Exam 6/26/2000 7:43:14

June T. Gronowski, DOB: 5/6/1944, AGE: 56, F, PID: 751055, SSN: 283242165, CHT: ACCT.

Specified Rad: Christine Anderson M.D., Penrad Clinic Exam Date: 06/22/2000
 Secondary Rad: Exam Visit #: 054654
 Attending Tech:
 Imaging Tech: Sue A. Breen RT(R)(M), Penrad Clinic
 Exam Type: Bilateral, screening mammogram

Inconsistencies / Missing Data: Combine m... No individu... Check if tea...

Recall: No Recall (diabetic), 6 months screening, 1 year screening, 2 year screening, 3 year screening, 4 year screening, 5 year screening, Immediate followup, 3 month followup, 6 month followup, 9 month followup, 12 month followup

Assessment: Complete, Incomplete, Recall Letter Type (unspecified or other), Mammogram, Ultrasound, Mammogram and US, Right Mammogram, Left Mammogram, Report Preview

Patient Letter: No Letter, Mammography Normal, Mammography Abnormal, Followup Recommended, Additional Imaging Needed, Comparison to Previous Films, Comparison Films Needed, Normal Mammo/Abnormal History, Biopsy Required, Same-day

Changes: NO significant changes

Buttons: Add Summary Text, Fast Text, Full Formatted, Modify/Dictate & Approve, Preliminary Approve, Prelim appr/Print, Approve, go to schedule

The approve/preview screen allows the preview of the narrative report prior to approving. To alter exam type, personnel, recall interval or assessment, tap the appropriate button or keyword.

To supplement PenRad automatic text generator, tap modify button, make additions or indicate that additions are to be transcribed by staff.

Select Exam Type 6/26/2000 7:43:39

June T. Gronowski, DOB: 5/6/1944, AGE: 56, F, PID: 751055, SSN: 283242165, CHT: ACCT.

Select study type, exam type and/or procedure type that best describes this exam

Bilateral, Bilateral first ever, Right, Left, Screening mammogram, Abnormal mammogram, Problem solving mammogram, Comparison mammogram, Post-reduction, Post lumpectomy, Post mastectomy, Pre-radiation therapy, Post-radiation therapy, Pre-reduction mammoplasty, Post-needle biopsy, Post-excisional biopsy, With Augmentation

Exaggerated CC, Cleavage, Axillary tail, Tangential, Caudocranial, Lateromedial oblique, Mediolateral, Mediolateral oblique, Cranio-caudal, Additional Views, Rolled lateral, Rolled medial, Spot compression, Magnification

Ultrasound, Ductography, Breast cyst aspiration, Specimen radiograph, Breast needle localization, Stereotactic core biopsy, Ultrasound guided biopsy

Buttons: Ok, Cancel, Help

Modify or Specify Report to be Dictated 6/26/2000 7:44:50

June T. Gronowski, DOB: 5/6/1944, AGE: 56, F, PID: 751055, SSN: 283242165, CHT: ACCT.

Phrases: BILATERAL DIAGNOSTIC MAMMOGRAM: 6/22/2000

Findings: Comparison is made to exams dated: 6/8/1998 and 6/6/1997 Penrad Clinic. There are scattered fibroglandular elements in the both breasts. There is a 4 mm irregular high density mass with a microlobulated margin in the right breast at 4 o'clock in the posterior depth as palpated. Compared to previous films, this mass is new. No significant masses, calcifications, or other findings are seen in the left breast.

Phrases: IMPRESSION: HIGHLY SUGGESTIVE OF MALIGNANCY

Impressions and/or Recommendations: The mass in the right breast appears highly suggestive of malignancy. A stereotactic biopsy or an ultrasound guided core biopsy is recommended for the mass.

Buttons: Approve, Approve, print now, Approve, need 2nd read, Exit, Cancel, Help

PenRad's text generator, automatically generates narrative reports and patient letter with site letterhead, calculates the ICD9, ACR and CPT coding for each exam in mail-ready or faxable format with or without electronic signature, while simultaneously tracking recalls, abnormalities and recommendations for the radiologist and referring doctor.

The PenRad system eliminates transcription and errors, proofing, duplication and manual tracking, and increases staff production. PenRad decreases turnaround time, while providing a guardian angel for the practice or facility.

The system produces printed exams and patient exam letters using Microsoft Word that offers virtually unlimited formatting options. There are automatic options that can include breast images (one breast if unilateral exam) when there is an abnormality for the mammogram and ultrasound exams. These graphical images reflect the location of the abnormality and bring higher awareness to the referring physician. Other standard formatting options allow importing of electronic signature for radiologists, CPT and ICD9 codes, and patient information on each copy of each page of the exam along with page number (if more than one page). Additional standard features are; options for titling multiple copies for sorting such as billing copy, medical records, jacket copy, etc. and printing exams and patient letters to different printers and/or paper trays.

Womancare PenRad Mammography Center
 14332-21st Ave N, Plymouth, MN 55447
 Phone (612) 475-3388 Fax (612) 475-2815

MAMMO INFORMATION FOR:
 Mary P. Farniano
 28670 Jenkins
 Plymouth, MN 55930
 home: (612) 550-7864
 PATIENT ID: 26035
 SSN: 470-01-2781
 DOB: 9/8/1933
 AGE: 62

ATTENTION:
 George R. Facelle MD
 Anoka Clinic
 34678 West James Place
 Anoka, MN 45456
 office: (612) 345-4354 fax: 545-6677

BILATERAL SCREENING MAMMOGRAM: 6/14/1996

FINDINGS:
 Comparison is made to exam dated: 3/15/1994 Fremont Medical Center. The tissue of both breasts is predominately fatty. No significant masses, calcifications, or other findings are seen in either breast.

IMPRESSION: NEGATIVE
 There is no mammographic evidence of malignancy. A 1 year screening mammogram is recommended.

The patient was been or will be notified of the results.

James E. Edwards MD Leo J. Loose MD
James Edwards *Leo Loose*

je.e@penrad6/21/1996

Imaging Technologist: Patty A. Ferdickson RT(R)(M), Penrad Clinic
 Letter sent: Mammography Normal Code: BIRADS 1 Negative
 76092 v76.12

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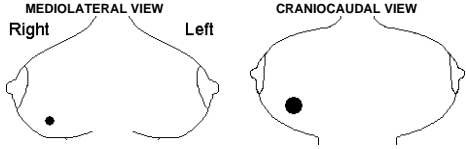
MAMMO INFORMATION FOR:
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BILATERAL DIAGNOSTIC MAMMOGRAM: 6/14/1996

MEDIOLATERAL VIEW **CRANIOCAUDAL VIEW**

Right Left



FINDINGS:
 Comparison is made to exam dated: 3/15/1994 Fremont Medical Center. The tissue of both breasts is predominately fatty. Scattered benign appearing calcifications are present in both breasts. There is a 1.6 cm lobular equal density mass with a microlobulated margin in the right breast at 4 o'clock in the anterior depth as palpated. Compared to previous films, this mass is new. No significant masses, calcifications, or other findings are seen in the left breast.

IMPRESSION: ABNORMAL MAMMOGRAM - ADDITIONAL IMAGING REQUIRED
 The mass in the right breast at is not readily classifiable. An ultrasound examination is recommended for the mass.

James E. Edwards MD
James Edwards

ee@penrad6/21/1996

Imaging Technologist: Patty A. Ferdickson RT(R)(M), Penrad Clinic
 Patient Letter sent: Need at 1 imaging
 Birads: 0 Additional Imaging Required

With the systems automatic associate feature activated, tracking is associated by the imaging facility for audits and the imaging logo for the patient letter is used.

Additional benefits using the PenRad system include and are not limited to: personnel performance, tracking recommendations and findings, outcome analysis for cost containment and marketing, instantaneous access to exams, automatic follow-up, one button normal exams and reports with graphics to enhance communications.

Procedures Report Generation

Scheduled Patients							6/26/2000 13:00:20
Pos	Status	Patient Name	PID	DOB	Date	Procedure	
17		Frizzell, Jeanette R	750024	03/07/1942	06/22	Bilateral, screening	
18		Gallovic, Karen O	751113	03/06/1945	06/23	Bilateral, screening	
19		Glatz, Karen V	751140	05/06/1945	06/23	Bilateral, screening	
20		Graham, Helen D	748962	04/08/1939	06/22		
21	Complete	Gronowski, June T	751055	05/06/1944	06/22		
22		Haegenson, Veronica B	106030	07/06/1942	06/26		
23	Printed	Hedgess, Joan O	750210	04/07/1942	06/26		
24	2ndRead	Hemness, Deborah C	623339	07/26/1933	06/26		
25	Complete	Hick, Irene R	3300000004	11/16/1954	06/23		
26	Arrived	Hick, Anne W	223234780	06/06/1963	06/26		
27	Held	Jackson, Deborah M	727093	12/05/1950	06/26		
28		Jacobs, Robyn O	223247422	10/10/1927	06/26		
29	Complete	Jacobson, Karen H	75311879	04/04/1962	06/23		
30	Complete	James, Kathy T	51559	10/06/1946	06/26		
31	Printed	Joesting, Ellen Sue	7100008	11/10/1944	06/26		
32		Johnsen, Anne P	743706	09/12/1919	06/26		
33	Complete	Johnsen, Gail A	748397	07/08/1937	06/23		
34		Kaiser, Julie I	750939	09/07/1944	06/22		

Procedure reports are generated from the radiologist reading schedule similar to mammography exams. Once the patient has been selected (either by bar-code or manually), the radiologist will review the electronic history sheet (pre-exam screen).

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT: 6/26/2000 7:34:18

Concussion Films: 6/8/1998 Bilateral, screening mammogram Film, 6/6/1997 Bilateral, screening mammogram Film, 6/16/1999 Mammography Examination - 1 yr, 6/8/1998 Mammography Examination - 1 yr, 6/6/1997 Mammography Examination - 1 yr

Indicated Breast Problems: 6/16/1999 Mammography Examination - 1 yr, 6/8/1998 Mammography Examination - 1 yr, 6/6/1997 Mammography Examination - 1 yr

Medical History: 1st menstruation, 1954, age 10; Menopause, 1988, age 44

Previous Procedures: 1996, age 52, last physical brst exam.B; 1997, age 53, Mammogram (normal).B; 1998, age 54, Mammogram (normal).B; 1999, age 55, Mammogram (normal).B

Exam Visit #: 564654

Clinical Text: Annual Screening

Change Exam: Bilateral, screening mammogram

Select Testing / Procedure Type 9/7/1997 13:51:22

Sally A. Gudim DOB: 11/11/1944 AGE: 52 F PID: 342532 SSN: CHT: ACCT:

Select Testing / Procedure Type and Then Add Results:

Active:

- Mammogram
- Ultrasound

Single Breast Procedures:

Active	Right Breast Procedures	Left Breast Procedures	Active
<input type="checkbox"/>	Ductography	Ductography	<input type="checkbox"/>
<input type="checkbox"/>	Stereotactic Core Biopsy	Stereotactic Core Biopsy	<input type="checkbox"/>
<input type="checkbox"/>	Breast Needle Localization	Breast Needle Localization	<input type="checkbox"/>
<input type="checkbox"/>	Mammo Specimen Radiograph	Mammo Specimen Radiograph	<input type="checkbox"/>
<input type="checkbox"/>	Breast Cyst Aspiration	Breast Cyst Aspiration	<input type="checkbox"/>
<input type="checkbox"/>	Ultrasound Guided Core Biopsy	Ultrasound Guided Core Biopsy	<input type="checkbox"/>
<input type="checkbox"/>	Fine Needle Aspiration	Fine Needle Aspiration	<input type="checkbox"/>

Exit Help

The type of procedure is selected from a common

window, which allows for multiple procedures to be completed at the same time. Each procedure requires simple taps to the screen to select the appropriate phrases to generate the narrative report. Any changes necessary to alter exam type, personnel, recall interval or assessment may be made. If it is necessary to supplement the PenRad automatic report text generator, changes may be made to the report prior to approving. Reports may be printed individually by the radiologist at the time the exam is completed, or they may be batch printed at a later time.

Ultrasound Exam

Ultrasound Examination 9/7/1997 13:52:18

Sally A. Gudim DOB: 11/11/1944 AGE: 52 F PID: 342532 SSN: CHT: ACCT:

Right Breast Abnormalities: Abnorm: 1 (none), 2 (none), 3 (none)

Methods Right: Color Flow Ultrasound, B-Mode Ultrasound, Doppler Ultrasound, Cont' Wave Doppler

Methods Left: Color Flow Ultrasound, Real-Time Ultrasound, Doppler Ultrasound, Cont' Wave Doppler

Left Breast Abnormalities: Abnorm: 1 (none), 2 (none), 3 (none)

Detail, Clear, No Findings

Size: 1 cm, 8 O'clock

Inferior, Lateral, Middle

Compare: 6/25/1994

To Exam, Help

An ultrasound exam is similar to a mammogram exam in that individual abnormalities may be plotted, described, and sized with simple taps on the screen. Reports may be modified or transcribed internally. The approval process is the same for all the PenRad procedures. Separate ultrasound patient letters may be generated with each ultrasound report. Ultrasound exams are included in the statistical reports and tracking capabilities of PenRad.

