

Shorter scans for **successful cardiac exams**

Compressed SENSE in practice –
University of Vermont Medical Center,
Burlington, VT

Challenge

The University of Vermont Medical Center in alliance with the University of Vermont College of Medicine is Vermont's academic medical center, and serves patients and their families in Vermont and northern New York. The center offers state-of-the-art MR services and sees a range of patients, including those with cardiac conditions for whom lengthy breath-holds can be a challenge.

Solution

Compressed SENSE is allowing the center to reduce scan times, which helps not only with scheduling patients, but also requires shorter breath-holds in cardiac exams, increasing the likelihood of a successful exam and enhanced patient satisfaction.

Trevor Andrews, Ph.D.

Trevor Andrews, Ph.D., is a MR Physicist at University of Vermont Medical Center. He is Adjunct Assistant Professor of Radiology at University of Vermont, College of Medicine. Dr. Andrews is board certified by the American Board of Magnetic Resonance Safety and the American Board of Medical Physics.

The University of Vermont Medical Center in Burlington, VT, is an academic medical center that integrates patient care, education and research. The center is using the time-savings offered by Compressed SENSE on its Philips 1.5T Ingenia MR scanner to speed cardiac exams, including reducing the length of breath-holds required during the scans, which can be challenging for patients with obesity and high heart rates. The shorter scans and breath-holds help provide high-quality diagnostic information and enhance the patient experience. The center is using Compressed SENSE across broad applications for a reduction of 40% on 3D scans and up to 25% on 2D scans.

“ A 15- or 16-second breath-hold is tough for many cardiac patients. [With Compressed SENSE] we actually have protocols now that can get that below 10 seconds. It's a lot easier to get through for a patient, and patients are a lot more satisfied with the experience.”

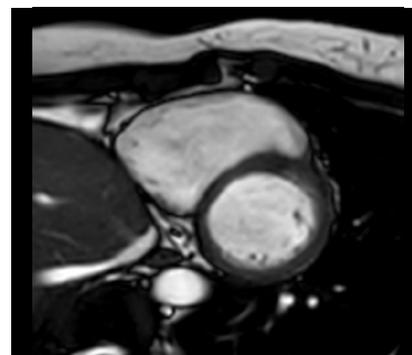
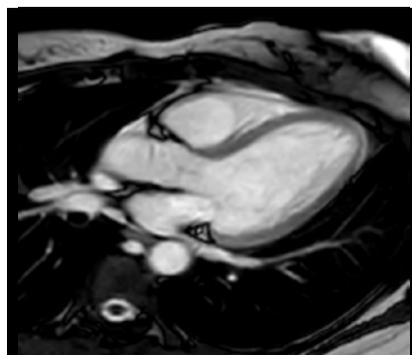
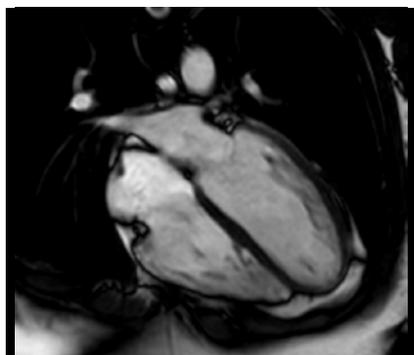
Trevor Andrews, Ph.D.
MR Physicist
University of Vermont Medical Center

Achieving diagnostic quality and enhancing patient satisfaction

Compressed SENSE is helping the medical center achieve high-quality clinical results and patient satisfaction, which is of value in an era in which compensation for healthcare organizations is partially dependent on patient satisfaction.

Dr. Trevor Andrews highlights the clinical impact of this, saying, "If you're not able to get good image

quality, you have to repeat. If the patient is having a hard time doing breath-hold after breath-hold, it extends your study quite a bit as you repeat it again and again. It's really a struggle for the technologist as well as the patient, and obviously in those cases where we have used Compressed SENSE successfully it can be dramatically easier to get through this without getting completely exhausted."



“A steep reduction in time in a breath-hold case can transform a scan from being non-diagnostic to quite diagnostic.”

Trevor Andrews, Ph.D.
MR Physicist
University of Vermont Medical Center

Learn more how Compressed SENSE can help shorten breath holds in cardiac imaging.

www.mriclinicalcasemap.philips.com/global/case/198/

Results from case studies are not predictive of results in other cases. Results in other cases may vary.

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