

Bringing critical care imaging to your patient

SOMATOM On.site for Mobile Stroke Units

➤ siemens-healthineers.us/mobile-stroke-unit



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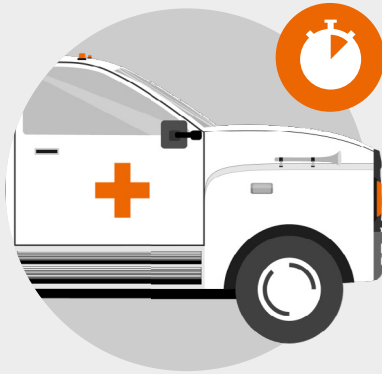


Stroke is a growing global health crisis, with annual cases projected to reach 29 million worldwide by 2035.¹



Time is brain

Yet, only 18% of patients receive treatment within the first “golden hour” after symptom onset², and only 15-60% arrive at a hospital within three hours.³



Delayed diagnosis and transport

Without pre-hospital CT imaging, stroke patients may be taken to the wrong facility, leading to critical delays in diagnosis and treatment. These delays have serious consequences.⁴

Delays may result in...



Increased brain damage



Diminished patient outcomes



Higher healthcare costs



Mobile Stroke Units empower timely stroke care for better outcomes

Mobile Stroke Unit

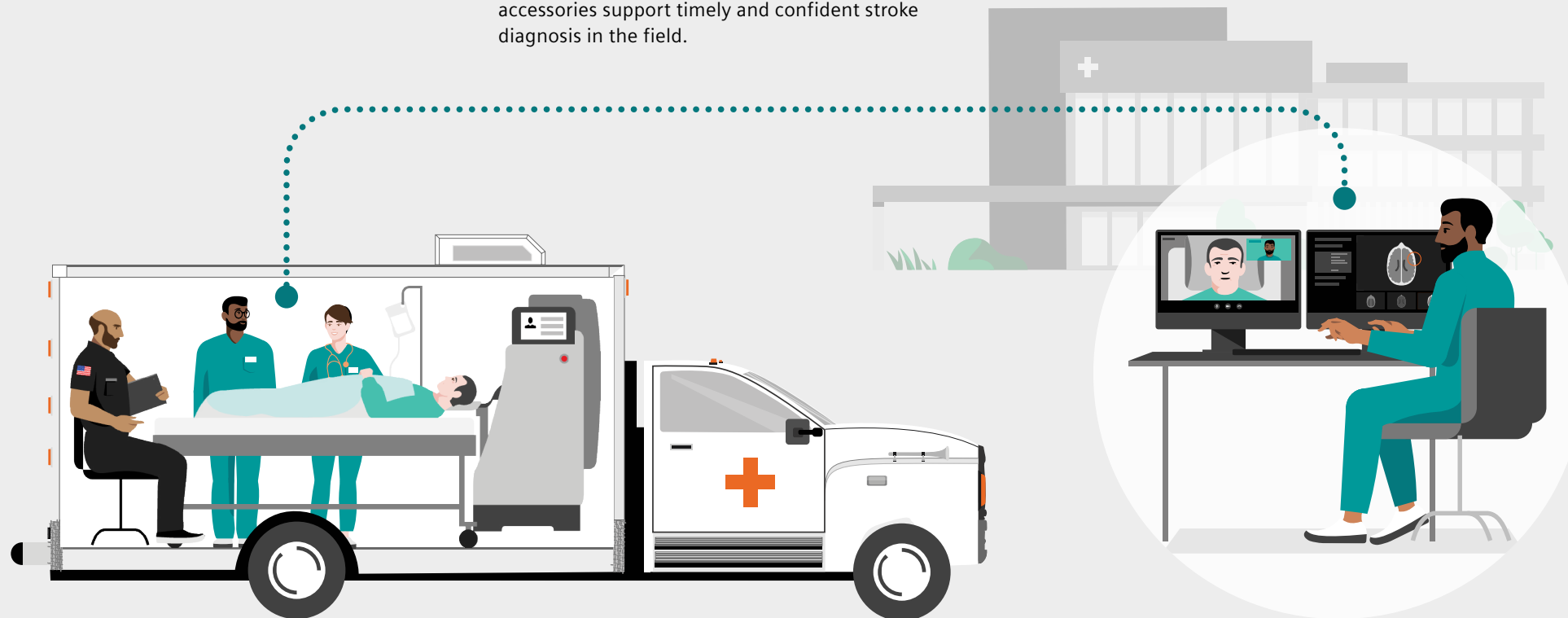
Specialized ambulances equipped with advanced stroke care technologies – such as CT imaging and telemedicine – enable rapid stroke diagnosis and treatment directly at the scene and timely transport to the most appropriate hospital.