Right Breast Ultrasound Abnormality Detailing 6/26/2000 7:48:58

June T. Gronowski DOB: 5/6/1944 AGE: 56 F PID: 751055 SSN: 283242165 CHT: ACCT:

Specify Abnormality: As a mass, As a region, As a cyst, As a fibroadenoma, Palpated/not seen abnorm, Mammographic abnorm not seen, Multiple

Impression: Benign, Probably benign, Suspicious abnormality, Highly suggestive of malign, Needs add'l evaluation

Classification: Simple cyst, Complex cyst

Profile Abnormality: Lobulated Margins, Irregular Margin, Indistinct Margin

Findings: Anechoic mass, Hypoechoic mass, Hyperchoic mass, Isoechoic mass, Mixed echogenicity mass, Fibroglandular tissue, Abscess

Modify: w/posterior acoustic shadowing, w/posterior acoustic enhancement, With internal echoes

Corresponds: As palpated, As seen mammographically, Incidental finding

Compare: 6/8/1998, 6/6/1997

Add Text, OK, Cancel, Help

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INFORMATION FOR:
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ULTRASOUND OF THE RIGHT BREAST: 6/14/1996
Real-time ultrasound was performed on the right breast. Corresponding mammographic film used: 6/14/1996 Penrad Clinic. There is a 1.6 cm round smooth margin mass with a smooth internal wall in the right breast at 4 o'clock in the middle depth. The mass corresponds as palpated and seen mammographically.

IMPRESSION: ASSESSMENT COMPLETE: NEGATIVE
The 1.6 cm mass at 4 o'clock in the middle depth in the right breast is a simple cyst and is benign. A screening in 1 year is recommended.

James E. Edwards MD
James Edwards
jee/penrad:6/21/1996
Imaging Technologist: Patty A. Ferdickson RT(R)(M), Penrad Clinic

All procedures reports generate report text by tapping on keywords within the procedure screen. Procedure templates can include the sites letterhead along with any footer notes. Procedure reports can be done in conjunction with mammography or with other procedures. PenRad generated reports are window letter ready and are in a faxable format. With the AutoFax option, procedures can be faxed directly to the physician.

Procedures Exam Generation - Continued



Womancare
PenRad Mammography Center
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PROCEDURE INFORMATION FOR:
Marian B. DeLacruz
13526 Oak Street
Plymouth, MN 55447
Home: (612)550-7681
PID#: 745669
Soc Sec#: 479-01-2368
Exam#: 4546
DOB#: 11/12/1944
Age: 55

ATTENTION:
Linda O. Abbott MD
Bass Lake Clinic
Suite 330
2323-33rd Ave N
Plymouth, MN 55441
Phone: (612)520-2980Fax: 475-2815

DUCTOGRAPHY PROCEDURE RIGHT BREAST: 6/2/2000
After informed consent was obtained from the patient a small droplet of breast discharge was manually discharged from the patient's right breast. The appropriate duct opening was visualized and a 29 gauge blunt tip sialography needle was placed into the duct. The needle and tubing were secured in place and the patient's breast was placed in the mammography unit. Contrast was injected and full field subareolar magnification in the craniocaudad and mediolateral views were obtained.

DUCTOGRAPHY IMPRESSION/RECOMMENDATION:
The procedure was successful and there were no post procedure complications. Ductography of the right breast demonstrates multiple intraductal filling defects and duct narrowing representing an abnormality. A clinical correlation is recommended.

RIGHT Breast Ductography Detailing		6/8/2000 6:56:59
Marian B. DeLacruz DOB: 11/12/1944 AGE: 55 F PID: 745669 SSN: 479012368 CHT: ACCT.		
<p>Viewed By Magnification In</p> <ul style="list-style-type: none"> <input type="checkbox"/> Craniocaudad <input type="checkbox"/> Mediolateral <input type="checkbox"/> 90 degree lateral 	<p>Impression:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Abnormal <input type="checkbox"/> Postinflammatory change 	<p>Results:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Procedure successful <input type="checkbox"/> Procedure unsuccessful <input type="checkbox"/> No post proc complications
<p>Needle Size</p> <ul style="list-style-type: none"> <input type="checkbox"/> 26 gauge <input type="checkbox"/> 27 gauge <input type="checkbox"/> 28 gauge <input checked="" type="checkbox"/> 29 gauge <input type="checkbox"/> 30 gauge <input type="checkbox"/> 31 gauge <input type="checkbox"/> 32 gauge <input type="checkbox"/> 33 gauge 	<p>Recommendations:</p> <p>Follow-up</p> <ul style="list-style-type: none"> <input type="checkbox"/> Surgical bx with preop ducto <input type="checkbox"/> Repeat ductogram <input checked="" type="checkbox"/> Ultrasound examination <input checked="" type="checkbox"/> Clinical correlation <input type="checkbox"/> Surgical consult 	
<p>Ductography Demonstrates:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Intraductal filling defect <input checked="" type="checkbox"/> Multiple intraductal filling defects <input type="checkbox"/> Complete intraductal ductal obstruction <input type="checkbox"/> Distortion and expansion of the duct <input checked="" type="checkbox"/> Duct narrowing <input type="checkbox"/> Duct wall irregularity <input type="checkbox"/> Duct ectasia <input type="checkbox"/> Cyst fill <input type="checkbox"/> Periductal contrast extravasation 		
<p>To Preexam OK Cancel Help Approve / Preview Add Text</p>		




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Phone: (612)520-2980Fax: 475-2815

STEREOTACTIC CORE BIOPSY PROCEDURE RIGHT BREAST: 6/2/2000
This procedure performed for the abnormality located in the middle depth at 3 o'clock as described on the previous mammogram and ultrasound. Informed consent was obtained from the patient and the right breast was prepped in the usual manner. Stereotactic images were obtained of the mass and three dimensional coordinates were calculated. The biopsy site was infiltrated with local anesthesia and a small incision was made in the breast. An 11 gauge biopsy needle was placed into the lesion under computer guidance and confirmatory stereotactic mammography images were obtained to document needle placement. Once the needle was documented to be in the mass, five core specimens were obtained at different sites within the mass using the Mammotome biopsy system. These specimens were sent to the laboratory for pathological analysis. Following the procedure a micro clip was inserted and a dressing was applied across the skin incision. A small hematoma was present and treated with local pressure until hemostasis was achieved. Post procedure localization films were obtained. Post procedure images of the breast show complete removal of the mass.

RIGHT Stereotactic Core Biopsy Detailing		6/8/2000 7:00:47		
Marian B. DeLacruz DOB: 11/12/1944 AGE: 55 F PID: 745669 SSN: 479012368 CHT: ACCT.				
<p>Location</p> <ul style="list-style-type: none"> <input type="checkbox"/> Multiple <input type="checkbox"/> 1 o'clock <input type="checkbox"/> 2 o'clock <input checked="" type="checkbox"/> 3 o'clock <input type="checkbox"/> 4 o'clock <input type="checkbox"/> 5 o'clock <input type="checkbox"/> 6 o'clock <input type="checkbox"/> 7 o'clock <input type="checkbox"/> 8 o'clock <input type="checkbox"/> 9 o'clock <input type="checkbox"/> 10 o'clock <input type="checkbox"/> 11 o'clock <input type="checkbox"/> 12 o'clock <input type="checkbox"/> cent to nipple axillary tail axilla <input type="checkbox"/> ant depth <input checked="" type="checkbox"/> mid depth <input type="checkbox"/> post depth <input type="checkbox"/> sub-areolar <input type="checkbox"/> sup med quad <input type="checkbox"/> sup lat quad <input type="checkbox"/> inf med quad <input type="checkbox"/> inf lat quad <input type="checkbox"/> desc/prev Mamm <input type="checkbox"/> desc/prev US 	<p>Needle Size</p> <ul style="list-style-type: none"> <input type="checkbox"/> 8 gauge <input checked="" type="checkbox"/> 11 gauge <input type="checkbox"/> 14 gauge <input type="checkbox"/> 15 gauge <input type="checkbox"/> 16 gauge <input type="checkbox"/> 17 gauge <input type="checkbox"/> 18 gauge <input type="checkbox"/> 19 gauge <input type="checkbox"/> 20 gauge <input type="checkbox"/> 21 gauge <input type="checkbox"/> Multiple <p>Hematoma Size</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1 cm <input type="checkbox"/> 2 cm <input type="checkbox"/> 3 cm <input type="checkbox"/> 4 cm <input type="checkbox"/> 5 cm <input type="checkbox"/> 6 cm <input checked="" type="checkbox"/> Small size <input type="checkbox"/> Medium size <input type="checkbox"/> Large size 	<p>Specimens</p> <ul style="list-style-type: none"> <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> Multiple 	<p>Biopsy Core of</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Mass <input type="checkbox"/> Mass with calcification <input type="checkbox"/> Mass with calcifications <input type="checkbox"/> Calcification <input type="checkbox"/> Calcifications <input type="checkbox"/> Cyst <p>Post Procedure Imaging</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Mass completely removed <input type="checkbox"/> Mass partially removed <input checked="" type="checkbox"/> Localization films obtained 	<p>Results</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Procedure successful <input type="checkbox"/> Procedure was terminated <input type="checkbox"/> No post proc complications <input type="checkbox"/> Benign <input checked="" type="checkbox"/> Malignant <input type="checkbox"/> No pathology requested <p>Results</p> <ul style="list-style-type: none"> <input type="checkbox"/> Atypical ductal hyperplasia <input type="checkbox"/> Papillomatosis <input type="checkbox"/> Lobular carcinoma in situ <input type="checkbox"/> Ductal carcinoma in situ <input type="checkbox"/> Ductal carcinoma in situ. Co <input checked="" type="checkbox"/> Invasive ductal carcinoma <input type="checkbox"/> Invasive lobular carcinoma <input type="checkbox"/> Medullary carcinoma <input type="checkbox"/> Mucinous carcinoma <input type="checkbox"/> Invasive papillary carcinoma <input type="checkbox"/> Tubular carcinoma <input type="checkbox"/> Inflammatory carcinoma <input type="checkbox"/> With calcifications <input checked="" type="checkbox"/> Clinical Correlation Recommended <p>Pathological Statistics</p>
<p>To Preexam OK Cancel Help Approve / Preview Add Text</p>				




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NEEDLE LOCALIZATION PROCEDURE RIGHT BREAST: 6/2/2000
This procedure performed for the abnormality located in the middle depth at 3 o'clock as described on the previous mammogram. Informed consent was obtained from the patient and the right breast was prepped in the usual manner. A localization film was obtained. Local anesthesia was introduced into the skin then a hook wire was introduced into the breast under mammographic guidance. The wire tip rests 3mm inferior, 2mm medial and 9mm anterior from the lesion.

RIGHT Breast Needle Localization Detailing		6/8/2000 7:17:30
Marian B. DeLacruz DOB: 11/12/1944 AGE: 55 F PID: 745669 SSN: 479012368 CHT: ACCT.		
<p>Location</p> <ul style="list-style-type: none"> <input type="checkbox"/> Multiple <input type="checkbox"/> 1 o'clock <input type="checkbox"/> 2 o'clock <input checked="" type="checkbox"/> 3 o'clock <input type="checkbox"/> 4 o'clock <input type="checkbox"/> 5 o'clock <input type="checkbox"/> 6 o'clock <input type="checkbox"/> 7 o'clock <input type="checkbox"/> 8 o'clock <input type="checkbox"/> 9 o'clock <input type="checkbox"/> 10 o'clock <input type="checkbox"/> 11 o'clock <input type="checkbox"/> 12 o'clock <input type="checkbox"/> cent to nipple axillary tail axilla <input type="checkbox"/> ant depth <input checked="" type="checkbox"/> mid depth <input type="checkbox"/> post depth <input type="checkbox"/> sub-areolar <input type="checkbox"/> sup med quad <input type="checkbox"/> sup lat quad <input type="checkbox"/> inf med quad <input type="checkbox"/> inf lat quad <input type="checkbox"/> desc/prev Mamm <input type="checkbox"/> desc/prev US 	<p>Specify Technique(s) and Position on Lesion</p> <p>Hooked Wire</p> <p><input checked="" type="checkbox"/> Check if localized using wire</p> <p><input type="checkbox"/> Multiple wires</p> <p>Wire Location</p> <ul style="list-style-type: none"> <input type="checkbox"/> Tip rests on the lesion <input type="checkbox"/> Denotes boundaries of the lesion <input type="checkbox"/> Tip at specified distance from lesion. (set distance below) <input type="checkbox"/> Traverses the lesion <input type="checkbox"/> Passes through the lesion. <p>Inferior: 0.3 cm</p> <p>Superior: 0.2 cm</p> <p>Lateral: 0.2 cm</p> <p>Medial: 0.2 cm</p> <p>Anterior: 0.3 cm</p> <p>Posterior: 0.2 cm</p>	<p>Dye</p> <p><input type="checkbox"/> Check if localized using dye</p> <p>The dye is adjacent to the lesion</p> <p>Distance from lesion to dye deposit</p> <p>Inferior: [] Superior: []</p> <p>Lateral: [] Medial: []</p> <p>Anterior: [] Posterior: []</p> <p>Method</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Mammographically guided <input type="checkbox"/> Ultrasound guided <input type="checkbox"/> Stereotactically guided <p>Procedure was</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Successful <input type="checkbox"/> Unsuccessful <p><input type="checkbox"/> Check if localized film taken</p> <p><input type="checkbox"/> Check if NO anesthesia used</p>
<p>To Preexam OK Cancel Help Approve / Preview Add Text</p>		



Womancare
PenRad Mammography Center
14332-21st Ave N, Plymouth, MN 55447
Phone (612) 475-3388 Fax (612) 475-2815

PROCEDURE INFORMATION FOR:
Marian B. DeLacruz
13526 Oak Street
Plymouth, MN 55447
Home: (612)550-7681
PID#: 745669
Soc Sec#: 479-01-2368
Exam#: 4546
DOB#: 11/12/1944
Age: 55

ATTENTION:
Linda O. Abbott MD
Bass Lake Clinic
Suite 330
2323-33rd Ave N
Plymouth, MN 55441
Phone: (612)520-2980Fax: 475-2815

MAMMO SPECIMEN RADIOGRAPH RIGHT BREAST: 6/2/2000
The specimen from the abnormality located in the middle depth at 3 o'clock submitted for radiograph contains the mass. The mass was localized and sent for pathologic diagnosis. The distal portion of the biopsy guidance wire is included in the radiograph.

