

## Philips Incisive CT at Nagano-Chuo Hospital

Meeting the demand for cardiovascular care with a cost-effective software upgrade

# PHILIPS



## Who

Kazuyuki Takeuchi, Chief Technologist

## Where

Nagano-Chuo Hospital Nagano, Japan

## Challenge

Increasing clinical capabilities and scanning capacity to meet community needs while also minimizing the costs to access advanced technology.

## Solution

Upgrade their Philips Incisive CT to the latest V5.1 software release\* to enhance clinical value and performance in a cost-effective way.

\*V5.1 upgrade contains significant enhancements, it may not be available in some markets if medical device registration or approval is not granted.

Nagano-Chuo Hospital was visionary in introducing CT for diagnostic cardiac imaging to its served community in 2006. "At that time," says Kazuyuki Takeuchi, Chief Technologist, "the use of CT to diagnose heart disease was rare, but the clinical team saw the potential and acquired the Philips Brilliance 16 and Brilliance 64 CT systems. Based on the reliability and performance of those first CT systems, the hospital later upgraded to an Ingenuity CT system and then again to Incisive CT, which is our current system." Nagano-Chuo Hospital is a private 300-bed hospital and is a regional hub for cardiovascular care in Nagano, Japan.

## At a glance

- Advanced capabilities, including Precise Cardiac and AI-enabled Precise Image, allow for excellent image quality in often-challenging cardiac exams
- Philips CT demonstrates consistently excellent results, and the team has even been able to salvage some scans in patients whose coronary motion affected the exam
- This software upgrade was a cost-effective choice, allowing the hospital to minimize the costs of acquiring advanced capabilities while maintaining high performance

## Advancing capabilities through the years

Takeuchi talks about the journey to this latest V5.1 software release for Incisive CT: "Over the years we've continually upgraded to the latest Philips CT system. Each model showed unique features and improvements. Notably, the introduction of iterative reconstruction, iDose<sup>4</sup>, IMR and AI technologies have significantly enhanced image quality. This leads to much more accurate diagnoses and higher-quality evaluations of coronary arteries. It's a cost-effective choice, especially amid challenges like inconsistent patient

volume post-pandemic, allowing us to minimize costs while maintaining high performance." Philips Incisive CT has helped the hospital to improve examination throughput, including for cardiac exams. The reliable system allows clinicians to reach fast, accurate diagnosis, and also offers operational efficiency to ease daily scheduling. When Nagano-Chuo Hospital decided to increase performance even further, it chose the cost-effective route of upgrading the Incisive CT to the latest software release V5.1.

## The value of excellent image quality

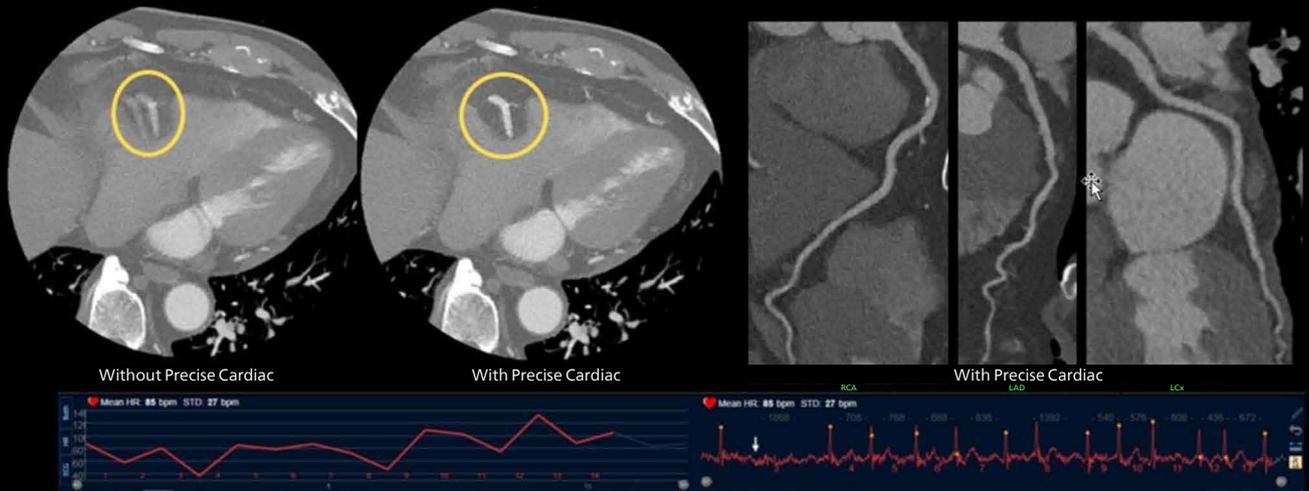
Precise Cardiac helps resolve cardiac motion artifacts, by providing motion-compensated images. This can help increase the number of successful scans and decrease the number of failed cardiac studies due to coronary motion.” The hospital uses Philips CT for detailed coronary artery evaluation. “We perform numerous cardiac treatments and the image quality significantly enhances diagnosis accuracy,” Takeuchi says. “The Philips CT is used for coronary CT angiography. The high-resolution images provide detailed information about artery narrowing and plaque. The high-

