Cassling

Customer Case Study

Nebraska Spine + Pain Center Elevates Efficiency and Patient Comfort with the MAGNETOM Free.Max

Executive Summary

Nebraska Spine + Pain Center, a leading orthopedic and pain management facility in Omaha, partnered with Cassling to implement Siemens Healthineers's MAGNETOM Free.Max, the region's first 80cm-bore MRI system. Within months of installation, the new system delivered measurable gains across every aspect of care delivery.

Patient volume increased by 50%.
The team now accommodates 25-30 exams per day between two MR scanners, compared to limited scheduling slots under their previous system.

Provider satisfaction surged.
Radiologists and surgeons report significantly reduced metal artifacts, clearer anatomy visualization and better surgical planning accuracy.

Scan times decreased by nearly half.
Average procedures dropped from 30-45 minutes to as little as 12-15 minutes, enabling same-day imaging for up to six patients daily. Turnaround time between exams is less than five minutes.

Revenue and access improved.
Increased efficiency and higher case throughput have enhanced reimbursement potential, while cash-pay patient volume has grown steadily thanks to rapid turnaround.

Claustrophobia-related cancellations dropped dramatically.
The wider bore and open design provide comfort to anxious and larger patients, reducing stress for both patients and technologists.

NEBRASKA SPINE + PAIN CENTER

Nebraska Spine + Pain transformed its imaging capabilities into a high-efficiency, patient-first model, one that advances care quality while supporting sustainable growth.

About Nebraska Spine + Pain

Since 1963, Nebraska Spine + Pain Center has been at the forefront of comprehensive orthopedic and pain management care. With on-site diagnosis, treatment and recovery, the organization has been a one-stop destination for patients seeking specialized musculoskeletal care.

They believe in improving healthcare access and outcomes through advanced imaging, and the addition of the MAGNETOM Free. Max represented the next chapter in that mission of accessibility, image quality and patient comfort.

The Challenge

Prior to the system upgrade, Nebraska Spine + Pain faced increasing demand for MRI studies, particularly complex orthopedic and spinal scans that required precision and speed.

Claustrophobic and larger patients often struggled to complete exams comfortably, leading to rescheduled appointments or referrals elsewhere. Because patients often had to travel multiple times for diagnostic clarity, their care timelines were extended.

Additionally, technologists were managing extended scans and tight scheduling with some studies taking up to 45 minutes to complete. As a result, backlog pressures grew, and the center was forced to extend hours to meet demand.

To maintain its standard of exceptional, same-day care, the clinic sought a solution that could enhance throughput without compromising image quality or patient experience.

The Solution: MAGNETOM Free.Max

With guidance from Cassling's project management team, Nebraska Spine + Pain installed the MAGNETOM Free.Max from

Siemens Healthineers, the world's first 80cm bore, helium-free MRI.

Key features and benefits include:

- **80cm wide bore** for greater patient comfort and reduced claustrophobia.
- **Deep Resolve Boost AI reconstruction** for enhanced image clarity.
- **Helium-free infrastructure** for reduced operational costs and environmental impact.

Cassling oversaw the implementation from design to execution, ensuring seamless integration within just 12 weeks, proving that coordinated planning and continuous communication deliver premier results.

Results and Impact

Efficiency Improvements

Since installation, Nebraska Spine + Pain has significantly increased imaging capacity. The MAGNETOM Free.Max's efficient workflow and faster reconstruction times now allow for up to 18 patients per day, a substantial jump from prior throughput.

Their hour-long slots for one patient turned into 30 minutes instead, resulting in capacity for two patients in one hour.

Exam setup and turnaround time have also improved thanks to easier patient positioning and stable, calm patient behavior during scans. In most cases, scan times now range between 12 and 20 minutes, depending on the study.

"The Free.Max has definitely helped us see more patients and improve our efficiency," said Jen Levos, lead tech of MRI/CT at Nebraska Spine + Pain "We had such a big backlog just last year, and now we're super efficient."