SPECIMEN RADIOGRAPH IMPRESSION/RECOMMENDATION:

RIGHT Mammo Specimen Radiograph Detailing		6/8/2000 7:19:45
Marian B. DeLacruz DOB: 11/12/1944 AGE: 55 F PID: 745669 SSN: 479012368 CHT: ACCT.		
<p>Location</p> <ul style="list-style-type: none"> <input type="checkbox"/> Multiple <input type="checkbox"/> 1 o'clock <input type="checkbox"/> 2 o'clock <input checked="" type="checkbox"/> 3 o'clock <input type="checkbox"/> 4 o'clock <input type="checkbox"/> 5 o'clock <input type="checkbox"/> 6 o'clock <input type="checkbox"/> 7 o'clock <input type="checkbox"/> 8 o'clock <input type="checkbox"/> 9 o'clock <input type="checkbox"/> 10 o'clock <input type="checkbox"/> 11 o'clock <input type="checkbox"/> 12 o'clock <input type="checkbox"/> cent to nipple axillary tail axilla <input type="checkbox"/> ant depth <input checked="" type="checkbox"/> mid depth <input type="checkbox"/> post depth <input type="checkbox"/> sub-areolar <input type="checkbox"/> sup med quad <input type="checkbox"/> sup lat quad <input type="checkbox"/> inf med quad <input type="checkbox"/> inf lat quad <input type="checkbox"/> desc/prev Mamm <input type="checkbox"/> desc/prev US 	<p>Specimen Submitted for Radiography</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Contains the mass <input type="checkbox"/> Contains the calcifications <input type="checkbox"/> Contains both a mass and calcification <input type="checkbox"/> Does not contain the mass <input type="checkbox"/> Does not contain the calcifications <input type="checkbox"/> Does not contain either mass or calcifications <input type="checkbox"/> Can't determine if ANY of mass in specimen <input type="checkbox"/> Can't determine if ALL of mass in specimen <input type="checkbox"/> Includes densities that may be mammo findings <input type="checkbox"/> No characteristics to indicate lesion in or not in <input checked="" type="checkbox"/> Contains the hook <input type="checkbox"/> Portion of hook missing 	<p>Results</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Procedure successful <input type="checkbox"/> Procedure was terminated <input type="checkbox"/> No post proc complications <input type="checkbox"/> Benign <input checked="" type="checkbox"/> Malignant <input type="checkbox"/> No pathology requested <p>Results</p> <ul style="list-style-type: none"> <input type="checkbox"/> Atypical ductal hyperplasia <input type="checkbox"/> Papillomatosis <input type="checkbox"/> Lobular carcinoma in situ <input checked="" type="checkbox"/> Ductal carcinoma in situ <input type="checkbox"/> Ductal carcinoma in situ. Comedo type <input type="checkbox"/> Invasive ductal carcinoma <input type="checkbox"/> Invasive lobular carcinoma <input type="checkbox"/> Medullary carcinoma <input type="checkbox"/> Mucinous carcinoma <input type="checkbox"/> Invasive papillary carcinoma <input type="checkbox"/> Tubular carcinoma <input type="checkbox"/> Inflammatory carcinoma <input type="checkbox"/> With calcifications <input checked="" type="checkbox"/> Surgical consult recommend <p>Pathological Statistics</p>
<p>To Preexam OK Cancel Help Approve / Preview Add Text</p>		

Procedures Exam Generation- Continued

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INFORMATION FOR:
 Marian B. DeLacruz
 13526 Oak Street
 Plymouth, MN 55447
 Home: (612)550-7681
 PID#: 745669
 Soc Sec#: 479-01-2368
 Exam#: 4546
 DOB#: 11/12/1944
 Age: 55

BILATERAL SCREENING MAMMOGRAM: 6/2/2000
 Comparison is made to exam dated: 1/27/1997 Penrad Clinic.

FINDINGS: There are scattered fibroglandular elements in the both breasts. There is a 6 mm mass in the right breast at 4 o'clock in the middle depth. Compared to previous films, this mass is new. No significant masses, calcifications, or other findings are seen in the left breast.


IMPRESSION: ADDITIONAL EVALUATION RECOMMENDED
 The mass in the right breast appears not readily classifiable. An ultrasound examination is recommended for the mass.

ULTRASOUND OF THE RIGHT BREAST : 6/2/2000
 Comparison is made to exam dated: 1/27/1997 Penrad Clinic. Real-time ultrasound was performed on the right breast. There is a 6 mm irregular shaped irregular margin mass with an irregular internal wall in the right breast at 4 o'clock in the anterior depth. The mass corresponds as seen mammographically.

ULTRASOUND IMPRESSION : HIGHLY SUGGESTIVE OF MALIGNANCY
 The 6 mm mass at 4 o'clock in the anterior depth in the right breast is a complex cyst and appears highly suggestive of malignancy. An ultrasound guided biopsy is recommended.

SUMMARY :
 The 6 mm mass at 4 o'clock in the anterior depth in the right breast is a complex cyst and appears highly suggestive of malignancy. An ultrasound guided biopsy is recommended.

The patient has been or will be contacted and a final report will be issued.

Christine Anderson M.D.

 ca/penrad6/8/2000 8:53:11
 letter sent: Mammography Abnormal Code: B-RADS: 4 Highly Suggestive of Malignancy

MEDICAL RECORDS COPY Marian B. DeLacruz , PID#:745669 EXAM#:4546 DOB#:11/12/1944 AGE:55 Page 1 of 1

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PROCEDURE INFORMATION FOR:
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ACCESS ASPIRATION PROCEDURE FOR RIGHT BREAST: 6/2/2000
 This procedure performed for the multiple abnormalities located at 3 o'clock and at 5 o'clock as described on the previous mammogram and ultrasound. Informed consent was obtained from patient and the breast was prepped in the usual manner. Under ultrasound guidance a 20 gauge needle was percutaneously placed into the abscesses. 4.0cc of turbid yellow fluid was aspirated. This was sent to the laboratory for cytological analysis. Following the procedure air was injected into the cysts and a mammogram was obtained.

ACCESS ASPIRATION IMPRESSION/RECOMMENDATION:
 Abscess aspiration was performed as described above. The procedure was successful and there were no post procedure complications. The post procedure mammogram showed the abscesses were no longer present. Pathology indicated a benign infection and/or abscess.

RIGHT Breast Cyst Aspiration Detailing 6/8/2000 7:28:56
 Marian B. DeLacruz DOB: 11/12/1944 AGE: 55 F PID: 745669 SSN: 479012368 CHT: ACCT:

Location Multiple 1 o'clock 2 o'clock 3 o'clock 4 o'clock 5 o'clock 6 o'clock 7 o'clock 8 o'clock 9 o'clock 10 o'clock 11 o'clock 12 o'clock	Needle Size 18 gauge 19 gauge 20 gauge 21 gauge 22 gauge 23 gauge	Specimen Type No fluid obtained Fluid Pus	Opacity Clear Turbid Opaque	Color Colorless Yellow Serosanguinous Bloody Green White Brown
ant depth mid depth post depth sub-areolar	With local anesthesia	Fluid Volume = 4.0 cc	Following Aspiration Mammogram Air injected and mammogram Air was injected Contrast injected and mammogram Ultrasound	Sent to Laboratory for Cytological analysis Bacterial analysis Chemical analysis Fluid was discarded
sup med quad sup lat quad inf med quad inf lat quad	Mammography Findings Lesion no longer present Mass no longer present Cyst no longer present Showed smooth walled cyst Showed an intracystic mass	Results Procedure successful Procedure was terminated No post proc complications Benign Malignant No pathology requested	Results Fibroadenoma Adenosis Sclerosing adenosis Fibrocystic change Fibrosis Ductal hyperplasia Adenoma Papilloma Lobular hyperplasia Phyllodes tumor Fat Necrosis Infection/Abscess With calcifications	Pathological Statistics
desc/prev Mammo desc/prev US	Specify Abnormally Cyst Abscess			

To PreExam OK Cancel Help Approve / Preview Add Text

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 DOB#: 11/12/1944
 Age: 55

ULTRASOUND GUIDED CORE BIOPSY RIGHT BREAST: 6/2/2000
 This procedure performed for the abnormality located in the posterior depth at 5 o'clock as described on the previous mammogram and ultrasound. Informed consent was obtained from the patient and the breast was prepped in the usual manner. The mass was localized by real-time ultrasound. The biopsy site was infiltrated with local anesthesia and a small amount of air was injected.

RIGHT Ultrasound Guided Core Biopsy Detailing 6/8/2000 7:39:34
 Marian B. DeLacruz DOB: 11/12/1944 AGE: 55 F PID: 745669 SSN: 479012368 CHT: ACCT:

Location Multiple 1 o'clock 2 o'clock 3 o'clock 4 o'clock 5 o'clock 6 o'clock 7 o'clock 8 o'clock 9 o'clock 10 o'clock 11 o'clock 12 o'clock	Needle Size 11 gauge 14 gauge 15 gauge 16 gauge 17 gauge 18 gauge 19 gauge 20 gauge 21 gauge	Specimens 2 3 4 5 6 7 8 9 10 Multiple	Biopsy Core of Mass Mass with calcification Calcification Cyst	Results Procedure successful Procedure was terminated No post proc complications Benign Malignant No pathology requested
ant depth mid depth post depth sub-areolar	With anesthesia With micro clip inserts	Methods Used Color Flow US Doppler US Cont. Wave Doppler	Post Procedure Imaging Mass completely removed Mass partially removed	Results Localization films obtained
sup med quad sup lat quad inf med quad inf lat quad	Hematoma Size 1 cm. 2 cm. 3 cm. 4 cm. 5 cm. 6 cm. 8 cm.	Hematoma Size 1 cm. 2 cm. 3 cm. 4 cm. 5 cm. 6 cm. 8 cm.	Localization films obtained	Results Atypical ductal hyperplasia Papillomatosis Ductal carcinoma in situ Ductal carcinoma in situ Ductal carcinoma in situ Invasive ductal carcinoma Invasive lobular carcinoma Medullary carcinoma Mucinous carcinoma Invasive papillary carcinoma Tubular carcinoma Inflammatory carcinoma With calcifications Surgical consult recommend
desc/prev Mammo desc/prev US	Small size Medium size Large size			Pathological Statistics

To PreExam OK Cancel Help Approve / Preview Add Text

Womancare
PenRad Mammography Center
 14332-21st Ave N, Plymouth, MN 55447
 Phone (612) 475-3388 Fax (612) 475-2815

PROCEDURE INFORMATION FOR:
 Marian B. DeLacruz
 13526 Oak Street
 Plymouth, MN 55447
 Home: (612)550-7681
 PID#: 745669
 Soc Sec#: 479-01-2368
 Exam#: 4546
 DOB#: 11/12/1944
 Age: 55

ATTENTION:
 Linda O. Abbott MD
 Bass Lake Clinic
 Suite 330
 2323-33rd Ave N
 Plymouth, MN 55441
 Phone: (612)520-2980 Fax: 475-2815

FINE NEEDLE ASPIRATION PROCEDURE RIGHT BREAST: 6/2/2000
 This procedure performed for the abnormality located in the anterior depth at 2 o'clock as described on the previous mammogram. Informed consent was obtained from the patient and the right breast was prepped in the usual manner. A 24 gauge biopsy needle was placed into the lesion by palpation. Once the needle was documented to be in the lesion.