SOMATOM On.site CT imaging

This CT system is designed for seamless integration into ambulances, enabling advanced imaging capabilities in the pre-hospital environment. The telescopic gantry design, fast image acquisition, intuitive touchscreen interface, and integrated accessories support timely and confident stroke diagnosis in the field.

Specialized care team

Staff typically includes a stroke neurologist connected via telemedicine, a paramedic, an advanced practice nurse, and a CT technologist. Stroke specialists remotely provide real-time expertise, supporting the on-site team with diagnosis and treatment decisions to ensure efficient and coordinated care in the field.



Streamlining workflow to accelerate treatment decisions – without compromising the quality of care.

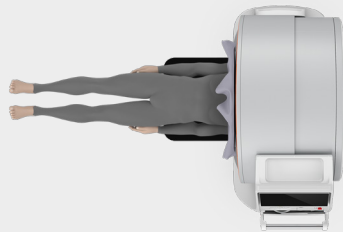
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Bring head CT imaging to the point-of-care with emergency vehicle integration

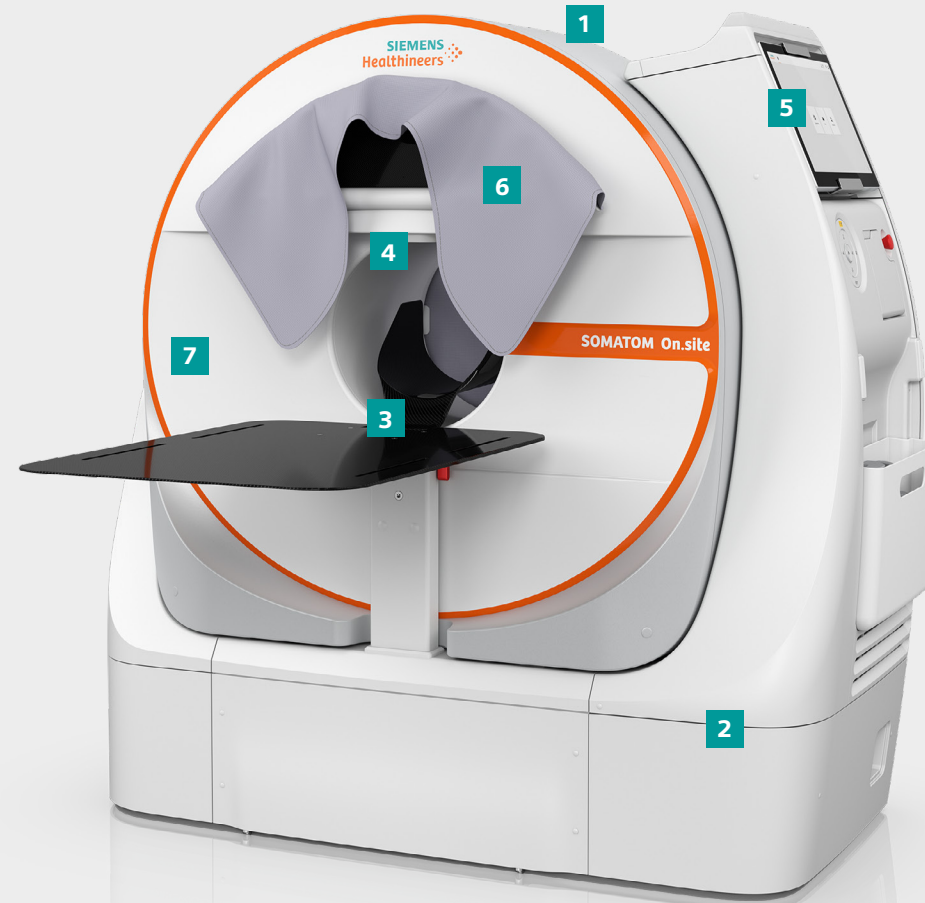
SOMATOM On.site's compact footprint, telescopic gantry, and fixed-mounted design eliminate the need for rails, supporting high-quality images and an efficient, streamlined workflow.

- 1 Telescopic gantry**
The first-of-its-kind telescopic gantry design simplifies patient positioning, minimizes motion artifacts, and enhances radiation safety.



- 2 Integration**
The scanner's fixed mounting enhances on-board safety and enables reliable CT image acquisition – even on vehicle inclines of up to 5°.

- 3 Patient positioning accessories**
Integrated positioning accessories provide a more efficient workflow and consistent, reliable scan results in the field.

