



# Make Your RIS/PACS Work...for You

By Shawn McKenzie, MPA

Okay, so you have spent the better part of the last year preparing for and implementing your picture archiving and communication system (PACS). The night sweats, shakes and nervous tick you developed are showing signs of improvement. The airline ticket is purchased, and the beachfront bungalow on that sparsely populated island is booked. You have packed a swimsuit, a toothbrush, and your VISA®, and you have called ahead to reserve the corner stool at the poolside bar. I wonder if the travel industry is aware of the growth of PACS and the surge in business it might experience from this technology. Enjoy the time away because upon your return, after the rum has lost its affect and your tan has begun to fade...you have a department or imaging center to run.

The daily operational issues and performance expectations did not diminish through the implementation; rather, they only temporarily slipped to the back burner while you tackled a project that you anticipated would have a positive effect on the operational issues you faced in the analog world. The only way to be sure is to measure the successes. In order to do so, you have had to acquire some real *valid* data prior to the PACS implementation. Let's face it, the imaging service is not known for producing piles of data capable of cross referencing and producing a picture of operational efficiency. Some of us are better than others, but the fact remains that we, as an industry, fall short of measuring with any real certainty.

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Relax; it is not completely our fault. The information systems we use to compile data tend to be cumbersome, clunky, and not all that comprehensive in producing good reporting data.

As expected, you are seeing some real value in the PACS. The film budget is dropping as expected (film jackets, paperwork, etc). The physicians you encounter while you are engaging in the practice of "management by walking around" stop you in the halls and suddenly burst into song, singing your praises for providing a tool that improves their quality of life and the care they provide to the patient. Am I right?

## Use the Technology to Measure Operations

Aside from the ability to move pretty pictures around in your facility or enterprise and improving some inherent analog workflow inefficiencies (the low-hanging fruit), what can your PACS do for you in the way of measuring operations? You remember—those things like turnaround times, procedure cycle times, referral patterns, radiologist

productivity, and device use. How about things like delayed billable studies, lost revenue because of inaccurate billing, and system use by referring physicians? We strive to understand all of these things by gathering data from a number of resources and correlating them into a looking glass of how we are performing with our current volumes and how we might grow our service lines.

PACS is an information system that uses and compiles data derived from multiple inputs, such as the modality and feeder information systems. Because it can act as a repository of this data, I am compelled to ask the question: Why is it that we are not using the PACS to produce operational management reports? The data is available. The order information produced by the radiology information system (RIS) is made available to the PACS—data such as origin of order by location and referring physician, type of study, the device used to complete the study, and so on. The PACS stores audit information about who is accessing the system and when the system is being accessed. What types of procedures are most regularly accessed and viewed? All this infor-

mation is stored, but is it available? Ask yourself: Is it possible—and how simple is it for you or your staff—to generate reports from your PACS? Can you generate graphs and charts, statistics, trends, run rates, etc. by using a module on the PACS, or must you dump the data into another application?

### Can PACS Help with Billables?

Take it a step further. Is it possible for your PACS to help with billable procedures? If the system stores images in series identifiable by exam types and descriptions generated from the RIS, why couldn't it use this data to reconcile billable studies? It would be great if the PACS would send image series update information about what is archived to the RIS. The RIS could cross check the data from the PACS with historical procedure information and create an exception report for those studies that have never been billed.

As PACS provides greater post-processing functionality to the radiologists' workstations, more and more billable studies will be generated downstream of the RIS order. An example would be if a radiologist completes a 3D rendering on a computed tomography angiography (CTA). Instead of catching the extra 3D charge on the back-end using coders, the PACS would send series information to the RIS, and the 3D charge would be revealed in the

exception report. One step further would be for the RIS to message the financial system and automatically add the charge.

My thought is that we are far enough down the evolutionary chain in RIS/PACS that we must look to the vendors for these types of answers. Many of you are still mired up in the thought process of preparing for PACS. While doing so, ask your vendor (if you have selected one): "What will this system do for me when the honeymoon is over?"

Okay...time for me to break out the spreadsheets, Pareto charts, Fishbone graphs, benchmark studies, and Advil®.

With my warmest wishes and a positive variance...Shawn is gone. ☹️

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