RIGHT Fine Needle Aspiration Detailing 6/8/2000 7:54:05
 Marian B. DeLacruz DOB: 11/12/1944 AGE: 55 F PID: 745669 SSN: 479012368 CHT: ACCT:

Location Multiple 1 o'clock 2 o'clock 3 o'clock 4 o'clock 5 o'clock 6 o'clock 7 o'clock 8 o'clock 9 o'clock 10 o'clock 11 o'clock 12 o'clock	Localization Method Stereotactic Guided Palpated Ultrasound Guided	Specimens 2 3 4 5 6 7 8 9	Cytologic Findings Insufficient samples Unavailable at this time Negative for malignancy Neg for malignancy Suspicious for malignancy Malignant	Results Procedure successful Procedure was terminated No post proc complications Benign Malignant No pathology requested
ant depth mid depth post depth sub-areolar	Hematoma Size 1 cm. 2 cm. 3 cm. 4 cm. 5 cm. 6 cm. 8 cm.	Needle Size 19 gauge 20 gauge 21 gauge 22 gauge 23 gauge 24 gauge	Recommendation Stereotactic core biopsy Surgical biopsy Ultrasound guided biopsy Surgical/oncologic consultation	Results Atypical ductal hyperplasia Papillomatosis Ductal carcinoma in situ Ductal carcinoma in situ Ductal carcinoma in situ Invasive ductal carcinoma Invasive lobular carcinoma Medullary carcinoma Mucinous carcinoma Invasive papillary carcinoma Tubular carcinoma Inflammatory carcinoma With calcifications Surgical consult recommend
sup med quad sup lat quad inf med quad inf lat quad	Small size Medium size Large size			Pathological Statistics

To PreExam OK Cancel Help Approve / Preview Add Text

Supplemental Transcription of Exam

Exams Requiring Transcription							5/18/1996 9:00:42	
Last Name	First Name	MI	PID	DOB	Exam	Radiologist		
1	Amann	Bernice	C.	9254	08/28/1921	5/17	Anderson, Chr	
2	Ambronson	Adeline	D.	223234176	06/06/1971	5/17	Anderson, Chr	
3	Apanian	Ione	K.	223240434	11/11/1948	5/17	Hillman, Kenne	
4	Apodaca	Cyrilla	Y.	45687	02/10/1928	5/17	Anderson, Chr	
5	Apodaca	Margaret	W.	53283	02/05/1951	5/17	Anderson, Chr	
6	Appling	Florence	J.	223238325	05/05/1951	5/17	Fishman, Peter	
7	Barson	Ilah	N.	49264	02/08/1948	5/17	Dothier, Robert	
8	Luther	Sandra	M.	223247914	02/02/1925	4/10	Dothier, Robert	
9	Phelps	Eloise	H.	223238881	01/01/1952	4/9	Dothier, Robert	
10	Weaver	Dorothy	P.	223238286	06/06/1954	4/6	Dothier, Robert	
11	Weaver	Linda	P.	52143	03/06/1948	4/6	Dothier, Robert	
12	Wick	Karen	W.	51246	11/06/1945	4/6	Edwards, Jame	

Modify or Specify Report to be Dictated 5/18/1996 10:05:31

BILATERAL FIRST EVER SCREENING MAMMOGRAM OUTSIDE STUDY: 4/6/1996

Findings
 No prior exams were available for comparison.
 The tissue of both breasts is extremely dense, which lowers the sensitivity of mammography.
 There is a 6 mm lobular mass in the right breast at 3 o'clock in the posterior depth.
 No significant masses, calcifications, or other findings are seen in the left breast.

ASSESSMENT COMPLETE
ABNORMAL MAMMOGRAM - PROBABLY BENIGN

Impressions and/or Recommendations
 The 6 mm lobular mass in the right breast at 3 o'clock in the posterior depth is probably benign.
 A six month follow-up is recommended to demonstrate stability.

Sort By: Name PID Exam Date Radiologist

Buttons:

a report which may not be accomplished using the standard procedures, while maintaining a record of that procedure. Once transcribed, report status reflects transcribed and the radiologist reviews and approves the exam from the reading schedule. Transcribed reports are processed the same as reports produced by standard procedures.

Track Only Mammography Exams

The PenRad system offers the radiologist and the facility multiple options and combinations to track, capture and automatically generate narrative reports for MQSA compliant breast related exams. The Track Only option allows facilities the ability to generate narrative reports for exams or transcribe "detailed" or complicated exams internally or external to the system while tracking and capturing required statistics.

Simple to use: After the Radiologist's selection of the exam (scanning bar-code label) an electronic history sheet screen appears displaying patient information, comparison studies, reason for exam and previous on-line exams. If the exam is negative, the radiologist taps the negative button and selects key items to complete and generate the report. If factors require a detailed narrative generated report, the detailed exam button is tapped along with tapping on keywords or phrases to capture tracking components and generate narrative report. If the exam is extremely complicated, a Tracking Only Report can be generated by selecting the Track Only button, specifying the key abnormality type, associated Bi-rads code, recommendations, recall interval and patient exam letter on the track only screen while transcribing the exam.

Pre-Exam 2/15/2000 8:57:45
 Beatrice N. Alligham, DOB: 5/11/1922, AGE: 77, F, PID: 744166, SSN: 283235276, CHT: ACCT.

Right Left

Comparison Films: 2/12/1999 Bilateral, screening mammogram Film; 2/12/1999 Mammography Examination - 1 year screening; 4/8/1997 Mammography Examination - 2 year screening

Medical History: 1st menstruation, 1934, age 12; Menopause, 1973, age 51

Previous Procedures: 1936, age 74, last physical brel exam, B

Risk Factors: No family history of breast cancer

Buttons: Negative Mammo Exam, Detailed Mammo Exam, Tracking Only Mammo Exam, Procedures

Tracking only Mammogram Exam 2/15/2000 8:56:44
 Beatrice N. Alligham, DOB: 5/11/1922, AGE: 77, F, PID: 744166, SSN: 283235276, CHT: ACCT.

RIGHT Breast: Primary Abnormality Type: Mass, Calcification, None (negative); Impression: 0 - Needs additional imaging, 1 - Benign, 2 - Benign, 3 - Probably benign, 4 - Suspicious abnormality, 5 - Highly suggestive of malignancy; Recommendations: Biopsy, Surgical consult & biopsy

LEFT Breast: Primary Abnormality Type: Mass, Calcification, None (negative); Impression: ; Recommendations: ;

Breast Tissue Density: Predominantly Fatty, Scattered fibroglandular, Heterogeneously dense, Extremely dense

Recall Interval: No Recall, 6 month screening, 1 year screening, 2 year screening, 3 year screening, 4 year screening, 5 year screening, Immediate followup

Patient Letter: No Letter, Mammography Normal, Mammography Abnormal Followup Recommended, Additional Imaging Needed, Comparison to Previous Film, Comparison Films Needed, Normal Mammo/Abnormal Hi, Biopsy Required, Same-day

Buttons: Approve Tracking into transcribed externally, Approve Tracking, commit & print patient letter now, Cancel, Help

Approve Normal Mammogram Exam 2/15/2000 8:58:33
 Beatrice N. Alligham, DOB: 5/11/1922, AGE: 77, F, PID: 744166, SSN: 283235276, CHT: ACCT.

Physician and Technologists: Christine A Anderson M.D., Able Clinic

Specified Rad: 1 - Negative

Exam Type: Bilateral, screening mammogram

Tissue Density: Predominantly Fatty, Scattered Fibroglandular, Heterogeneously Dense, Extremely Dense

Recall Interval: No Recall, 6 month screening, 1 year screening, 2 year screening, 3 year screening, 4 year screening, 5 year screening

Buttons: Approve, Approve For 2nd Read, Approve and Print Now, Exit, Help

Mammography Examination 2/15/2000 8:59:06
 Beatrice N. Alligham, DOB: 5/11/1922, AGE: 77, F, PID: 744166, SSN: 283235276, CHT: ACCT.

MEDIOLATERAL/OBLIQUE VIEW Superior

Right Left

CRANIOCAUDAL VIEW Inferior Lateral

Right Left

Buttons: Implant, Compare, Procedures, PreExam, Add Text, Done Prev Exam, Grid On, Approve / Preview, Help, Exit

Mammography Repeat Analysis

Within the system a repeat analysis module exists for breast imaging facilities. The data is captured with simply the touch or tap of the finger during or after the imaging process. This eliminates manual calculations and correlation for instant MQSA reports for audit and inspections. The repeat data is centrally located to eliminate the need to correlate, manually count and transfer data.

This data may be captured or reviewed at any workstation. Administrative reports are available to display the repeat analysis by imaging facility, machine and technologist. Reports can help identify machine problems or positioning problems.

The repeat module tracks and computes statistics for individual imaging machines by location along with processor and phantom QC films. The system automatically separates repeat analysis for each imaging facility and technologist.

Breast Imaging Views and Settings Capture

This screen is accessed from the View Settings button on the Breast Imaging Main screen for logging views and imaging factors.

Views may be automatically recorded or manually entered. When the imaging machine is connected to the workstation (may require connection module from imaging machine vendor) patient demographic information can be directly transferred to imaging machine eliminating the manual input and the technical factors are automatically recorded for each exposure. An administrative report is available which is sortable by film date, imaging machine, technologist and location for MQSA audit and inspections.

Automatic Alternator Location

Facilitated in the system is an automatic system for locating exams by alternator location by pairing a study's films to one or more alternator positions. This feature increases efficiency of locating studies for first and second reads.

Automatic bar-coding can be used to specify the study's location or can be entered with a few keyboard strokes if bar-coding is not utilized.

This feature also allows the film hanger to specify or create the comparative studies concurrently. Studies for interpretation can be identified by the alternator's location or the patient ID bar-code.

A bar-code label is attached to one film of the study (patient ID label) and a second label is applied permanently to the alternator's web belt. The web location label specifies the alternator location. When the film hanger hangs the studies both the label on the film and the web are scanned. The system accommodates unlimited alternators and locations on an alternator. Labels are applied to the web as a series of numbers where the first numbers specify the alternator and the following numbers specify the location on the web.

Add Text System

Additional Report Text Learn a Phrase 11/7/1997 15:01:48
 Marlys C. Quast DOB: 8/8/1935 AGE: 62 F PID: 223244985 SSN: 223244985 CHT: ACCT:

Phrase Categories: **Calcifications**
 densities
 pain

Findings:
 There are approximately ten scattered calcifications in the right breast which are benign appearing.

Impression/Recommendation:
 The above mentioned scattered calcifications appear to be stable and benign.

Category Specific Phrases Available for Rapid Insertion

	Findings	Impressions/Recommendations	Sort
1	These calcifications are more defined than the last exam.		
2		The above mentioned scattered calcifications appear to be stable and benign.	
3	There are approximately ten scattered calcifications in the right breast which are benign appearing.	The above mentioned scattered calcifications appear to be stable and benign.	
4	There are approximately five scattered calcifications in the right breast which are benign appearing.	The above mentioned scattered calcifications appear to be stable and benign.	
5	There are approximately five scattered calcifications in the right breast which are benign appearing.		
6	There are approximately ten scattered calcifications in the right breast which are benign appearing.		

Learn: Save Delete Clear Text Findings Imp/Rec Both OK Cancel Help

The 'add text' system allows sites to create and use their own individual or personal phrases on the fly and reuse them for interpretative reports and clinical data (reason for study) to assist with medical billing and auditing.

Add text screens are available for each type of abnormality, procedure, special case, implant and clinical. These screens allow users to pick existing phrases; create, modify, or learn them, and have complete sentences or paragraphs appear in the interpretive or clinical data area of the report with a couple of taps. Screen phrases may be organized by categories, subject manner, and/or by user. (Dr. Smith's, pain, clinical data, etc.)

Each phrase may be modified and learned for future or repetitive uses. Multiple phrases can be selected to create complete

paragraphs. Phrases may appear in the body and/or in the impression of the report and can be learned together for a combination finding and impression phrase.

Exam Amending

Amend Exam: 8/14/1997 - Mammography Examination 11/15/1997 12:03:48
 Sharon V. Charon DOB: 1/4/1948 AGE: 49 F PID: 7101220 SSN: CHT: ACCT:

Phrase Categories: **Exam Imaging**
 Exam Followup
 Pathology
 Reduction
 Surgical consult

Text for Amendment:
 Additional views were obtained and the area in question was most likely super imposed breast tissue. The patient should return to her annual screen interval. A new patient letter will be sent indicating her results were normal.

Amending Radiologist: Change Christine A. Anderson MD, Penrad Clinic, Plymouth MN

Amend Date: 11/15/1997 Last Mammo Date: 11/11/1997 Next Mammo Date: 11/11/1998

Category Specific Phrases Available for Rapid Insertion

	Findings	Sort
1	Additional views were obtained and the area in question was a film artifact. The patient should return to her annual screen interval. A new patient letter will be sent indicating her results were normal.	
2	Additional views were obtained and the area in question was most likely super imposed breast tissue. The patient should return to her annual screen interval. A new patient letter will be sent indicating her results were normal.	
3	Patient refused additional imaging as recommended.	

Learn: Save Delete Clear Amendment Approve Amended Exam Finish Later View Orig Exam Cancel Help

The PenRad mammography interpretive reporting, tracking and medical auditing system generates complete interpretive reports for hundreds of thousands of combinations without transcription. Occasionally a circumstance arises where a report requires amending after it has been distributed.

