

CASE STUDY

RADIOLOGY REVITALIZED

**A 25% Efficiency Augmentation via Sirona's Cloud-Native
Unified Workflow at Eastern Radiological Associates**



SIRONA

INTRODUCTION

The healthcare industry as a whole, and the radiology field in particular, face **major staffing shortages and burnout**. More than half of the workforce is over the age of 55,¹ and hiring has become increasingly difficult. At the same time, reimbursements have been declining at a rate of 5.5% annually for the last decade,² and there is a greater reliance on advanced imaging as a diagnostic tool.³

1) Raymond Montecalvo, M. (2021, October 19). *Radiologist staffing trends 2021*. vRad Blog. <https://blog.vrad.com/radiologist-staffing-trends-2021>

2) Scharzt, E., Manganaro, M., & Scharzt, D. (2022, January 14). *Declining Medicare reimbursement for Diagnostic Radiology: A 10-year analysis across 50 imaging studies*. Current problems in diagnostic radiology. [https://pubmed.ncbi.nlm.nih.gov/35153101/#:~:text=The%20overall%20yearly%20percent%20change,severities%20\(P%20%3C0.0001\).](https://pubmed.ncbi.nlm.nih.gov/35153101/#:~:text=The%20overall%20yearly%20percent%20change,severities%20(P%20%3C0.0001).)

3) Waheed, S., Tahir, M. J., Ullah, I., Alwalid, O., Irshad, S. G., Asghar, M. S., & Yousaf, Z. (2022, May 6). *The impact of dependence on advanced imaging techniques on the current radiology practice*. Annals of medicine and surgery (2012). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9111924/#bib2>



Eastern Radiological Associates (ERA) is a professional partnership of nine board-certified radiologists who have been providing professional radiology services since 1970.

The ERA team serves a broad area, including parts of Montana, Wyoming, and the surrounding areas, by providing the highest quality diagnostic imaging and interventional services in a caring and compassionate atmosphere.

ERA has seen 10-15% growth in the number of images needing to be read year over year since the COVID-19 pandemic, without an increase in staffing to match. All of this creates a perfect storm of conditions that potentially increase burnout.

THE PROBLEM

Picture a day in the life of an ERA radiologist. Using their legacy picture archiving and communication system (PACS), the radiologist arrives at the office and takes the following steps before they can begin work:


- 1 Sit at an assigned desk space
- 2 Login to the host computer and PACS to view images
- 3 Login to a separate computer which hosts a dictation system
- 4 Login to a *third* machine which hosts a second dictation system

At this point, the radiologist can start the process of reading the long list of images that awaits. Additionally, the doctor must view the image, medical record, dictated report, and PACS on separate monitors, using separate mice and multiple dictaphones or microphones.

This switching between machines creates a “swivel chair effect,” causing literal headaches, back pain, and undue stress on the neck, spine, and arms. This is added to the mental and emotional stress of needing to keep each system and file at the front of mind to read and record the image properly.

What the system lacks in ergonomics, unfortunately, it does not make up for in terms of efficiency or risk management. Time spent switching between machines, calling subspecialists to the desk to read specific images, and inability to view the information all mean lost productivity, stressed workers, decreased client satisfaction, and ultimately—a negative impact on ERA staff and patients.

The legacy system was installed in order to help ERA take on new business in the digital age, but the technology was woefully out of date.



“Between the technical and physical inefficiencies, it was a battle. When volumes were low, it was manageable, but as the workload grew, **it became unsustainable**. I had 30-year-old colleagues with back pain and tendonitis. It is **no wonder burnout has been such a problem.**”

Dr. Brett MacAdam,
Board-Certified Musculoskeletal Radiologist

THE SOLUTION

ERA employed Sirona Medical, with a first-of-its-kind cloud-native unified workflow software, to help address these deficits.

The Sirona software uses principles of unification to unlock efficiency for ERA across:

- Reading
- Staffing
- Operations
- Interpractice Collaboration



Reading efficiency

The Sirona solution allows for all records and studies to be accessible at the same time, on the same machine. This provides both a roadmap to the day's workload and important patient histories that can improve outcomes.

