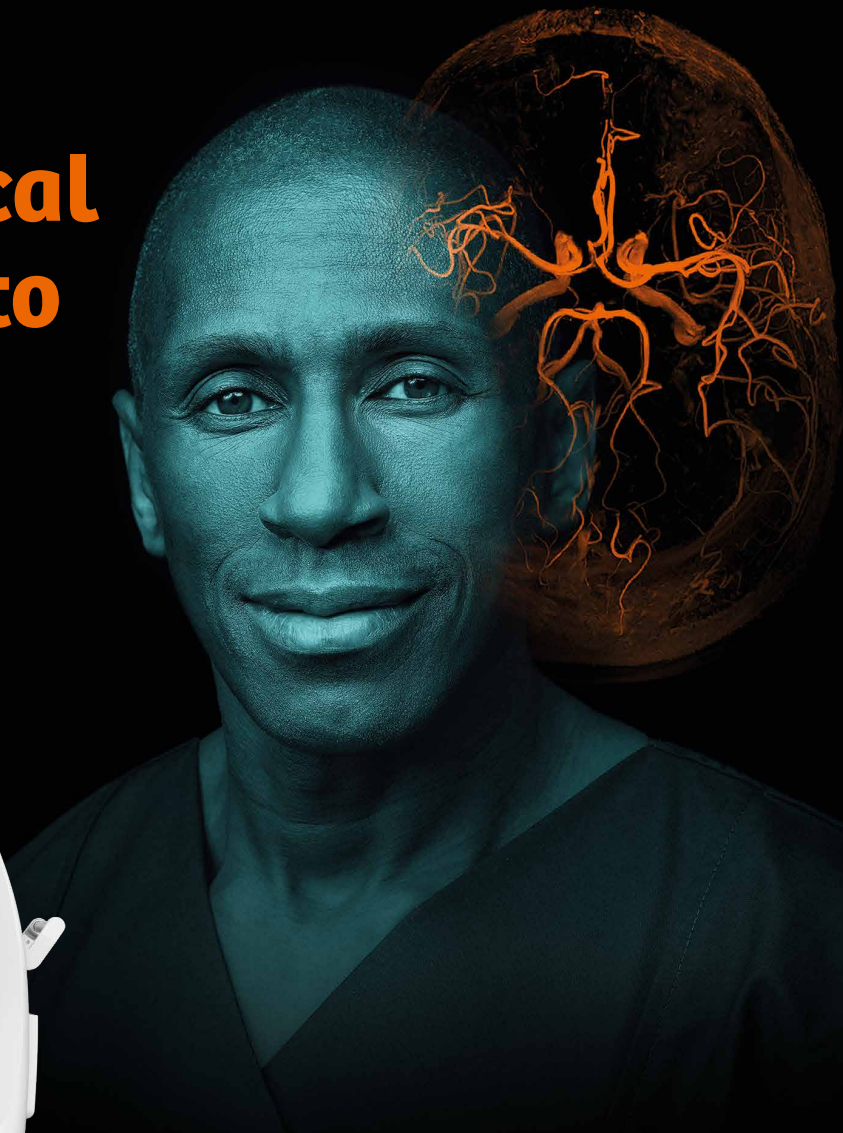


SOMATOM On.site

Bringing critical care imaging to your patient

siemens-healthineers.com/somatom-onsite



Patients with critical head conditions require constant supervision



Time is of essence

Patients suffering from acute and critical head conditions face a high risk of sudden health status deterioration, requiring fast evaluation.¹

The impact is resounding

Not just patients feel the impact of these challenges: staff who treat them are affected as well. This holds true for the entire workflow:

Technologists

Patients with acute and critical conditions tie up stationary CT scanners in the radiology department for at least twice as long as would be the case for noncritical or acute patients.

ICU Nurses

With at least two accompanying nurses, critical care transports take time and resources away from the ICU. In addition, by 2030, it is



Transports can worsen conditions

For 1 in 4 patients, transport increases the risk of adverse events. Existing health conditions may worsen due to the delicate state of critical head cases in the ICU.¹

estimated that there will be a shortage of 13 million nursing staff.² This results in overburdened personnel.

Radiologists

Fast scanning is critical due to sudden patient health status deterioration, but is not always easy to do. Finding and deciding upon the correct treatment promptly leads to better patient outcomes.

Streamline your critical care patient workflow today

CT scanner transport to ICU
Easily maneuver SOMATOM On.site[®] to the patient's bedside and perform a CT scan in just 20 minutes.³

CT scan and transfer of clinical images
Scan results are sent automatically to the archiving system for review and evaluation by radiologists.