quality images allow precise assessment. The use of Precise Image onsite has led to a dose reduction of 30-50%\* while improving our image quality,” he says.

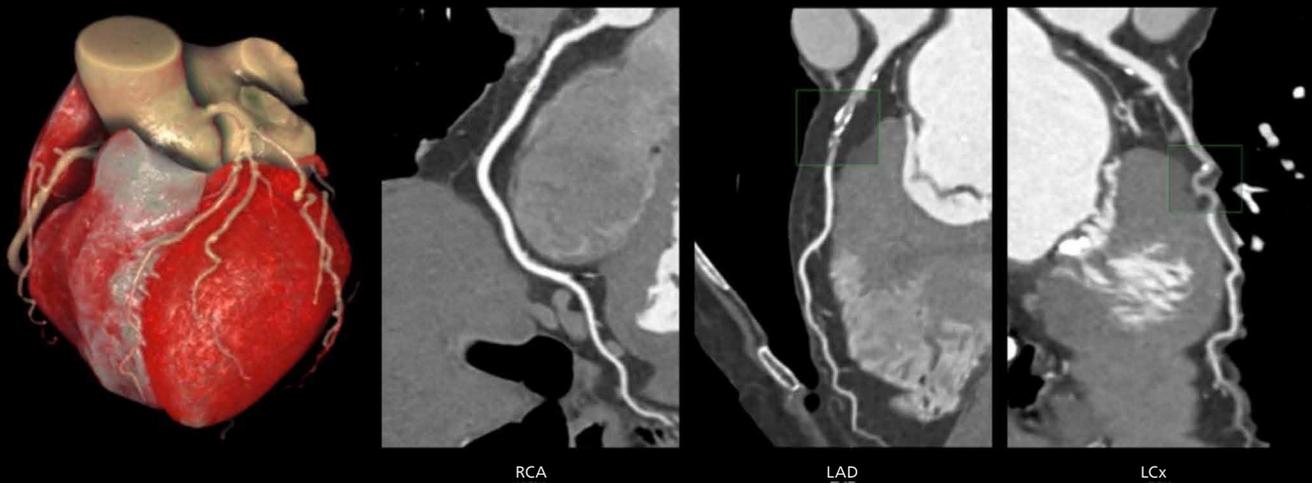
The benefits of advances such as AI-powered Precise Image provide high-quality images efficiently, enhance reading accuracy and help differentiate Nagano-Chuo Hospital from other institutions in the area. Takeuchi says, “Philips CT provides stable results, with over 20,000 examinations conducted, proving we made a good choice.”