The system includes everything a radiologist needs to do their work and can run on any computer with internet access. This allows ERA to simplify hardware from 5+ monitors to 2, all running from a single computer and single application with a single mouse and dictaphone attached.

Sirona also employs modern AI-powered features, customizations, and built-in templates to improve productivity, amplify quality, and decrease tedium.

Finally, unlike ERA's legacy software, **Sirona allows ERA to control their own IT stack, instead of being at the mercy of disparate systems. This gives ERA greater control, security, flexibility, and customization options.** Owning the stack sets the practice up for long-term success and the crucial ability to adapt to changes in study volume, site coverage, and radiologist staffing.

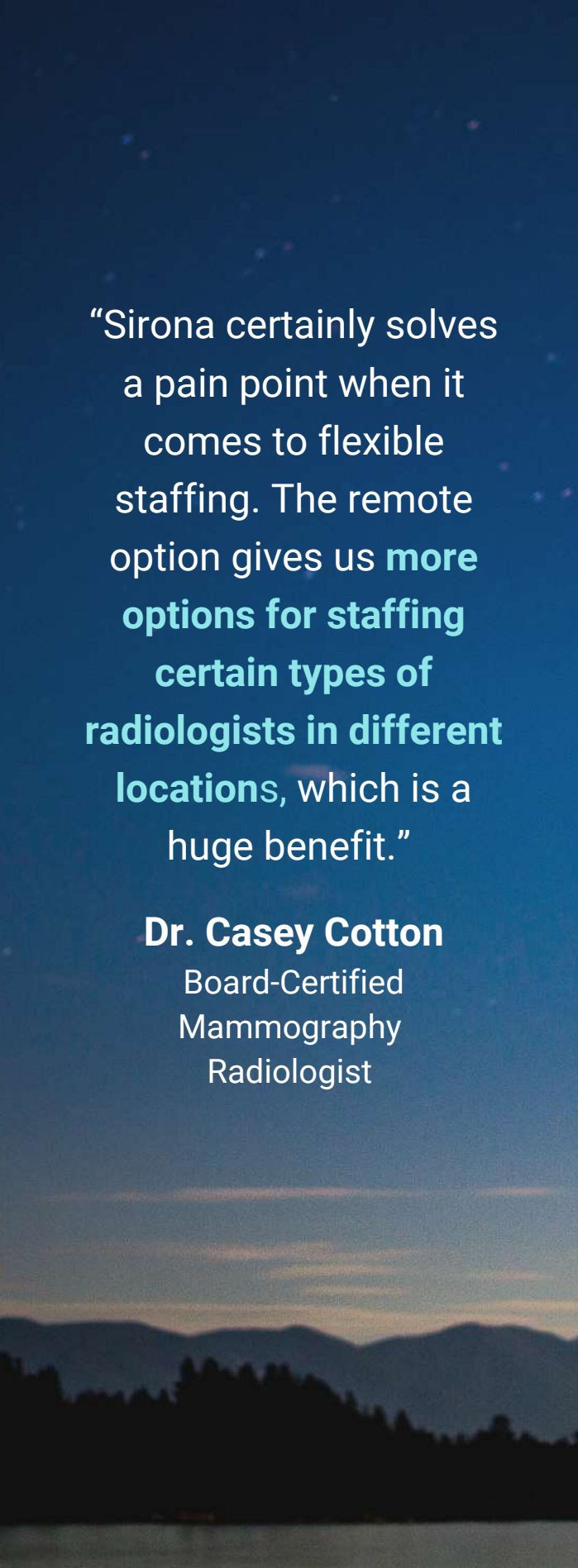
"When I am reading outpatient studies, **I can see all the studies from our four different centers at once.**

We have buy-in from the different groups, so I am able to look at the histories, including past imaging, right away and on the same monitor.

The Sirona software allows this without costing our partners any inconvenience or money."

Dr. Brett MacAdam

Board-Certified
Musculoskeletal
Radiologist



“Sirona certainly solves a pain point when it comes to flexible staffing. The remote option gives us **more options for staffing certain types of radiologists in different locations**, which is a huge benefit.”