PenRad's amend module allows previously distributed reports to be amended using PenRad's 'add text' technology to create common reusable amend phrases.

This technology allows users to select existing phrases; create, modify, or learn them on the fly and have these sentences or paragraphs appear in the interpretive reports with a couple taps. Phrases may be organized by user definable categories. (additional imaging, pathology, consult, etc.). Each phrase can be modified

and learned for future or repetitive uses. Multiple phrases can be selected to create complete paragraphs.

Reports may be amended multiple times. When a report is amended, an amended statement along with the date appears in the report along with added text and a radiologist signature. Only radiologists or master users have the security to amend reports.

A copy of the report may be reviewed or printed from the previous exam history screen. Amended reports and selected patient letters are automatically transferred to the exam schedule to be printed for redistribution.

Bar-coding, Imaging, and Patient Labels

The system facilitates bar-coding for the generation of various labels to automate the identification of patient and exams by DOB or patient ID. If bar-code label is applied to one of the films, the radiologist scans the bar-code label and concern is minimized for patient identification, indexing and sequencing of films.

The system can generate labels for the exam, film jackets, imaging labels with or without imaging information for each film, and patient address labels using compact label printers.

Insurer Information

Insurer List					9/22/1999 7:24:37
Name	Unit	Street	City	St	
1 A A Linscomb & Son		13122 Mont Village Ave	Gallitersburg	MD	
2 Alcoa 100		P O Box 9897	Greensboro	NC	
3 Abi Adminis Serv Corp		10159 Weyzata Boulevard	Hopkins	MN	
4 Aetna (Fairfax)		12701 Fair Lakes Cr	Fairfax	VA	
5 Aetna Hmo/Ppo		P O Box 26141	Greensboro	NC	
6 Aetna Us Healthcare		P O Box 1125	Blue Bell	PA	
7 Aetna/Tracor		P O Box 795080	San Antonio	TX	
8 All-Clo	Sulte 703	815			
9 Alliance Feira Food					
10 Alliance Feira Non Food					
11 Alliance Geha					
12 Alliance Pipo					
13 Alta Health Strategies					
14 Am Postal Wlkrns Union					
15 Amalgamated Grey Hound	Sulte A	4330			
16 Amer Chambers Life Ins					
17 American Cancer Society	Sulte 315	1825			

The system can maintain a database of insurance providers for the patient and for primary and secondary insurance companies with the ability to export a custom file for separate billing. The system does not contain a billing system. Patient insurer selection is done via the insurance button on the patient maintenance screen.

Insurance Provider Maintenance		9/22/1999 7:25:25
Name:	Amer Chambers Life Ins	Phone: (800)822-1805
Unit:		Fax Phone:
Mail Stop:		ID Number: 1741
Address:	P O Box 3048	ID Number 2:
City:	Naperville	Contact:
State:	IL	
Zip Code:	60566	
County:		
County:		

OK Cancel Help

Patient Insurance Information		9/23/1999 6:34:10	
Marianne M Hill DOB: 8/5/1938 AGE: 61 F PID: 106342 SSN: 470009539 CHT: ACCT:			
Primary Insurance Provider Information:		Secondary Insurance Provider Information:	
Name:	Alliance Geha	Name:	Natl Grp Life Of Dallas
Unit:		Unit:	
Mail Stop:		Mail Stop:	
Street Address:	Po Box 938	Street Address:	P O Box 619077
City, State, Zip:	Frederick, MD 21705	City, State, Zip:	Dallas, TX 75261
Phone:	(800)342-6141	Phone:	(214)929-9000
Fax:		Fax:	
Contact:		Contact:	
Select Provider Remove Provider		Select Provider Remove Provider	
Policy:	324234	Policy:	435345
Group:	346346	Group:	6457455

OK Cancel Help

Film Transit Tracking

Comparisons and Prior Exams			12/31/1999 13:27:46															
Phyllis A Gedra DOB: 5/5/1928 AGE: 71 F PID: 223247049 SSN: 223247049 CHT: ACCT:																		
Selected Imaging Dates for Comparison:	Prior Imaging Dates:																	
<input type="checkbox"/> Some films requested, not obtained	<p>11/22/99 Bilateral, screening mammogram Film, Penned Clinic, Flynn</p> <p>OUT: 11/12/1998 Bilateral, screening mammogram Film, Penned Clinic,</p> <p>11/18/97 Bilateral, screening mammogram Film, Penned Clinic, Flynn</p> <p>11/18/96 Bilateral, screening mammogram Film, Kamman Hospital</p>																	
Remove Selected Add Text Use for Compare																		
Add Generic Imaging Date:																		
Location:																		
Change Location Clear This Location																		
Select Exam Report for Review																		
<table border="1"> <thead> <tr> <th>Date</th> <th>Description</th> <th>Recall</th> </tr> </thead> <tbody> <tr> <td>11/22/99</td> <td>Mammography Examination</td> <td>1 year screening</td> </tr> <tr> <td>11/12/98</td> <td>Mammography Examination</td> <td>1 year screening</td> </tr> <tr> <td>11/18/97</td> <td>Mammography Examination</td> <td>1 year screening</td> </tr> <tr> <td>11/18/96</td> <td>Mammography Examination</td> <td>1 year screening</td> </tr> </tbody> </table>	Date	Description	Recall	11/22/99	Mammography Examination	1 year screening	11/12/98	Mammography Examination	1 year screening	11/18/97	Mammography Examination	1 year screening	11/18/96	Mammography Examination	1 year screening			
Date	Description	Recall																
11/22/99	Mammography Examination	1 year screening																
11/12/98	Mammography Examination	1 year screening																
11/18/97	Mammography Examination	1 year screening																
11/18/96	Mammography Examination	1 year screening																
View Full View Short Print Amend Results																		

The film transit tracking system offers automatic film tracking, requisition and reporting. The system tracks a film study as removed, returned, or requested from an outside source, and indicates the expected return date.

Check Film IN or OUT	
Film is or will be checked out to a facility.	
Mail To:	Academic Medical Center
Address:	Radiology Center
Address:	100 Thulium Squabb Junction
Address:	Chico, MN 55626
Out Date:	02/15/2000
Due Date:	03/16/2000
Contact:	Chernoff
State/Operation:	<input type="radio"/> Checked in or returned <input checked="" type="radio"/> Checked out to facility <input type="radio"/> Checked out to patient <input type="radio"/> Outside film requested <input type="radio"/> Outside film received
File Information:	
Date:	10/10/1997
Location:	Tomas Medical Center, Round Lake, MN 30339
<input type="button" value="Print Mailing Label"/> <input type="button" value="Print Checkout Form"/> <input type="button" value="Print Past Due Letter"/> <input type="button" value="Film Request Letter"/> <input type="button" value="Film Return Letter"/>	
OK Help	

Mail ready labels and/or custom formatted letters can be printed for check out, requisition and past due notifications. Administrative reports are available reflecting status of exams requested, checkout and past due. The prior imaging dates window reflects the transit status and the patient's administrative note field is automatically updated when status is changed.

Security Features

The PenRad mammography system incorporates security to limit access to functions.

1. Access to system is only granted after selecting one's name and entering the proper pass-code.
2. Unattended workstations can auto-logout based on time to prevent unauthorized use.
3. Master user rights - "super user" may be assigned individually to a radiologist or technologist by checking the master user check box on their maintenance screen.
4. A master user may access the radiologist or technologist maintenance screen to change rights and pass-codes.
5. Only a master user may access the Delete Exam button on Previous Exam screen and Schedule screen.
6. Only a master user may access the Resolve/Unresolved Exam screen.
7. Access to the "Change Status button" on the Schedule screen is limited to master user or radiologist associated with exam for exams with the status of: printed, complete, preliminary, suspended or disagree.
8. Access is limited to exams on the Schedule screen with a status of printed, complete, preliminary, suspended or disagree by master user or radiologist associated with exam that prevents alteration of exam that has been read.
9. Access is limited to exams with 2nd read status by master user or a logged-on radiologist on the Reading screen.
10. Access is limited to pre-exam screens for technologists.
11. Residents are only able to approve an exam for 2nd read. Exam must also be approved by a staff radiologist.
12. Only radiologists or master users can amend exams.

Administrative Report Generation

Report Printing Screen 6/20/2000 17:49:29

Select a Report Category

- 1. Medical Relationship Reports
- 2. Quality Control Reports
- 3. Pathology Reports
- 4. Patient Recall List
- 5. Exam Resolution reports
- 6. Abnormalities and Non-Negatives
- 7. Teaching Exams Reports
- 8. Films

Select a Report Type

- A. Current Patients Scheduled for Exam in Queue
- B. Patient List for Examined During Time Interval
- C. Patient Recall List By Doctor Based on Examinations
- D. Patient Recall List Based on Examinations by Recall Date
- E. Patient Past Due List By Doctor Based on Examinations
- F. Patient Past Due List Based on Examinations - Sorted by Recall Date
- G. Patients with Associated Doctors List
- H. Patients with Associated Doctors List By Doctor
- I. Self Refered Patient List
- J. Examinations Approved During Time Interval by Associated Doctor
- K. Patients With No Exam History and/or Recall Date
- L. Examinations Approved During Time Interval by Patient
- M. Patient Exam History
- N. Simple Patient List
- O. Fax Log by Doctors or Facility

Referring Physician on which to Report

Location on which to report

PenRad provides a wealth of information to assist administration in evaluating the efficiency of the facility. Numerous reports are available to evaluate workload, quality, efficiency, outcome analysis, facility utilization, cost patterns and trends. Marketing reports track patient services rendered and recommendations for time period along with statistical information for radiologist or the ordering physician. Any of the 100 plus reports may be exported for further study and/or graphical representation.

There are multiple report groups, each with multiple types. Beginning and ending date ranges for each report may be specified. If applicable, a user can specify an individual or all and either one or all affiliations or location may be selected.

Current Patients Scheduled for Exams In Queue (1A)

DOB	Patient	RIS	DOB	Exam Date	Exam Date	Exam Date	Exam Date	Exam Date	Exam Date
01/21/1951	Adler, Carl R.	101199	01/21/1951	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000
01/21/1951	Adler, Carl R.	101199	01/21/1951	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000
01/21/1951	Adler, Carl R.	101199	01/21/1951	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000	06/20/2000

Patient Recall List Based on Examination

Print Date: 9/7/97
 Doctor(s): <ALL>
 Hospital/Clinic(s): <ALL>

Export

Format: Excel 5.0 (XLS)
 Destination: Disk file

Recommendation: 1 year screening
 Finding: Benign
 Finding: Simple cyst

Approved: 9/7/96 Madere MD, Gar

See administration report packet for sample reports.

RIS/HIS Interface System

Select RIS Procedure 10/21/1999 21:34:31

Patient Name	PID	RIS Proc #	Sch Date	Procedure	Description
Dikay, Charlotte	0041017	23A-092399	9/23/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Ramer, Virginia	00416101	22A-081099	8/10/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Sell, Linda	00434296	21A-093099	9/30/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Witchow, Joy	00445197	37A-081099	8/10/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Brookslaw, Nancy	00460219	32A-091799	9/17/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Johnson, Janet	00481315	33A-081099	8/10/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Anderson, Heidi	00492004	187B-081099	8/10/1999	Ultrasound	BI BREAST US RT
Frid, Florence M	00515936	66A-091499	9/14/1999	Mammogram	BI MAMMOGRAM SCREENING
Rapp, Lois	00529122	36A-091999	9/17/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Sienkiewicz, Star L	00585981	95A-090999	9/9/1999	Mammogram	BI MAMMOGRAM SCREENING
Coenen, Amy	00625460	60B-081099	8/10/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Brown, Diana L	00652649	74A-081099	8/10/1999	Mammogram	BI MAMMOGRAM SCREENING
Haushalter, Mary Ann	00686691	23A-092799	9/27/1999	Mammogram	BI MAMMOGRAM SCREENING
Balk, Karen J	00720520	114A-081099	8/10/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Kuckkan, Rosemary	00729704	44A-092099	9/20/1999	Mammogram	BI MAMMOGRAM SCREENING
Braun, Linda D	00730346	96A-081099	8/10/1999	Mammogram	BI MAMMOGRAM SCREENING
Thomas, Krista	00740450	71A-090199	9/1/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC
Thornton, Patricia	00757641	132A-081999	8/19/1999	Mammogram	BI MAMMOGRAM DIAGNOSTIC

Show only: All Today + 6 - 1 day Tomorrow
 Date: / / Thru Today Thru Yesterday Thru Tomorrow Next 7 days After Date
 Sort By: Name PID RIS Proc# Date Desc
 Preliminary Exam Print List Delete

The option exists to have the PenRad System connected to an RIS/HIS system. PenRad has its own HL7 bi-directional compliant interface engine that is an automatic real-time 2-way HL7 that accepts and processes ADT, PID, OBR, OBC, OBX and other various segment information contained in the message.

The interface engine is soft coded so variables can be changed instantaneously to accommodate variables between RIS/HIS vendors. When the system receives an order, the patient demographics are updated and the order is added to the HIS/RIS list. When the exam is completed all the appropriate order information and a complimentary copy of the exam, CPT and ICD9 codes are returned the RIS/HIS system.