### Precise Cardiac compensates for motion artifacts in cardiac scans



### AI-enabled Precise Image enhances image quality in cardiac scans



## The upgrade experience

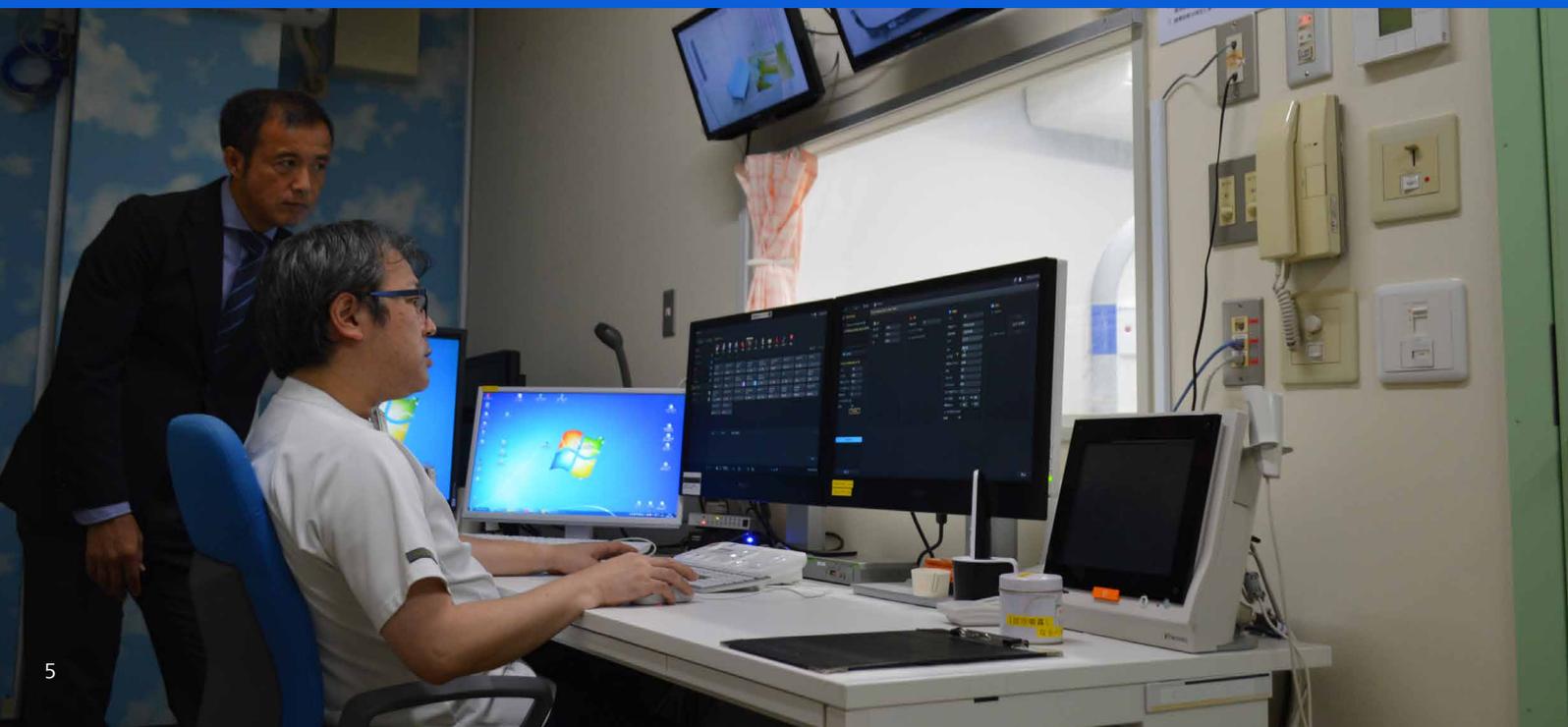
Takeuchi explains the benefits of the recent upgrade: "The latest Incisive CT software upgrade to version 5.1 enhanced usability and cardiac image quality. It offers more flexibility, providing a range of options for slice thickness, improving operational efficiency. This upgrade also significantly reduces patient radiation exposure while delivering high-quality images, which is particularly beneficial in cardiac exams."

The Incisive software upgrade V5.1, which includes the AI-enabled Precise Position

camera for automatic patient positioning, and the faster table speed of Incisive have greatly improved workflow efficiency for the team. "With the camera-based workflow, we reduce preparation time, while the routine workflow for imaging and analysis speed is fast. This swift imaging and analysis is especially beneficial in emergencies," he says. "The user-friendly interface helps new staff quickly adapt, increasing overall operational efficiency. The cost-performance balance with Philips CT systems supports ongoing quality healthcare service delivery."