Dr. Casey Cotton

Board-Certified
Mammography
Radiologist

Staffing efficiency

The Sirona solution allows ERA to do more with less. Sirona opens the door to not only a more efficient but a more flexible workforce.

Because the system can be used on any machine, radiologists have the opportunity to read images when and where they want.

Since implementing Sirona, ERA saw a 470% increase in the number of studies read flexibly from home workstations. Something that had been uncommon for them previously.

Further, a work-from-home option and AI-powered tools simplify how radiologists read and are attractive recruitment incentives, allowing ERA to entice more staff members and partners to join the team in the future.

Operational efficiency


On the legacy system, ERA had designated stations where images must be read. Sirona has changed all of that.

Now, the images (and ability to read those images) come directly to the radiologist, wherever they happen to be—in the clinic, from home, even on vacation if needed instead of the radiologist needing to travel to the images. This allows for smoother scheduling and the ability to divide images based on subspecialty.

“Scheduling has always been a burden for certain speciality radiologists. **Now, we can distribute the work to the radiologists rather than putting the radiologists in front of the work.”**

Linda Masin

Director



“Sirona provides us
the flexibility to decide
how we want to do
business—it is the type
of system I have
wanted for years, and
we are finally there!”

Linda Masin

Director

Interpractice collaboration efficiency

The problem of staffing shortages can be addressed by either hiring more radiologists (which is difficult in the current economic climate), or through outsourcing the work to like-minded partners with bandwidth.

Sirona’s unified workflow software gives ERA the ability to easily share their workload with other local practices.

While offsite work was possible on the legacy system, it was cumbersome and required offsite radiologists to set up separate computers in their offices for remote access, disincentivizing business partnership and collaboration.

RESULTS

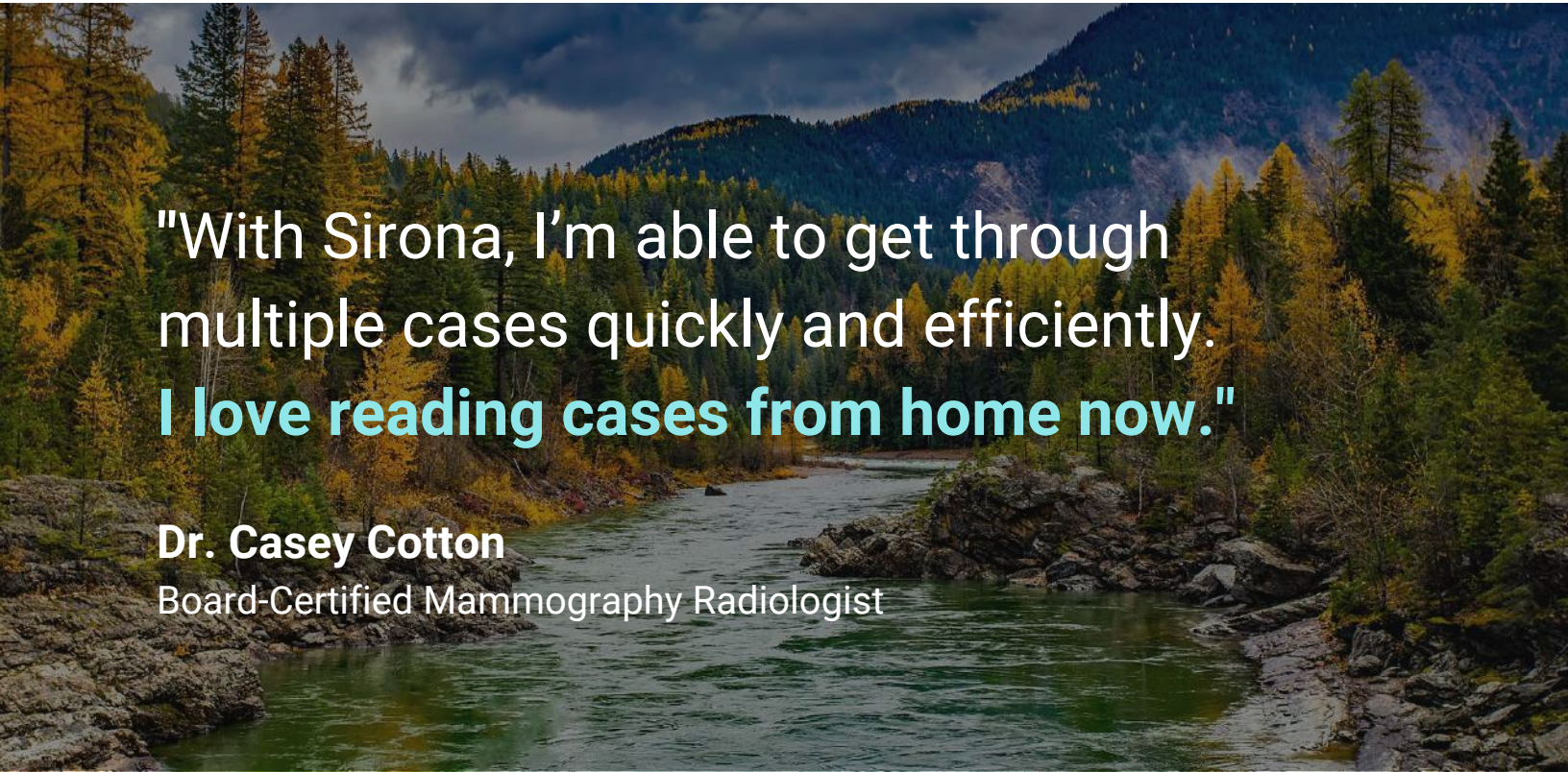
Through the adoption of Sirona's cutting-edge unified workflow software, ERA sought to address the negative impact working with their disparate legacy systems had on increased workload, staffing shortages, physician burnout, and changing reimbursement. These results highlight the positive impact of this transformation on patient care, accessibility, and operational efficiency.