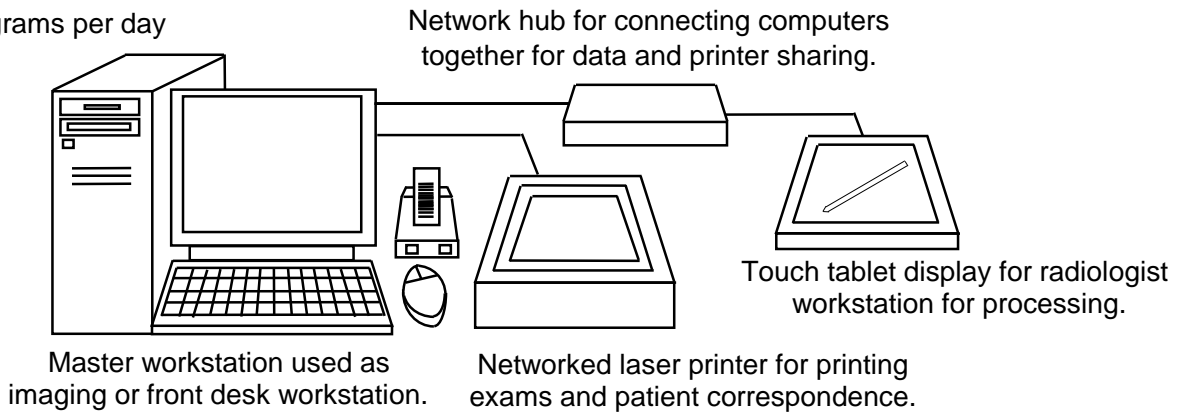
The interface also supports exams that are preliminary, final, and amended. Doctor tables can also be automatically maintained. All mammographic data and practice analysis information resides on the PenRad system and is easily accessed for administrative and auditing report generation at the touch of a finger.

The RIS work list is available for selecting the patient exam directly as a short cut verses selecting the patient from the patient list for the technologist. The RIS work list reflects outstanding orders only that can be sorted by date and displays patient name, ID#, DOB, procedure type, scheduled date, RIS #, doctor, and reason for exam and is accessed from the main screen. Many options relating to the interface are available in the system configuration file to facilitate the needs of RIS/HIS vendors such as, allow exam add without order, formatting, etc.

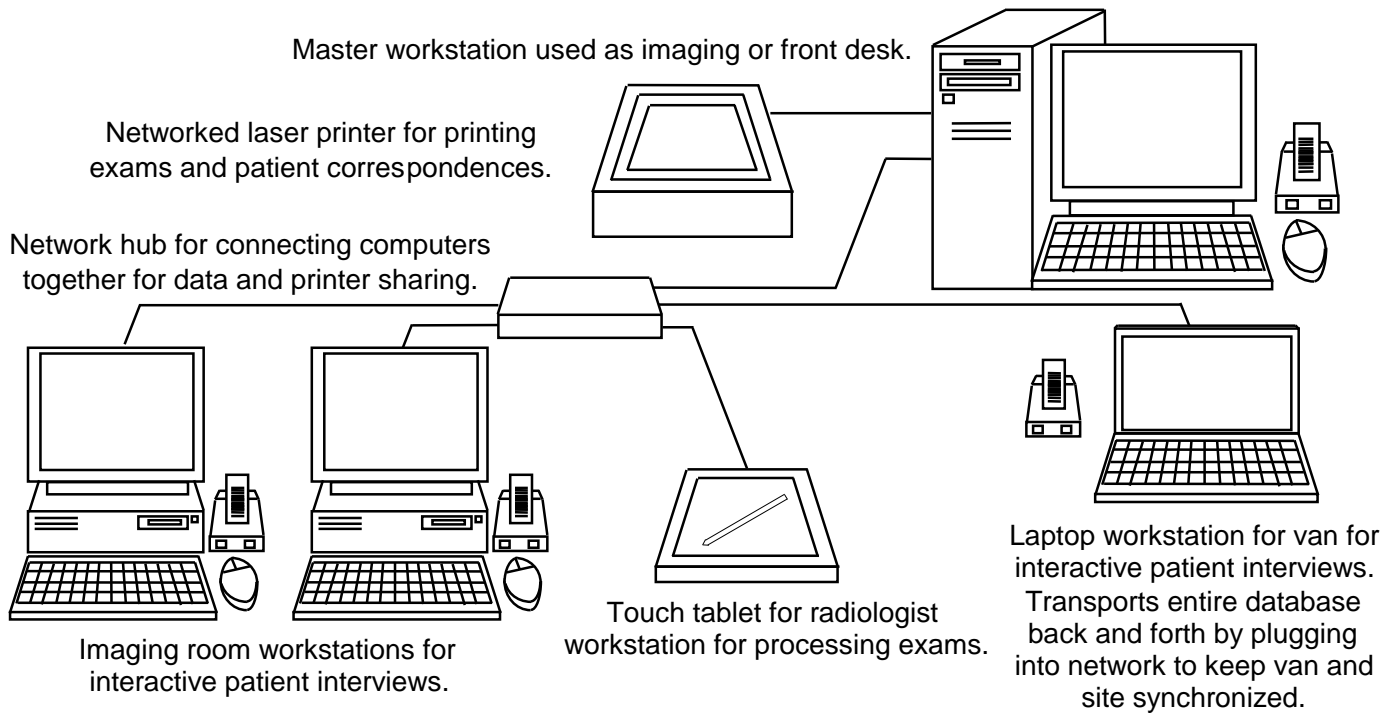
For additional information contact PenRad directly.

Possible Site Configurations

10-20 mammograms per day configuration.



Systems are designed to meet and grow with your sites needs. PenRad can be connected to other sites for an enterprise solution by modem network for centralized reading or satellite facilities. The PenRad platform is Windows NT and SQL server. The master workstation provides automatic tape backup and a modem connection for on-line software upgrades and support. AutoFax provides direct faxing of exams to physicians. Bar-code label printers, wands or guns can be added for bar-code awareness to workstations for automatic exam and patient identification. PenRad interfaces with bi-directionally HIS/RIS systems through ADT, HL7 and other interface modules.



PenRad

MAMMOGRAPHY INFORMATION SYSTEM

... for facilities with greater expectations...

Mammography QC/QA Reporting and Tracking Module

PenRad offers a comprehensive QC/QA module for breast imaging facilities. The data is captured with simply the touch or tap of the finger and produces instant MQSA reports for audit and inspections. The QC/QA data is centrally located to eliminate the need to correlate and transfer data. This data may be captured or reviewed at any workstation and is capable of displaying a history log and producing a detailed printed hard copy MQSA report.

The PenRad QC/QA module incorporates **one-glance** technology and displays the QC/QA and operational status for each imaging station, reading station and processor on a single screen. The QC/QA module also provides repeat analysis, cassette and CEU status. Data is collected on electronic worksheet screens.

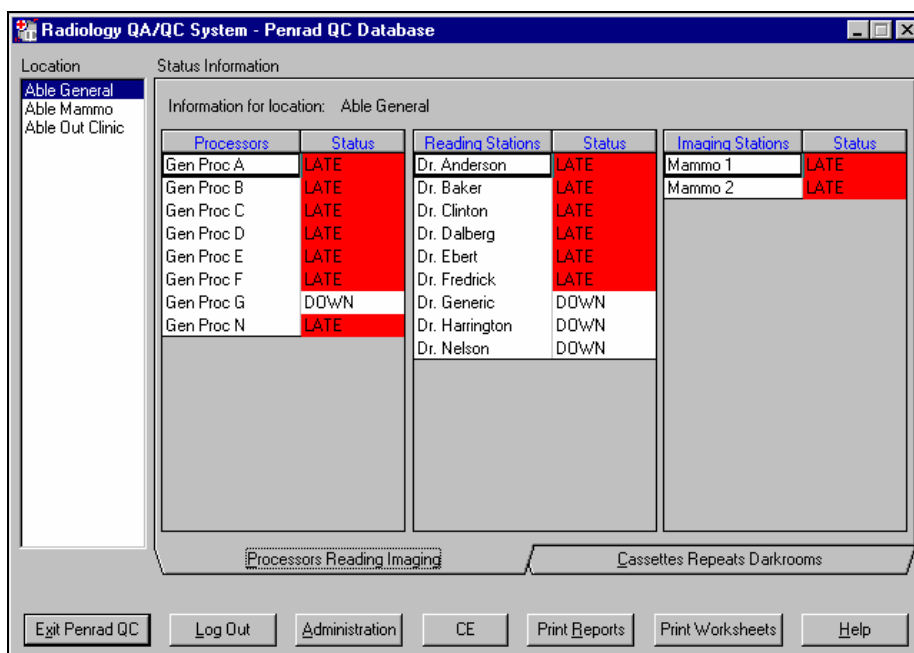
The QC/QA module has a unique **auto-remind** function that allows instant visualization of the current status of your facility. Independent reminder schedules display the current status for each reading and imaging station, processor, repeat analysis, cassette and darkroom. Separate reminder schedules are available for a specific day or days of the week and month, or by month, week and day for each item.

Variance-alert technology, combined with the automatic calculation of crossover, density, processor and phantom values, instantly alerts facilities when variances are exceeded.

Ease of use and simplicity allow the facility to automatically collect, retrieve and produce MQSA audit information effortlessly and instantly to increase staff utilization.

The QC/QA module tracks, reminds, and computes statistics for up to 16 individual imaging, reading and processing areas. Separate repeat statistics can be monitored for up to 16 different sites or locations. Unlimited numbers of cassettes at multiple locations may also be tracked and monitored. CEU credits can be tracked for your entire staff and may be identified by staff type and location.

The staff, with a single tap, can easily access or send any messages for any equipment that is off-line or down and instantly review corrective action and target return to service time. With a second tap, you can review or add data to record the QC session and immediately generate a QC/QA worksheet or electronically record the QC/QA data.



The main QC/QA screen displays the QC/QA and operational status in a summary format for each imaging and reading station, processor, repeat analysis, cassette and CEU. To view or add detailed information for a particular item, tap the item or the appropriate button.

To view a correction schedule, service order status or send a message, simply tap the down button for instant viewing.

Tap the worksheet button to instantly produce a printed worksheet or detailed history worksheets for MQSA.

To return to main PenRad application, tap the exit button.

Featured below are a few sample screens to illustrate the scope of the QC/QA module. **One-glance** reminder schedules are used for each imaging and reading station, processor, cassette and darkroom. Stations down and messages may also be specified. Data elements and worksheet information are recorded for each QC recording session along with their individual identification and any associated notes.

Recorder Activity - Location: Able General

Activity Selection: Summary | Record Repeat | View Repeats | Note History

Processors: Reading Stations, Imaging Stations, Repeat, Cassettes, Darkroom

Department: CT, Fluoro, General Xray, General Xray2, **Mammo Screening**, MRI, Urgent Care

UPDATE QC DATA FOR: Mammo Screening Department. Recording Date: 07/08/1999

Reject Type: Film Count % of Total Total Films Used: 753

Positioning	8	40	Rejects/Repeats Totals	# of Films	%
Patient Motion	0	0	Total Rejects	60	7.97
Light Films	2	10	Total Repeats	20	2.66
Dark Films	0	0	<input checked="" type="checkbox"/> Repeat Data for a Department (un-check if data is for a Tech)		
Black Films	0	0	Select New QC only if adding a new separate record for same day. For example- Record QC for each Tech.		
Static	0	0	New QC << Prev Next >> Record QC Data		
Fog	4	20	Technologist ID: Admin		
Wrong ID/ Dbl Exp	0	0	Recording Date: 11/18/1999 ? Help Main QC		
Mechanical	0	0			
Miscellaneous	6	30			
Good Films	0	0			
Clear Film	0	0			
Wire Localization	0	0			
QC Films	40				

Recorder Activity - Location: Able General

Activity Selection: Summary | Control Chart/Cleaning | Fixer | Crossover | Note History

Processors: Gen Proc A, Gen Proc B, Gen Proc C, Gen Proc D, Gen Proc E, Gen Proc F, Gen Proc G, Gen Proc N

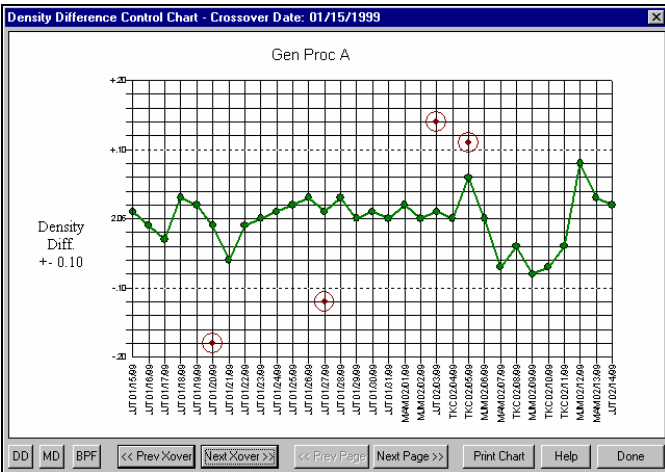
Processor Summary for: Gen Proc A

Item	Status	Next QC Date	Last QC Date
Control Chart Items (d)	LATE	10/25/1999	10/22/1999
Processor Cleaning	LATE	10/28/1999	10/21/1999
Fixer Retention (q)	OK	01/10/2000	10/13/1999
Crossover (New film lot)			07/27/1999

Manufacturer: Samsung
Model Number: SS-5512
Serial Number: 9876567

Unit Down

Technologist ID: Admin
Recording Date: 11/18/1999 ? Help Main QC



Recorder Activity - Location: Able General

Activity Selection: Summary | Visual | Phantom | Compression | Note History

Processors: Reading Stations, Imaging Stations, Repeat, Cassettes, Darkroom

Imaging Stations: Mammo 1, Mammo 2

UPDATE QC DATA FOR: Mammo 1 Recording Date: 08/26/1999

Phantom ID: 95 Base Values Variance Alert Values Out of Range Values

KVP Setting: 26

Exposure Time (mAs): 101.00 102.00 -1.00 15 %

Background Density: 1.52 1.51 0.01 0.1

OD Outside Disk: 1.55

OD Inside Disk: 1.10

OD Difference: 0.45 0.46 -0.01 0.05

Fiber Count: 4.00 4.00 0.00 0.5

Specks Count: 3.00 3.00 0.00 0.5

Masses Count: 4.00 4.00 0.00 0.5

Phototimer Position: 3.00

mA Setting: 0.00

Manual Exposure Time: 0.00 Emulsion Number: []

Phantom Crossover Date: 02/04/1999

Technologist ID: Admin
Recording Date: 11/18/1999 ? Help Main QC

Mammography QC/QA Reporting and Tracking Report Module

Data collected is display and printed via the report screen and can also be electronically exported for further processing to such as Excel, PowerPoint, etc.