CT order and scheduling
Physician orders the CT scan and the technologist is informed.

Diagnosis and treatment
The care team treat the patient based on the findings.

Traditional workflow in hospital³



- CT order and scheduling
- Patient preparation in ICU
- Patient transport to radiology department
- Patient transfer, CT scan, and transfer of clinical images
- Patient transport to ICU
- Diagnosis and treatment

Workflow with portable CT scanner³

- CT order and scheduling
- CT scanner transport to ICU
- CT scan and transfer of clinical images
- Diagnosis and treatment



On scene

Quickly move SOMATOM On.site by using the front-facing camera and motorized trolley with two speeds to the point of care. These features let you maneuver your way to the patient with ease.

On care

Scanning your critical care patient with SOMATOM On.site gives nurses more time to focus on core tasks in the ICU. This avoids preparation work and the long, often strenuous trips to the radiology department.

On time

The double scanning time allotment and the often accompanying delays associated with critical head patients can leave your device idle. SOMATOM On.site brings the scanner to your patient, allowing you to streamline your stationary fleet.



Bring head CT imaging to your patient

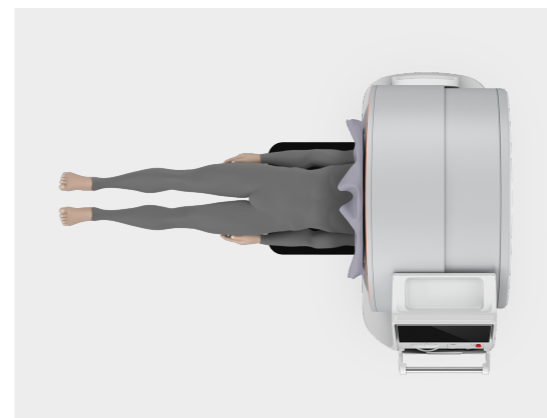
SOMATOM On.site is designed to bring head CT imaging to the point of care. With the **unique telescopic gantry design**, **integrated positioning accessories**, and **proven SOMATOM technologies**, you can achieve fast and reliable answers for critical care patients.

Driving to the point of care

SOMATOM On.site brings critical care imaging directly to your patient's bedside. This means fewer patient transports, resulting in more staff remaining in the ICU. Being able to focus on their core tasks translates into a better nurse-to-patient-ratio.



- 01 Telescopic gantry**
The first-of-its-kind telescopic gantry design allows for easier patient positioning, minimizes motion artifacts, and provides radiation safety for staff and neighboring patients.



- 02 Driveability**
Easily maneuver the scanner throughout the hospital using the front-facing camera, two driving speeds, brake, and ergonomic handle.

- 03 Patient positioning accessories**
Integrated accessories to help accommodate most patients for consistent scan results.

- 04 CARE 2D Camera & bore lighting**
See the patient even when the radiation shield covers are in place.

- 05 myExam Companion powered by GO technologies**
Get reliable scan results regardless of user's experience levels with intelligent guidance.

- 06 Self-shielding radiation system**
Protect staff as well as neighboring patients from scatter radiation during scanning.

- 07 SOMATOM technologies**
Stellar detector, iMAR, and ADMIRE® allow you to get sharp images.



Enable easy positioning

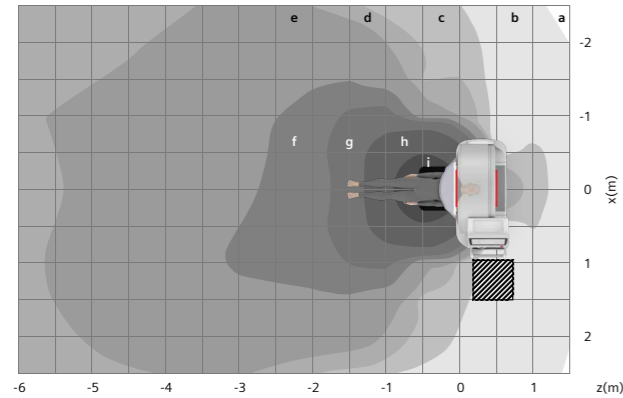
With its unique telescopic gantry and adaptable positioning accessories, SOMATOM On.site provides ample space when positioning patients.



Get reliable image quality

Thanks to the stationary trolley and telescoping gantry, motion artifacts can be reduced during image acquisition regardless of where you scan.