Improved Patient Care

Staffing shortages affect more than just radiologists—the patients waiting for imaging results are adversely impacted by backed-up queues.

The ability to read from anywhere coupled with the flexibility to call in subspecialists from anywhere means an increase in both the speed at which patients get results and the quality of the analysis.



"With Sirona, I'm able to get through multiple cases quickly and efficiently.
I love reading cases from home now."

Dr. Casey Cotton

Board-Certified Mammography Radiologist

Accessibility for All

The modern features and customizations available with Sirona are not just convenient.

Personalized keyboard shortcuts allow radiologists to set up their workflow in a way that makes sense for their unique needs.

For example, left-handed users can perform common actions with their dominant hand. Shortcuts and templates also mean users can rely less on using the mouse, and can perform repetitive tasks with fewer clicks. Also, as a unified platform, users can setup all their shortcuts in one place for both viewing images and dictating reports.

“With Sirona all-in-one, I can customize my shortcuts, which vastly facilitates my productivity and reduces repetitive stress injuries. This was not addressed with our legacy software—they were too big or too out of touch to make meaningful changes.”

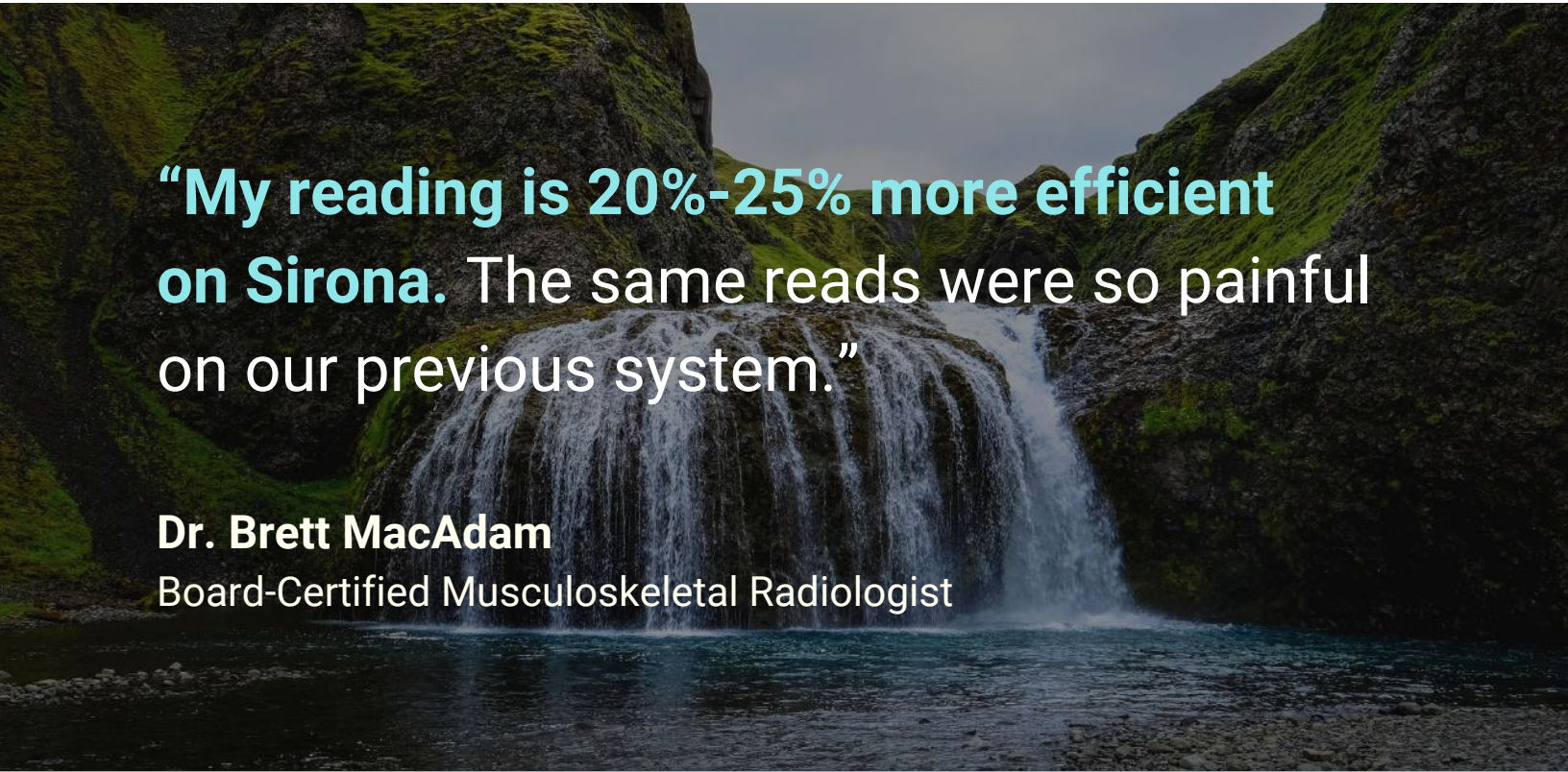
Dr. Brett MacAdam

Board-Certified Musculoskeletal Radiologist

More Efficient Workflow

Perhaps most impressively, **the Sirona software has increased efficiency at ERA by as much as 25%.**

With Sirona, an ERA radiologist, either comes into the office or logs in to the Sirona system from home. Then, they begin work. That's it. That is a 75% reduction, from 4 steps down to 1.



“My reading is 20%-25% more efficient on Sirona. The same reads were so painful on our previous system.”