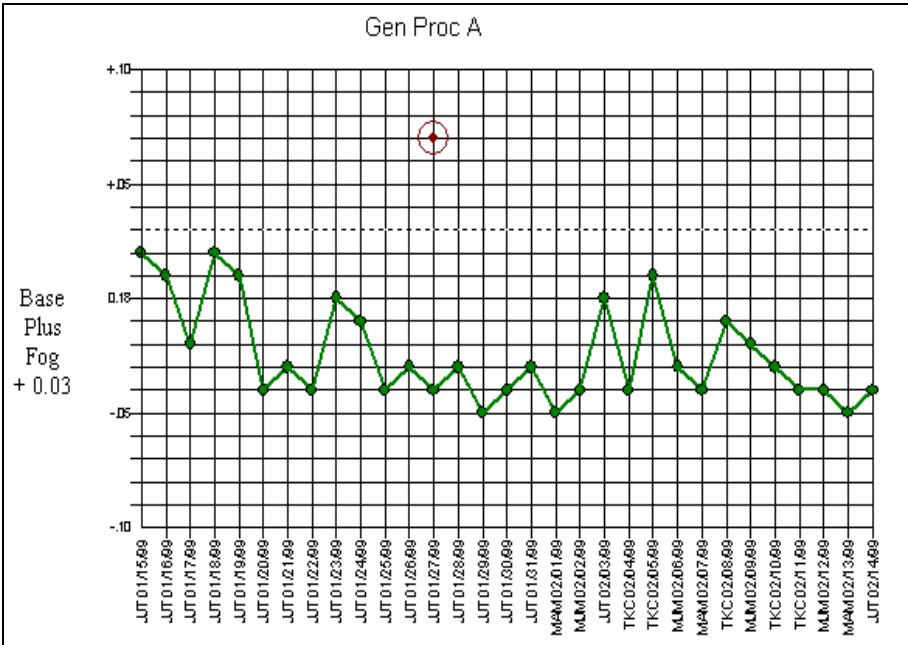
Reading Station Detail Report
Location: Able General
Beginning QC Date: 4/1/99 Ending QC Date: 12/31/99
Date: 1/16/00
Page: 1

Reading Station	QC Date	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Tech Initials
Dr. Anderson	5/24/99	Lumens Cleaned New Bulbs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	JJT
	9/7/99	Lumens Cleaned New Bulbs	Yes		Yes			Yes	Yes	Yes	Yes			JJT
Dr. Baker	6/7/99	Lumens Cleaned New Bulbs	Yes	Yes										JJT
	10/2/99	Lumens Cleaned New Bulbs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	JJT
Dr. Clinton	5/24/99	Lumens Cleaned New Bulbs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	JJT
	9/2/99	Lumens Cleaned New Bulbs			Yes	Yes	Yes	Yes	Yes	Yes				JJT
	8/23/99	Lumens Cleaned New Bulbs		Yes	Yes	Yes	Yes	Yes						JJT
	12/21/99	Lumens Cleaned New Bulbs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	MMC

Reading Station QA/QC Reports are available by department, reading station and for given date range. In addition, reading station added notes are displayed.

Darkroom QA/QC Reports are available by darkroom for given date range for cleaning, fogged values and status.

Cassette QA/QC Reports are available by department for given date range for cleaning, contact and density test.



Processor QA/QC Reports

Processor Control Chart Graphs are available for display and printing for Base Plus Fog, Mid Density and Density difference for each new crossover. When recorded value is out of range it appears with a circle along with corrected value for that date. Charts indicate values, initials of recorder and date.

Processor Control Charts Reports are available reflecting the recorded number values for display and printing. Reports are sorted and grouped by processor crossover date for simplified management and audit.

Control Chart Crossover Detail Report Date: 1/15/00
Page: 1

Location: Able General
Processor: Gen Proc A
Manufacturer: Samsung
Model: SS-5512
Serial: 9876567

Next Control Chart QC Date: 12/28/99
Next Processor Cleaning Date: 1/27/00
Next Fixer Retention QC Date: 1/10/00

Beginning QC Date: 01/15/99 Ending QC Date: 02/09/99

Crossover Date	Low	Mid	High	Base Plus Fog	Density Difference	Film Lot/Emulsion #	Film Manufacturer
1/15/99	1.00	1.28	3.06	0.18	2.06	E9786	Kodak

Control Chart QC Date/Time	Processor Cleaned	Developer	Fixer Repl. Rate	Repl. Initials	Tech Initials
1/15/99	Yes	flood	flood	JJT	JJT
1/16/99		flood	flood	JJT	JJT
1/17/99		flood	flood	JJT	JJT
1/18/99		flood	flood	JJT	JJT
1/19/99		flood	flood	JJT	JJT
1/20/99		flood	flood	JJT	JJT
1/21/99		flood	flood	JJT	JJT
1/22/99		flood	flood	JJT	JJT
1/23/99		flood	flood	JJT	JJT
1/24/99		flood	flood	JJT	JJT
1/25/99		flood	flood	JJT	JJT
1/26/99		flood	flood	JJT	JJT
1/27/99		flood	flood	JJT	JJT
1/28/99		flood	flood	JJT	JJT
1/29/99		flood	flood	JJT	JJT
1/30/99		flood	flood	JJT	JJT
1/31/99		flood	flood	JJT	JJT
2/1/99		flood	flood	MAM	MAM
2/2/99		flood	flood	MAM	MAM
2/3/99	Yes	flood	flood	JJT	JJT
2/4/99		flood	flood	TKC	TKC
2/5/99		flood	flood	TKC	TKC
2/6/99		flood	flood	MAM	MAM
2/7/99		flood	flood	MAM	MAM

Processor Control Note Reports are available for display and printing of notes associated to the processor. These notes are also available instantaneously on-line. Reports are sorted by date, note type (control chart, crossover or fixer) and reflect the initials of staff that added note.

Processor Control Fixer Reports are available for reflecting the stain values for display and printing. Reports are sorted and grouped by processor.

Repeat Detail Report Date: 1/16/00
Page: 1

Location: Able General
Beginning QC Date: 5/1/99 Ending QC Date: 12/31/99

Dept.	QC Date	Pos. Motion	Patient Films	Light Films	Dark Films	Black Films	Static	Fog	Wrong Patient	Mech	Misc	Good	Total Films	Clear Film	Wire Loc.	QC Films	Total Rejects	Total Films Used
Mammo Screening	5/25/99	6	1	2	0	0	0	0	0	0	0	0	9	2	0	63	74	1108
		6	1	2	0	0	0	0	0	0	0	0	9	2	0	63	74	1108
		%	66.67	11.11	22.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81				6.68	
	7/8/99	8	0	2	0	0	0	4	0	0	6	0	20	0	0	40	60	753
		8	0	2	0	0	0	4	0	0	6	0	20	0	0	40	60	753
		%	40.00	0.00	10.00	0.00	0.00	20.00	0.00	0.00	30.00	0.00	2.66				7.97	
	8/2/99	8	0	6	0	0	0	0	0	8	0	0	22	0	3	70	95	1305
		8	0	6	0	0	0	0	0	8	0	0	22	0	3	70	95	1305
		%	36.36	0.00	27.27	0.00	0.00	0.00	0.00	36.36	0.00	0.00	1.69				7.28	
	10/14/99	3	0	25	0	0	0	1	0	1	0	0	30	0	0	25	55	1126
		3	0	25	0	0	0	1	0	1	0	0	30	0	0	25	55	1126
		%	10.00	0.00	83.33	0.00	0.00	3.33	0.00	3.33	0.00	0.00	2.66				4.88	
	12/21/99	2	0	0	0	3	0	1	1	1	0	0	8	0	0	24	32	1000
		2	0	0	0	3	0	1	1	1	0	0	8	0	0	24	32	1000
		%	25.00	0.00	0.00	0.00	37.50	0.00	12.50	12.50	0.00	0.00	0.80				3.20	
Total for:	Mammo Screening	27	1	35	0	3	0	6	1	10	6	0	89	2	3	222	316	5292
		%	30.34	1.12	39.33	0.00	3.37	0.00	6.74	1.12	11.24	6.74	0.00	1.68			5.97	
All department total:		27	1	35	0	3	0	6	1	10	6	0	89	2	3	222	316	5292
		%	30.34	1.12	39.33	0.00	3.37	0.00	6.74	1.12	11.24	6.74	0.00	1.68			5.97	

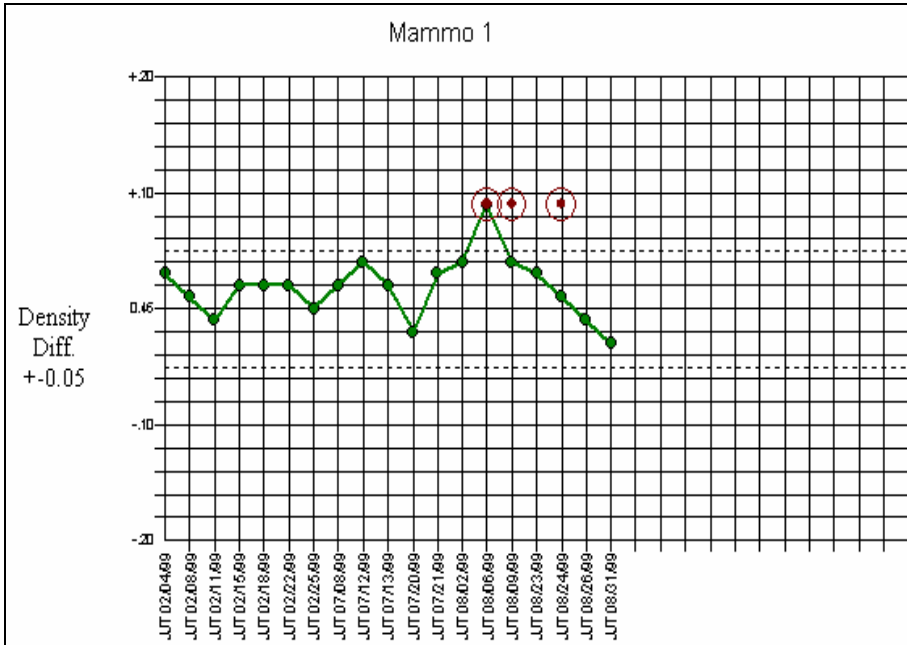
Repeat QA/QC Reports are available by department, individual machine and technologist for given date range. This data reflects trends for management for repeat analysis by technologist, machine, etc.

Continuing Education History Report Date: 04/06/2000
Page: 1

For: Anderson, Christine A Radiologist DOB: 12/12/1944 ID#: 312312312
Beginning Date: 04/01/99 Ending Date: 09/01/00

Course Date	Description	CE Reference Num. or Approving Origination	Credits	Credit Type
04/14/1999	Dealing with difficult Technologists	121223	8.00	A
05/12/1999	Interpreting Mammography Skills	121223	6.00	A

Continuing Education Reports are available by individual for given date range for course, credits, date.