Expanding Same-Day Imaging

Same-day imaging, a core differentiator for Nebraska Spine + Pain, has become more routine and sustainable.

To meet their mission, they had to extend their working hours to accommodate patients. Now, they can often schedule someone today and have them scanned tomorrow or even the same afternoon.

This flexibility has proven especially valuable for rural and out-of-town patients, reducing their travel burdens and improving continuity of care.

"We can get so many same-day add-ons and a 50% boost," said Jen. "It's easier to squeeze exams in between our scheduled patients, and we are able to stay on time with few delays due to the fast turn-around. Our patients are shocked."

Enhanced Image Quality

Physicians have reported a noticeable improvement in image quality, especially in cases involving metal hardware or orthopedic implants.

NEBRASKA SPINE + PAIN CENTER

"Our mission is to make advanced imaging as accessible and stress-free as possible. With the MAGNETOM Free.Max, we can welcome patients who might otherwise defer or avoid imaging due to claustrophobia, weight concerns or anxiety."

– Dr. Timothy A. Burd, Orthopedic Spine Surgeon, Nebraska Spine + Pain

"Radiologists have told us they're getting fewer metal artifacts and less blooming," said Jen. "They actually request this scanner for patients with prior fusions because the images are so much clearer."

This improvement not only enhanced diagnostic precision, but also supports surgical planning.

"The more we know before we go in, the less chance there is for error during a surgery," said Dr. Timothy Burd, an orthopedic spine surgeon at Nebraska Spine + Pain.

Elevated Patient Experience

The wide bore has defined comfort for patients who might otherwise delay imaging appointments. Anxiety and claustrophobia have dramatically decreased, and feedback has been overwhelmingly positive.

Patients get especially nervous if their arms touch their sides but now are surprised at how much room they have. It's a night-and-day difference for comfort, making the entire process smoother for everyone involved.

The shorter scan durations further reduce stress and fatigue, leading to calmer sessions, fewer motion artifacts and higher-quality images.

"The wide bore makes positioning a lot easier and patients tend to stay calmer, so we have fewer motion issues or repeats done," said Jen.

Stronger Provider and Staff Satisfaction

Technologists described the new workflow as smooth, efficient and stress-free. With two techs per scanner with one scanning and one prepping, turnaround between exams now takes less than five minutes.

"Our busiest days don't feel crazy," said Jen. "Everything just flows like a well-oiled machine.

The streamlined operations have allowed staff to focus more on patient care rather than logistical bottlenecks.

Measurable Business Impact

Increased patient throughput has translated into tangible financial benefits. With higher scan volumes and expanded cash-pay options, revenue has grown alongside patient satisfaction.

Unsurprisingly, reimbursements have increased alongside scan volume. And because they're physician-owned, Nebraska Spine + Pain has been able to offer affordable cash-pay MRIs, which has attracted new patients who might otherwise delay care.

"We're a lot less expensive than a facility where a patient could pay a couple thousands of dollars or more for a scan," said Joann Baumert, Business Office Manager at Nebraska Spine + Pain.

Improved efficiency has minimized the need for extended hours or overtime staffing, ultimately strengthening operational sustainability.

Conclusion

With the MAGNETOM Free.Max from Siemens Healthineers, Nebraska Spine + Pain has set a new benchmark for patient-centered imaging, one that reflects the center's ongoing commitment to quality and innovation.

Cassling is proud to play a role in that mission, helping Nebraska Spine + Pain deliver the clarity, confidence and compassion that define exceptional care.

Disclaimer: The statements by customers of Siemens Healthineers described herein are based on results that were achieved in the customer's unique setting. Because there is no "typical" hospital or laboratory and many variables exist (e.g., hospital size, samples mix, case mix, level of IT and/or automation adoption) there can be no guarantee that other customers will achieve the same results.

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