A self-shielding radiation system



a <0.1 mSv/a ⁴	d 1.0–2.0 mSv/a ⁴	g 10–20 mSv/a ⁴
b 0.1–0.5 mSv/a ⁴	e 2.0–6.0 mSv/a ⁴	h 20–50 mSv/a ⁴
c 0.5–1.0 mSv/a ⁴	f 6.0–10 mSv/a ⁴	i >50 mSv/a ⁴

▨ Designated zone of occupancy

One of the main challenges associated with portable scanning is the safety of staff and neighboring patients when it comes to scatter radiation. This is why SOMATOM On.site features a holistic radiation safety concept integrated in the telescopic gantry.

It consists of:

- Front and back radiation covers
- Lead-lined telescopic gantry
- Designated zone of occupancy for the operator during the scan
- CARE 2D Camera to keep your patient in view even with the front radiation cover closed

Technical specifications

Key data

Scanner type	Portable head CT scanner	kV steps	80, 120 kV
Detectors	2.4 cm Stellar detector	Detector row thickness	0.75 mm
Iterative Reconstruction	ADMIRE®	Gantry opening	35 cm
Metal artifact reduction	iMAR	Slice acquisition	32

Simple steps suitable for crosstrained staff



Built into the SOMATOM On.site is myExam Companion, an intelligent software that works with the user to get the best scan results. myExam Cockpit helps you standardize the protocols you use, and myExam Compass provides guidance during the examination.

In addition, SOMATOM On.site features workflow guidance provided by our proven GO technologies. Scan&GO enables techs to control the entire scan process via the integrated Touch UI, staying right next to the patient at all times. After the scan, the users can check the images (Check&GO) before the automated reconstruction tasks. With Recon&GO, automated postprocessing and upload to PACS is performed without any user interaction.

Establishing a new standard of head CT imaging in the ICU

Follow-up imaging after cerebral bleeding

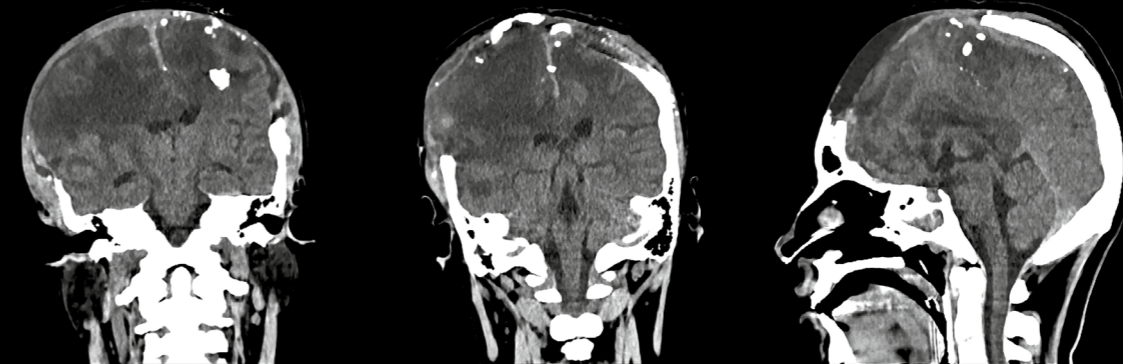


Conclusion

- Faster access to neuro CT imaging
- Portable head CT enables treatment decisions based on imaging at the point of care

120 kVp; CTDI_{vol}: 44.1 mGy; real DLP: 1058 mGy*cm; pitch 0.55; rotation 1/s

Follow-up of severe brain injury



Conclusion

- Critically ill patient could stay connected to stationary ICU monitoring equipment during the CT scan
- Reduction of complications associated with complex patient transportation from the ICU to the radiology department

120 kVp; CTDI_{vol}: 44.1 mGy; real DLP: 1058 mGy*cm; pitch 0.55; rotation 1/s

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¹ *Parmentier-Decrucq E, et al. Adverse events during intrahospital transport of critically ill patients: incidence and risk factors. Ann Intensive Care. 2013; 3(1):10.*

² *International Council of Nurses Policy Brief: The global nursing shortage and nurse retention. 2021*

³ *Rumboldt Z, et al. Review of portable CT with assessment of a dedicated head CT scanner. AJNR Am J Neuroradiol. 2009; 30(9): 1630–6.*

⁴ *A typical clinical operation, relevant for personal dose, is 5 examinations per day, 5 operation days per week, and 50 operation weeks per year.*

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