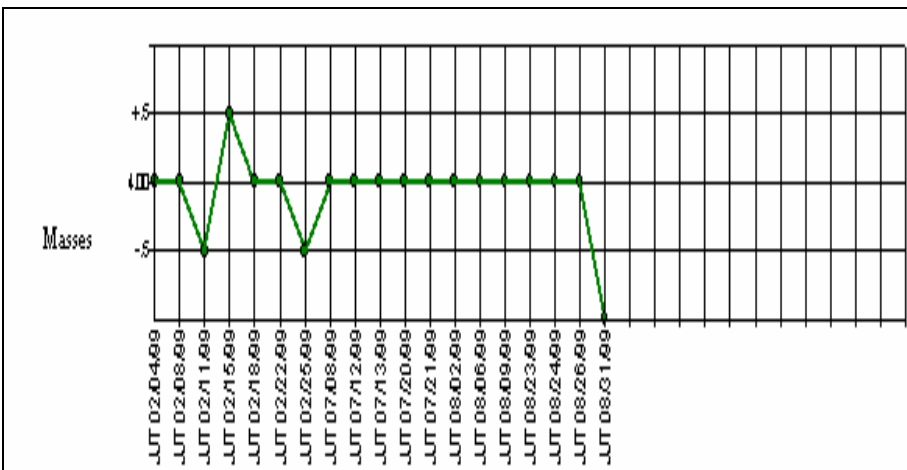
Phantom Detail QA/QC Reports

Phantom Detail Chart Graphs

are available for display and printing for Density Difference, Exposure Time, Background Density, Specks, Masses, Fibers for each new crossover. When a value is out of range it appears with a circle along with corrected value for that date. Charts indicate values, initials of recorder and date.

Phantom Detail Reports

are available reflecting the recorded values for display and printing. Reports are sorted and grouped by crossover date for each Imaging machine to simplify management and audit.



Phantom Detail Note Reports

are available for display and printing notes associated to the Imaging machine. Notes are on-line. Reports are sorted by date, note type (Density Difference, Exposure Time, Background Density, Specks, Masses, Fibers) and reflect the initials of staff that added note.

Phantom Detail Report															Date:		
Location: Able General		Beginning QC Date: 1/1/99			Ending QC Date: 2/4/99										1/16/00		
															Page: 1		
Imaging Station	QC Date	Tech Initials	Phantom ID	KVP	mAs Exp. Time	Back-ground Density	OD Outside Disk	OD Inside Disk	OD Diff.	Fiber Count	Spec Count	Masses	Detector Position	mAs Setting	Exp. Time	Emulsion Number	Phantom Crossover Date
Mammo 1	1/4/99	JJT	1234	26	101.00	1.48	1.48	1.00	.48	3.00	4.00	3.00	3.00	0	.00		1/4/99
		Base Values:			100.00	1.50			0.45	3.00	4.00	3.00					
		Alert Values:			%15.00	0.10			0.05	0.50	0.50	0.50					
		Out of Range Data:															
	1/7/99	JJT	1234	25	103.00	1.52	1.52	1.05	.47	3.50	3.50	3.50	3.00	0	.00		1/4/99
		Base Values:			100.00	1.50			0.45	3.00	4.00	3.00					
		Alert Values:			%15.00	0.10			0.05	0.50	0.50	0.50					
		Out of Range Data:															
	1/11/99	JJT	1234	27	101.00	1.55	1.55	1.07	.48	2.50	4.50	2.50	3.00	0	.00		1/4/99
		Base Values:			100.00	1.50			0.45	3.00	4.00	3.00					
		Alert Values:			%15.00	0.10			0.05	0.50	0.50	0.50					
		Out of Range Data:															
	1/14/99	JJT	1324	26	101.00	1.49	1.49	1.05	.44	3.00	4.00	3.00	3.00	0	.00		1/4/99
		Base Values:			100.00	1.50			0.45	3.00	4.00	3.00					
		Alert Values:			%15.00	0.10			0.05	0.50	0.50	0.50					
		Out of Range Data:															
	1/18/99	JJT	1324	26	105.00	1.53	1.53	1.10	.43	3.00	4.00	3.00	3.00	0	.00		1/4/99
		Base Values:			100.00	1.50			0.45	3.00	4.00	3.00					
		Alert Values:			%15.00	0.10			0.05	0.50	0.50	0.50					
		Out of Range Data:															
	1/21/99	JJT	1234	26	108.00	1.54	1.54	1.10	.44	3.50	4.50	3.50	3.00	0	.00		1/4/99
		Base Values:			100.00	1.50			0.45	3.00	4.00	3.00					
		Alert Values:			%15.00	0.10			0.05	0.50	0.50	0.50					
		Out of Range Data:															

Visual QA/QC Reports

are available by department, imaging station and for given date range. In addition imaging station added notes are displayed.

PenRad

MAMMOGRAPHY INFORMATION SYSTEM

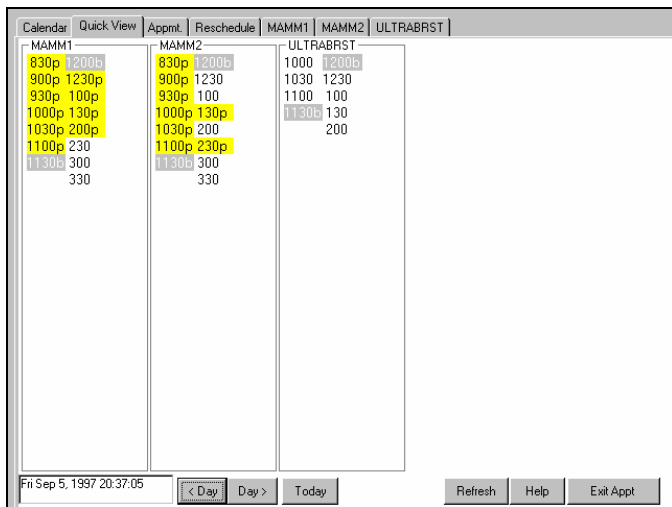
... for facilities with greater expectations...

PenRad Appointment Module

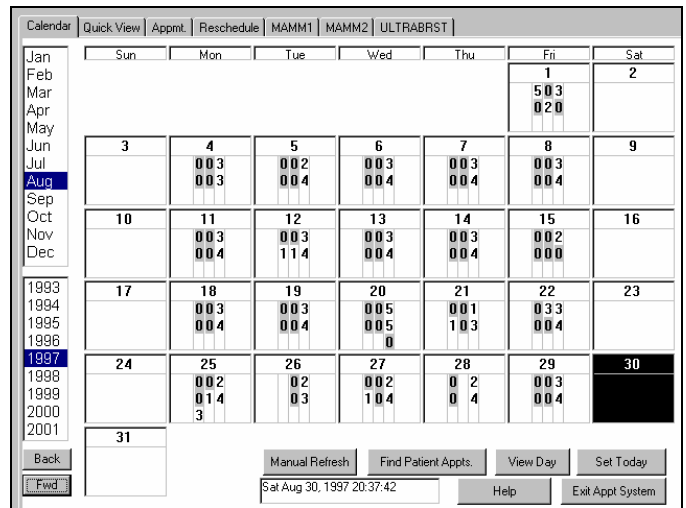
The appointment package facilitates scheduling of patients for exams, generation of reminder and no-show letters, and room schedule printouts. The **one-glance** touch screen system optimizes facility utilization and staffing. The standard package allows scheduling for up to 5 rooms. Additional 5-room modules may be added.

Scheduling, rescheduling, changing or reviewing an appointment is simple - select the patient, tap on the day/time and room. Or if you wish: pick day/time, room and patient.

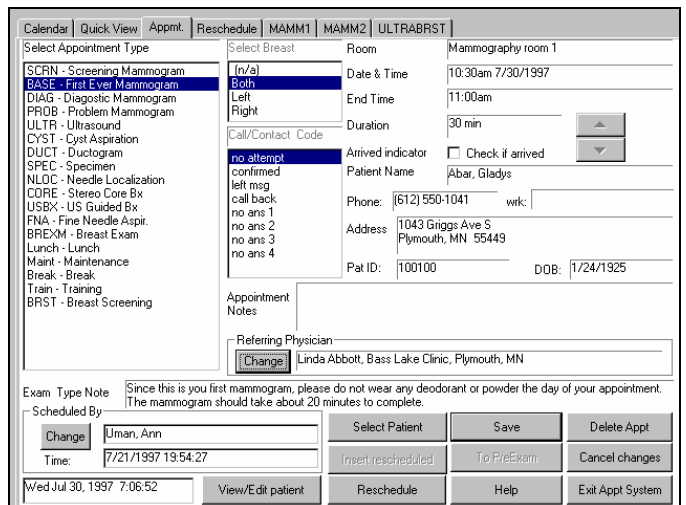
The main appointment calendar screen displays in **one-glance** the number of openings available (by column) for each room for the morning, afternoon and evening.



The appointment screen automatically displays information pertaining to the appointment for review and instructions for the patient whenever a room time is tapped. Patient demographics, referring doctor and any previous appointments are inherited from the patient maintenance screen. New appointments may be made and existing appointments can be confirmed, changed, rescheduled, or canceled. The scheduler's name and the time are automatically recorded.



The daily quick view screen displays the status of each room with a tap on a particular day on the calendar screen. Occupied time slots are highlighted and are followed by a letter key. Tapping directly on a time slot displays the appointment screen for that time slot. Tapping on the room tab brings up a detailed view of the room.



The room screen tab displays an overview of room schedule with the patient's name and an abbreviation of exam type. A patient can occupy multiple slots, i.e. diagnostic study in a screening room. A room schedule may be printed for each day and room. Reports include: time, patient name, phone, medical record number, DOB, doctor, exam type, previous films and any notes.

Calendar		Quick View	Appt.	Reschedule	MAMM1	MAMM2	ULTRABRST
Morning				Afternoon		Evening	
830p	Abar, Alice	BSCRN	1000p	Lunch			
900p	Abar, Barbara	BSCRN	1230				
930p	Dolan, Bette	BBASE	100p	Abar, Joyce	BSCRN		
1000p	Abar, Gina	BSCRN	130				
1030p	Abar, Gladys	BBASE	200p	Abar, Helen	LULTR		
1100p	Abar, Helen	LDIAG	230p	White, Lorraine	BDIAG		
1130p	Lunch		300p	Bliske, Golda	BSCRN		
			330p				

Print Appointment Reminder Letters								8/5/1997 20:35:49	
A	Colby, Myrna	103930	MAMM2	8/4/97	3:00pm	BSCRN	Jafferi, Rov		
1	Abar, Judy	100099	MAMM1	8/21/97	3:30pm	BSCRN	Idams, James		
2	Amundson, Evelyn	7100864	ULTRABRS1	8/27/97	10:30am	LULTR	Valdes, Evelyn		
3	Arbaczewski, Ila	49255	MAMM1	8/29/97	10:00am	BBASE	Jackie, Toni		
4	Arnold, Gertrude	748584	MAMM2	8/27/97	8:30am	BSCRN	Babar, Kristi		
5	Asche, Christine	223236616	MAMM1	9/1/97	2:30pm	BSCRN	Maani, Seth		
6	Ashley, Irene	223240502	MAMM1	9/1/97	4:30pm	BBASE	Iannini, William		
7	Athey, Ila	749260	MAMM1	8/29/97	9:00am	BSCRN	Babar, Kristi		
8	Avery, Mary	100840	MAMM1	9/1/97	3:30pm	BSCRN	Farmer, Luis		
9	Baker, Janice	8848848	MAMM2	9/1/97	8:30am	BSCRN	Newmann, Joyce		
10	Basham, Nancy	356690093	MAMM1	8/29/97	3:00pm	BSCRN	Labadie, William		
11	Batchelder, Janet	223240791	MAMM2	8/25/97	9:30am	BSCRN	Eades, James		
12	Beck, Barbara	7100017	MAMM1	8/15/97	9:00am	BBASE	Aaronson, Peter		
13	Berg, Joanne	9307	MAMM1	8/25/97	10:30am	BSCRN	Eades, James		
14	Berieto, Cath	66796	MAMM1	8/18/97	2:30pm	BSCRN	Iannini, William		

The print appointment letter screen prints reminder, no-show and film jacket pull lists, along with reminder and no-show letters. Each letter may be customized to automatically include the time of the appointment, directions to the individual room (satellite clinics), and any instructions for the exam. Letters are mail ready for windowed envelopes.

Formatting Templates		Rooms	Appt Types	Repair	Template Name: 8-20-1997		
Template Type	Template Name	Morning	Afternoon	Evening			
Default	Make all rooms identical to current	8:15	12:15 Lunch	4:15 Lunch			
Exact Date	Room	8:45	12:45	4:45 Lunch			
All weekdays	Clk Start Offset	9:15	1:15	5:15			
All weekends	Mammography room 1	9:45	1:45	5:45			
Mondays	Mammography room 2	10:15	2:15	6:15			
Tuesdays	Breast ultrasound room	10:45	2:45	6:45			
Wednesdays		11:15	3:15	7:15			
Thursdays		11:45 Lunch	3:45	7:45			
Fridays							
Saturdays							
Sundays							
1st wkday of month							
2nd wkday of month							

The Formatting Template screen allows each facility to customize their appointment package allowing **one-glance** visualization of the entire exam schedule for any day, week, or month in any year. A template may be created and reused for each room for any particular day or dates. Start/stop times, duration of appointments, block-outs for lunch, maintenance and training are some of the many features for each room. Off-set start times allow rooms to be staggered.

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