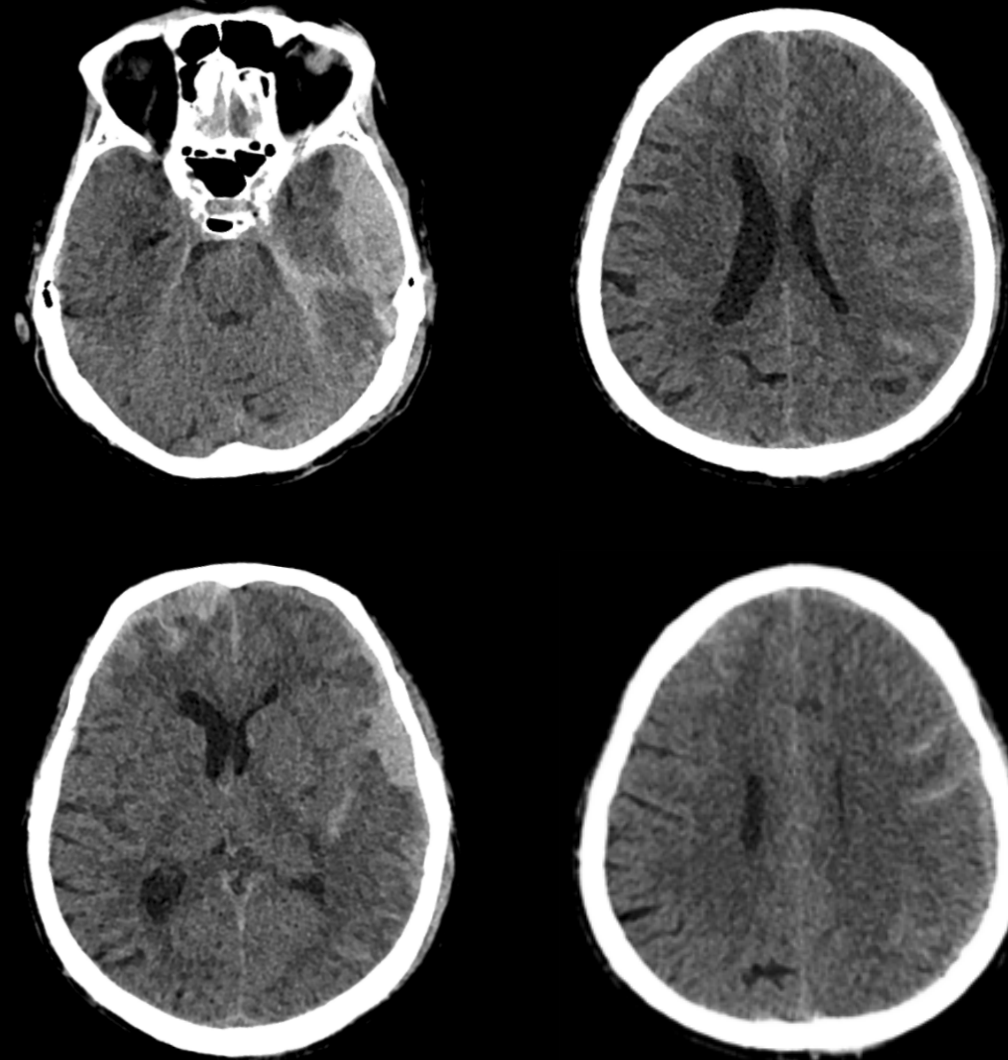


- 4 CARE 2D Camera & bore lighting**
Maintain visual contact with the patient from the touch UI – even with radiation shield covers in place – for continuous monitoring.
- 5 myExam Companion powered by GO technologies**
When every second counts, intelligent guidance supports fast, consistent head CT acquisition to help make timely clinical decisions and automate post-processing tasks.
- 6 Self-shielding radiation system**
The internally lead-lined gantry covers and radiation shields on the front and back bore openings minimize scatter radiation, enhancing safety for on-board staff.
- 7 SOMATOM technologies**
Stellar detector, iMAR, and ADMIRE® deliver high-quality images for increased diagnostic confidence.



Setting a new standard for head CT imaging in Mobile Stroke Units

Triaging of intracranial hemorrhage patient supported by Mobile Stroke Unit



Conclusion

- Support triage and treatment decisions through high-end head CT image quality enabling reliable bleeding detection or exclusion.
- Thanks to the high image quality of SOMATOM On.site, care teams could be supported to define and initiate a pre-hospital treatment plan, for example blood pressure (BP) lowering medication for hemorrhagic stroke patients.

Courtesy of Siriraj Hospital, Mahidol University, Thailand

SOMATOM On.site technical specifications

Detectors	2.4 cm Stellar detector
Iterative Reconstruction	ADMIRE®
Metal artefact reduction	iMAR
kV steps	80, 120 kV
Spatial resolution	0.75 mm
Gantry opening	35 cm
Slice acquisition	32
Scan modes	NCCT, CTA, (m)CTA
Rotation time	1s
Scan mode	Helical

NCCT = Non contrast computed tomography
CTA = Computed tomography angiography
m(CTA) = multiphase computed tomography angiography



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References

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