Optimizing Productivity and Revenue in Breast Imaging

Today, clinicians are handling more images, data and protocols on a daily basis within their women’s imaging program. PenRad’s suite of products enhance interpretive reporting, tracking and management of clinical data, optimizing productivity and revenue.

A Total Solution for Breast Imaging

PenRad offers a total solution for breast imaging, enhancing practice workflow. Designed flexible and for easy integration, PenRad’s client/server SQL enterprise architecture supports all customers ranging from individual imaging facilities to enterprise wide diagnostic clinics. Always maintaining individual statistics, workflow and automation needs.

PenRad MIS: Significantly improves professional productivity, quality and revenue in mammography reporting workflow. PenRad MIS automates tasks, and eliminates duplication, secondary data input and transcription.

PenRad MIS produces narrative reports for all breast procedures and DEXA studies. PenRad MIS generates complete sentences and paragraphs with proper grammar from its graphical interface by tapping on keywords allowing various levels of detail without navigating through series of cascading drop down menus. The narrative report warns radiologists of inconsistencies and ranks order of findings based on level of severity. With our PenProfiler system, radiologists confirm findings instantaneously with over a million abnormalities as a clinical support tool.

Synchronization with a softcopy workstation allows access to prior reports and a visual recap of the patient’s history and risk factors. PenRad auto-clone technology duplicates priors allowing one tap reports. Radiologists can use their own macros and supplement reports via voice recognition or transfer cases for transcription and review. PenRad facilitates report distribution through the HL7 engine to the RIS/EMR and print, fax, or email to patient and physicians.

PenAutoReader: Automatically processes exams by utilizing adaptive learning and pattern recognition technology to eliminate the need for manual data input and extracting key data phrases for each exam type by each radiologist directly from the text of the report. This automates exam tracking and provides a copy of the narrative report in the database for easy viewing and data mining.

PenTrac: Automates tracking and management of patient exams, recalls and reminder letter generation, statistics and MQSA reports, unresolved exams, pathology correlation, and electronic or paper history worksheets, saving time and money. Available as a hosted web service or it can be installed locally. PenTrac provides an upgrade path to full PenRad MIS for comprehensive reporting.

Whether integrating with existing infrastructure or providing a complete solution, PenRad partners with customers to optimize efficiency and productivity.
PenRad Optimizes Workflow in Breast Imaging

The Most Advanced Technology Available

- **Client/Server Technology**: LAN/WAN enterprise capability, Citrix, terminal services, web, off-line (mobile imaging)
- **SQL Server**: MS SQL relational, robust, automatic re-index, logs and backup
- **Document format flexibility**: for patient letters and exams including customization of font and images
- **Administrative reports**: advanced statistical reports allow print and export (i.e. Excel, tab, PDF, etc.)
- **System Interfaces**: compatible with HIS/RIS/EMR systems, DICOM and softcopy

Comprehensive Breast Center Information System

- **Captures patient data once**: no need to re-enter patient information
- **Bar-Code awareness**: instant error-less identification by exam accession and patient MRN
- **Paperless files**: online repository for prior exams, history, risk and correspondence
- **Interactive patient interviews**: eliminates errors and saves patients time, or update with wireless or kiosk tablet
- **Captures referral information**: simplifies management of referral patterns for enhanced marketing
- **Information system**: tracks all data automatically, common access for exam results and patient information
- **Medical auditing**: statistical data by personnel and/or by location for MQSA audits and more
- **Complements workflow**: increases efficiency and productivity for radiologists and technologists
- **Increases productivity**: focuses staff on efficient patient throughput and service versus clerical tasks
- **Tap-not-type technology**: allows collection of data with sliders and narrative reports from just a few keywords

Reliable Support and Upgrades Protect Against Obsolescence

- **24/7 Connection**: instant online and phone support with access to an application specialist
- **No hidden costs**: all PenRad software upgrades are covered in license agreement
- **Best in KLAS MIS**: PenRad is the industry leader in MIS