Dr. Brett MacAdam

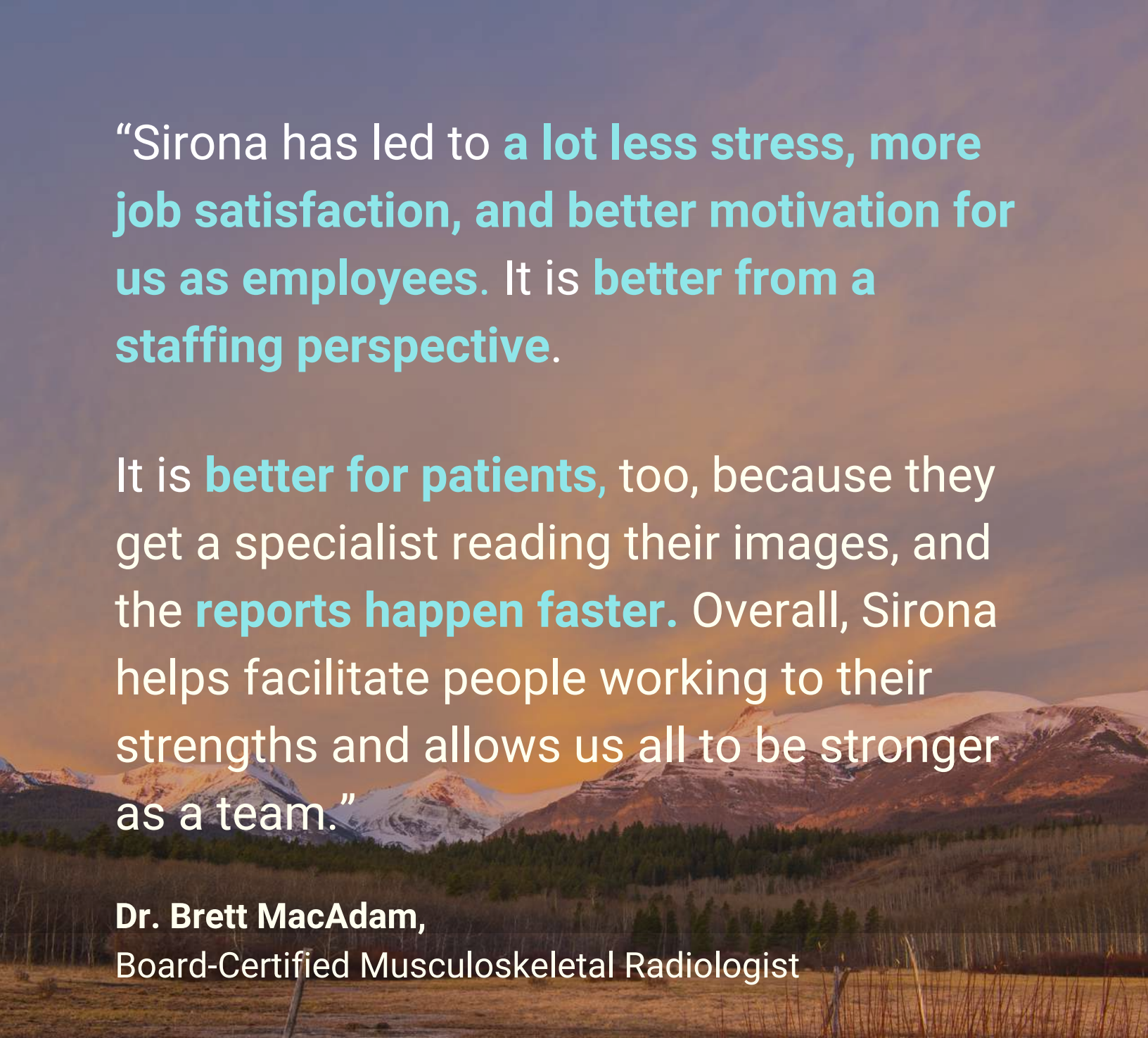
Board-Certified Musculoskeletal Radiologist

CONCLUSION

Switching from an outdated, disparate workflow to Sirona's cloud-native unified workflow software, ERA has been able to handle an expanding workload with fewer full-time employees.

The ability to read all your cases in one place from anywhere, with offsite partners, and a faster reading rate all provide **a better experience for the radiologists, better patient service, and a more dynamic long-term business model.**





“Sirona has led to **a lot less stress, more job satisfaction, and better motivation for us as employees.** It is **better from a staffing perspective.**

It is **better for patients**, too, because they get a specialist reading their images, and the **reports happen faster.** Overall, Sirona helps facilitate people working to their strengths and allows us all to be stronger as a team.”

Dr. Brett MacAdam,
Board-Certified Musculoskeletal Radiologist

To learn more about how Sirona is reimagining radiology IT, sign up to meet our team today:
sironamedical.com/contact