

## A Ringgold-CSI-Avreo Success Story



### Ringgold County Hospital At a Glance:

**Company Profile:** Ringgold County Hospital ([www.rchmtayr.org](http://www.rchmtayr.org)) is a 16 bed Critical Access hospital operating in Mt Ayr, Iowa, with close community ties—patients are literally colleagues, neighbors, friends and family for this hospital. Ringgold opened in 1951 with 21 employees and has since grown to over 125 employees, with a broad array of medical services offered to the surrounding rural community.

Ringgold's services have expanded from in-patient care only to same-day/out-patient surgeries, infusion therapy, cardiac rehab, sleep studies, a family practice clinic, physical therapy and much more.

Ringgold County Hospital believes that for the sake of their patients, it is critical that they stay abreast of new developments and new technologies, and is committed to innovative medicine while remaining true to their Enduring Beliefs: ICARE (Integrity, Compassion, Attitude, Respect and Excellence).

### The Challenge:

Ringgold County Hospital maintains a dynamic and varied schedule of radiology services, including mammograms and ultrasound to X-rays and CAT scans and more. To keep up with these broad and continually evolving needs, Ringgold required a modern PACS solution that provided on and off-site access to their radiology studies, robust storage and recovery, and radiology workflow support.

According to Carrie Main, the Director of Hospital Information Systems at Ringgold, the hospital faced three distinct challenges regarding its PACS. The first and most pressing was the fact that their existing PACS manufacturer was going out of business within the next 12 months, forcing the need for a fast decision and switch to a new system before product support for the old system disappeared.

Secondly, the system itself was aging. Other PACS that Carrie had evaluated in other hospitals had many features that Ringgold's current system did not. In order to be as competitive and efficient as possible, Ringgold required a fresh, long-term solution, even if the manufacturer of their current PACS wasn't going out of business.

Finally, having just led a very large Electronic Health Record system implementation for both the hospital and its associated ambulatory clinic, Carrie knew that the new PACS had to be compatible with the new EHR system, had to be certified for Meaningful Use, and absolutely had to have a flawless implementation to meet the tight timeline involved.

In their initial search, Carrie and her team had narrowed their choice of PACS to 3 top contenders when a last minute phone call from Computer Service Innovations (CSI) offered a 4th option—Avreo. After speaking with a CSI Radiology and Imaging Consultant, Carrie discovered some advantages with the Avreo interWORKS product that made it well worth considering, even at the last minute.

After both an online and face-to-face demo facilitated by CSI's Radiology and Imaging Consultant, the Ringgold team determined that Avreo interWORKS had all the functionality the hospital needed, plus the advantages that would make their Radiology and Imaging department highly progressive at a price that was extremely affordable.

## Keeping Up With Evolving Needs



Exactly as Carrie predicted based on her own experience in Radiology, there was a fast learning curve with the new system and its familiar folder view. Her team was also extremely pleased with Avreo's low levels of down-time ("almost non-existent since we went live," said Carrie), and the support provided from both CSI, the company that sold and helped install the system, and Avreo, the system manufacturer themselves. After-implementation service in particular was a point of strength for the new system.

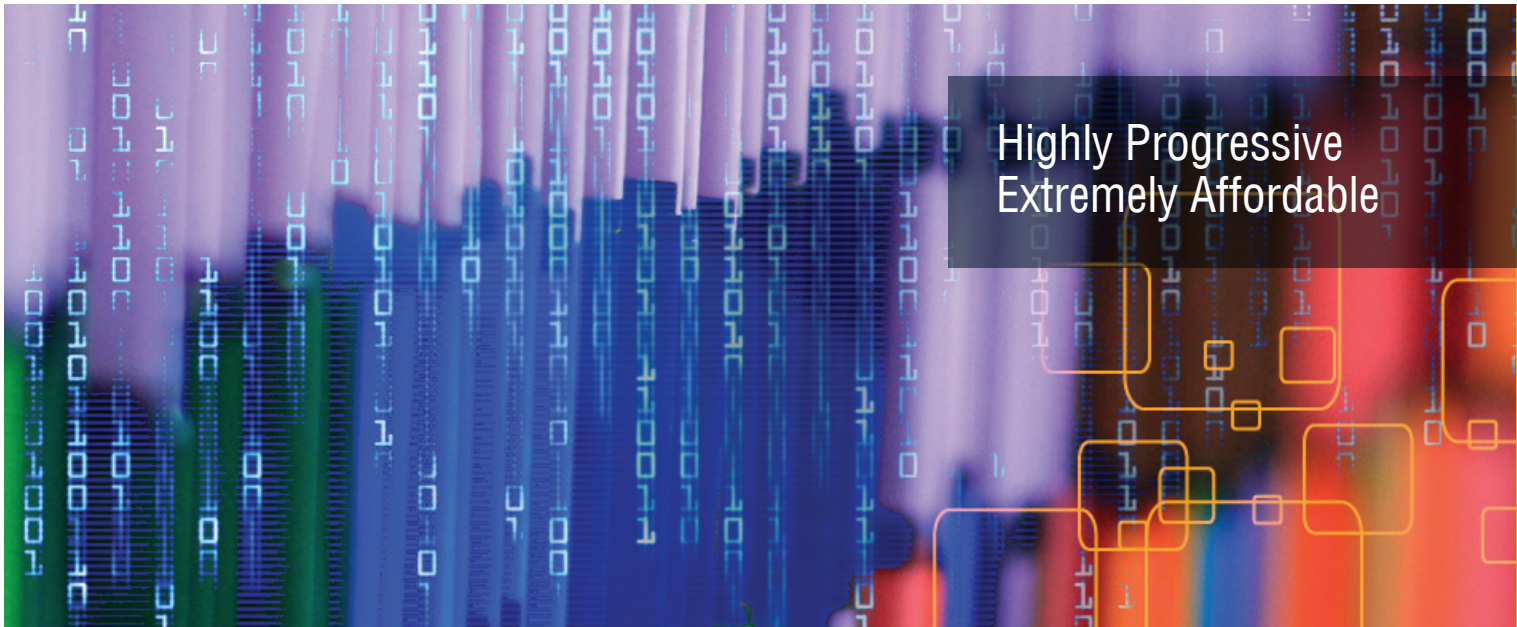
### Implementation:

The implementation process for Avreo interWORKS included weekly implementation calls, beginning with a discovery phase to review and document current processes and procedures, identify historical pain points, and itemize project goals. As the implementation proceeded, these calls transitioned to planning, review, and proactive problem identification and remediation.

Carrie was very pleased that Avreo worked around her schedule, allowing Ringgold to activate one modality at a time with interWORKS for testing and approval, making the switch-over as painless as possible. She was particularly impressed with the extra level of support provided by Avreo for the Mobile MRI Truck, which Ringgold used to provide mobile radiology services to the community. The truck was available for upgrading and testing only on weekends, and as Carrie noted: "I felt fully supported during the entire implementation. One thing that I really appreciated with Avreo was the after-hours support. I never had any trouble getting resources from Avreo on a Saturday, so I think that shows their dedication to a successful implementation as well."

The Avreo approach to implementation also permitted Ringgold to run both the old and new systems simultaneously, allowing the team to observe and deal with any issues or create needed changes to processes and documentation before going 100% live. Once the Avreo system was up and running, it proved extremely reliable—a quality that made the previous system's deteriorating reliability level that much more evident to users. In the six months since Go-Live, Ringgold has had only one short segment of downtime with interWORKS that lasted a few minutes and was resolved with a simple server reboot.





Highly Progressive  
Extremely Affordable

## Results:

Carrie points to five stand-out advantages of interWORKS now that it's in place:

- The intuitive Avreo “folder view” method of organizing patient information mimicked the real world folder view familiar to the techs and physicians, and made the new PACS system much more user friendly and time-efficient than its predecessor.
- Instead of having to open three or four separate modules to perform various tasks, the Avreo system accommodated these tasks within a single application.
- The ability to sync the system with Active Directory Log-In eliminated the annoying, time wasting routine of logging in for each and every use.
- The web-based platform proved extremely convenient and flexible, allowing physicians the ability to access and operate it with ease, regardless of whether they are accessing it on-site, in the mobile MRI Truck, or remotely from home. The web-platform is “device friendly” as well, usable on smart phones, tablets, and portable computers.
- The price was extremely competitive—about half the cost asked by some of the other vendors while still providing equal or superior functionality.

In addition, of vital importance to the Ringgold Radiology team was the on-going customer service and technical support from Avreo. Carrie commented: “Before and right after a system is implemented, you always get a lot of attention, but with Avreo you get a lot of attention afterwards too. They call and check that things are running exactly as you expect them to be, and they check in on us regularly. You can't say that about many vendors.”

From a financial perspective, the certified Avreo system interfaced with other electronic systems at Ringgold County Hospital, allowing for a successful Meaningful Use Stage 2 attestation.

*“My advice to another facility in the market for a PACS system or to those who are curious about what they might be missing is that they look at Avreo and see everything it has to offer them”.*

**Carrie Main**  
Director of Hospital Information Systems  
Ringgold County Hospital



As a final point, Carrie noted how the responsiveness of the CSI team was a major factor in both the success of the initial set up and the continuing benefit of the new PACS. She stated that the attention to detail and the concern for customer satisfaction exhibited by the CSI team was clear as they researched and found a critical hardware component that their IT network lacked. That focus on customer satisfaction was instrumental in what she considers to be a highly satisfactory and welcome upgrade to Ringgold Hospital's health information systems. "Kudos to him (the CSI person) for helping us out there. I don't know what we would have done without him. I was just impressed with how well he worked with us."

## Conclusion:

The combination of the Ringgold/CSI/Avreo teams made the new Avreo PACS implementation at Ringgold County Hospital an impressive demonstration of its effectiveness as a highly advanced solution for aging, discontinued or otherwise limited Radiology and Imaging systems. Avreo's ability to combine a streamlined interface, web-based accessibility, high level of reliability and knowledgeable support has helped make Ringgold County Hospital a leader in Critical Access hospitals in Radiology and Imaging technology and in quality of patient care. In addition, satisfaction with the work environment for Radiology staff and physicians at Ringgold has also improved with the efficiencies and additional functions that the new system provided.