Narrative Report Generation for Improved Efficiency and Turnaround

- **Narrative report generation**: One click exam report generation, and data bound macros
- **Auto-Clone technology**: automatically clones findings between various exam types for tracking
- **One-button negatives**: automatically clones report as previous with findings, tissue, etc.
- **Full screen templates**: no drop downs, increases efficiency, allows defaults by radiologist
- **2nd and multiple reads**: supports resident and multiple staff reads with agree/disagree capabilities
- **Auto lesion location**: auto calculation of depth, clock and quadrant on graphical screen
- **Voice control and command**: provides audible patient info, control and feedback for report generation
- **Voice Integration**: allows free-text addition or complete report with various VR products
- **Amendments**: unlimited and facilitates multiple radiologists, and amendment patient letters
- **Report generation imaging**: Mammo, CESM, US, MRI, BSGI, PET, PEM, Brachy, Specimen, Localization
- **Report generation biopsies**: Aspiration, FNA, Stereo, US, BSGI, MRI, Skin punch
- **Report generation other exams**: Cryoablation, Ductogram, Sentinel Node, DEXA, CBE, Consultation
- **DEXA comparison**: auto calculates year to year changes
- **Preliminary and final report**: facilitates distribution of preliminary and final reports by HL7, fax and email
- **Referring preferences**: automatically filters exams based on preferred radiologist or not preferred
- **Graphic report presentation**: visual indicators for referring physicians, staff and surgeons
- **Risk assessment statements**: automatic and conditional for multiple risk models and breast density
- **Patient consent**: by radiologist and exam type, facilitates custom specific JCAHO information
- **Built-in spell check**: pre-reads exam for added free text or exams and custom letters
- **Common voice from radiology**: benefits referring physicians for concise reports and recommendations
- **Inconsistency checking**: checks findings, recommendations and recall as well as clinical information
- **Unresolved case reminder**: verifies during current exam interpretation of any outstanding recommendations
Assessment and Clinical Support Tools

• **Risk assessment:** Tyrer-Cuzick & Gail built-in real-time assessment calculations. CRA Health(formerly Hughes Riskapp) integration

• **Clinical abnormality profiler:** returns pathology on similar morphology from local and national databases

• **NMD and NQMBC survey:** prepares NMD and NQMBC Center of Excellence statistics for submittal

• **Task reminder:** reminds staff of daily/weekly follow-up tasks

Correspondence

• **Faxing system:** faxes cover letter and summary as batch

• **Physician email:** physician can receive exam results versus fax or not part of enterprise RIS

• **Patient correspondences:** multi-language for exam, recall and reminder letters. Email capable

• **Patient history sheet review:** displays info in multi-language to improve communication with patient

• **Patient wireless tablet:** allows patient review and capture history on tablet with browser

• **No-patient-left-behind:** automatically generates recall reminders and past due letters. Email capable

• **Unresolved exams:** prepares correspondence for cases without resolution

• **Windowed envelope format:** personalized, accurate mailings or compatible with print-to-mail

• **Dynamic letter templates:** automatic bookmarks producing a customized appearance. Multi language, email capable

Flexible Integration

• **AutoNext SoftCopy control:** initiates the display of next study and caching for increased productivity

• **Dynamic work-list status:** displays work in progress, filters by exam type, status and assigned cases

• **Synchronization integration:** bi-directional patient/exam with PenRad MIS and SoftCopy

• **DICOM SR generation:** creates Structure Report for PACS from narrative report

• **Voice recognition:** application login with various third party engines and with Windows speech

• **DICOM work-list provider:** provides DWL to modalities from current orders

• **DICOM integration:** inherits breast density and dose as well as DEXA integration

• **PenFetch image transfer:** automatic system, finds and selects priors and routes by exam type to workstations

Integrated Appointment Scheduling

• **One-glance presentations:** instant view of all rooms, procedures or patients

• **Daily quick view screen:** each room for day, month or year

• **Letter display screen:** prints appt reminders, no-shows, daily schedules and history sheets

• **Procedure information:** prints exam specific instructions

• **Directional information:** prints directions to each room

• **Schedule list:** prints daily schedule with film pick list

• **Custom format:** customized for sites with multiple schedules

• **Optimizes utilization:** defines all information at-a-glance
**PenLung**: PenRad offers a comprehensive unified software solution to manage patients participating in LDCT lung screening programs for Radiology departments and/or Imaging facilities. In addition, PenLung provides automated web and tablet calculators to collect smoking and environmental risk history for patient eligibility. Simple lung cancer screening registry export.

**PenConnect**: A patient communication solution, that reduces mailing costs by 60% for exam, recall and reminder letters by providing instant exam results via secure email. Automatic printed letter generation occurs if there is no response to electronic distribution.

**Nurse Navigator Module**: The Nurse Navigator module allows facilities to plan, schedule and capture information for patients requiring additional work-up as an electronic diary. The Nurse Navigator module categorizes tasks, provides organization and suggestions on patient protocol allowing Breast Imaging Centers to have access to the status of pending events for all patients and their progress anytime, anywhere within the network.

**PenRad DQC**: PenRad’s next generation Digital QC (DQC) system automates the process of recording and calculating QA/QC data for the digital breast imaging environment. DQC tracks all FFDM, MRI and stereo modalities, as well as all reading workstations and film printers, based on guidelines established by the manufacturer and/or MQSA. Continuing Education (CE/CME) credits are also tracked.

**PenCare**: As a PenRad partner with access to innovative information and image management solutions meeting tomorrow’s needs today, you receive PenRad’s 24/7/365 award winning support; PenCare. With more than 20 years experience in image and information management optimization, our goal is to always achieve the highest level of customer satisfaction with every customer experience.

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**Optimize your Breast Center with PenRad**

Attend a ‘live’ demo. Scan to learn more at penrad.com

**Questions?**

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