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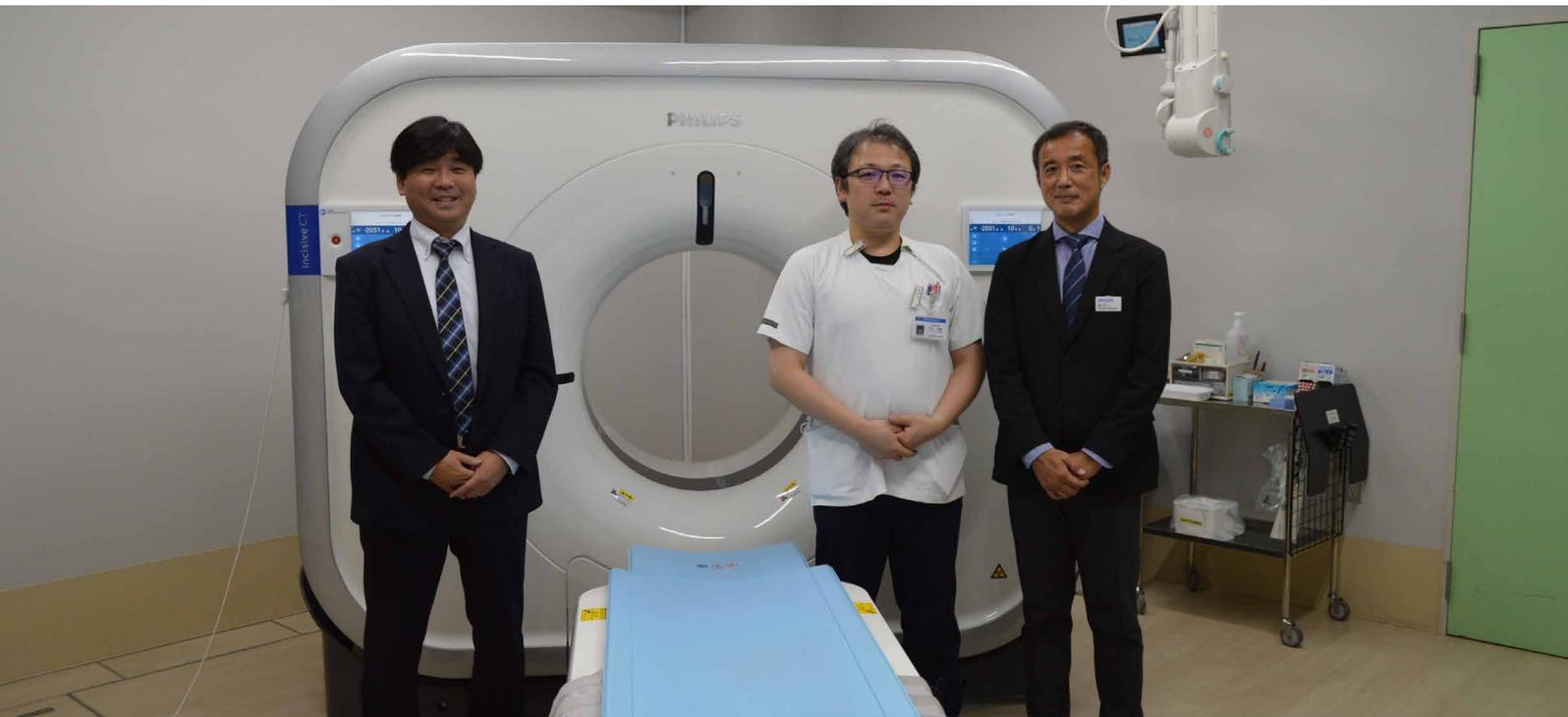
Kazuyuki Takeuchi, Chief Technologist, Nagano-Chuo Hospital, Nagano, Japan



## Philips as a partner

“Philips is crucial to our radiology department,” summarizes Takeuchi. “Their service engineers and application specialists provide prompt, accurate technical support, minimizing downtime and offering clinical support as well. They are very friendly and flexible to user needs. Regular training and updates ensure we are always equipped with the latest knowledge and technology, enhancing our daily diagnostic and treatment abilities.”

Takeuchi shares his view on the future with Philips CT: “I am excited about future technological advancements, especially in AI and radiation reduction technologies. Strengthening our partnership with Philips will help us continue to play a crucial role in regional healthcare, and we continue to value our partnership with Philips.”



## Conclusion

As a regional hub for cardiovascular care, Nagano-Chuo Hospital values its ability to provide fast, accurate diagnosis. Upgrading to the V5.1 software release of Philips Incisive CT allows the hospital to continue to enhance clinical value and performance in a cost-effective way.



Talk with your Philips representative about CT upgrades today

