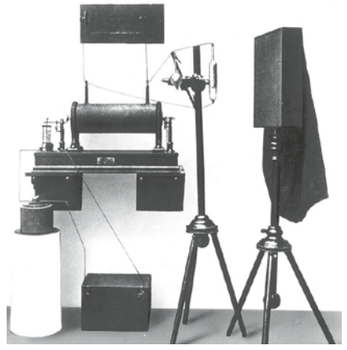
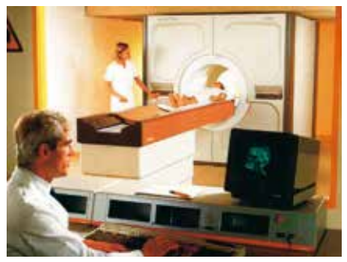
Pioneers. Passionate and professional

Siemens Healthineers is a young company with a long tradition. Shortly after x-rays were discovered in 1896, Siemens became a market leader with its own x-ray apparatus, and by 1932 it was the world's largest manufacturer of electrical equipment for medical applications. In the following decades, Siemens continued to introduce breakthrough innovations, such as the world's first dry chemistry testing for glucose in urine in 1956. Medical technology soon became one of its most successful businesses.

Digital health means a fundamental transformation that impacts everyone. We believe there are three major paradigm shifts that mutually impact each other: more precise diagnostics and treatments based on vast amounts of data (precision medicine), a more active role of the patient (consumerism), and the growing significance of digital technologies such as Artificial Intelligence (AI). Those who understand and actively address these paradigm shifts will shape the future of medical technology.





We enable healthcare professionals to help human beings live healthier and longer

Every day, more than 5 million human beings benefit from our medical technologies. Our products, services and solutions are at the center of clinical decision making. They help physicians, medical staff and healthcare providers keep people from getting sick, or make the right diagnosis and decide on the right treatment helping them recover faster.
It is in human nature to constantly advance – with our innovations we have been shaping progress in healthcare for over 120 years.

We are a global player with a strong heritage in German engineering. Healthcare professionals and patients around the world rely on the quality of our products and solutions. We create and aggregate knowledge and experience globally to apply best-in-class technologies locally.

Each day, 5 million people benefit from our technology

This has made us one of the world's leading companies in our field, and we will continue to invest into strengthening our leadership position.

Thanks to our close relations with healthcare professionals, we understand their challenges and needs.
We systematically combine these insights with our in-depth knowledge in medical technology and data analytics to engineer solutions that help healthcare providers efficiently deliver the right treatment at the right time for every patient.

We combine knowledge and practical know-how to create advanced products and services that generate better data for even more knowledge.
Through this innovation cycle, we constantly learn from effects, ask new questions and overcome boundaries.
This applies to the entire healthcare continuum: from prevention to diagnostics, therapy, and aftercare.

THE JCI ACCREDITED HOSPITALS IN THAILAND 2019

Our value promises

We enable healthcare providers to deliver high value care

As a leading medical technology company, Siemens Healthineers is committed to helping healthcare providers overcome these challenges. It is our purpose to help increase value in healthcare through and beyond this transformation. We enable healthcare professionals to achieve better outcomes across the whole care pathway at lower costs. We thus provide answers to fundamental questions in the healthcare sector.

Every hour, about 240,000 patients are touched by the technology we provide. Almost threequarters of all critical clinical decisions are influenced by our products. We use our extensive know-how to help healthcare providers increase value by expanding precision medicine, transforming care delivery, improving patient experience, and digitalizing healthcare.

Expanding precision medicine

We help expand precision medicine through medical technology and solutions that make diagnosis quicker and more accurate, reduce unwarranted variations, and enable personalized therapies, so that high value care is provided for every patient, at the right time.

Transforming care delivery

By transforming care delivery together with our customers, we help break down silos and make clinical operations more efficient – treatments become more accessible and less expensive, while keeping or improving patient outcomes. We deliver solutions that help manage population health and increase workforce productivity.

Improving patient experience

Patients must be at the center of every healthcare system. People are going to be managing their healthcare more actively, expressing their expectations more vigorously, and choosing services more consciously. Patients see themselves increasingly as customers and act accordingly. We help healthcare providers work together with their patients to design care that suits individual needs.

Digitalizing healthcare

As a global healthcare leader, we are in a strong position at the core of clinical decision making. And we have the entrepreneurial flexibility to lay the foundation for growth in a highly attractive market with tremendous changes and opportunities. Our installed base of more than 600,000 active systems worldwide is continuously generating quality data. We aggregate this information, analyze it with help from AI, and put actionable insights into operation.

Our presence in Thailand

Recent Milestones

The Siemens Healthineers Thailand team comprises more than 130 highly skilled professionals who sell, install and maintain the whole In-Vivo and In-Vitro portfolio. With more than 1,200 products installed country-wide, we partner with Thailand's healthcare providers to improve the lives of the Thai people.

2019

Siemens Healthineers Thailand recently signed a contract with Ramkhamhaeng Hospital Group, which is the largest order win in Thailand for radiology solutions. This milestone comes after having already installed three **Atellica Solutions** in their largest laboratories.

2018

A new world of precision in Molecular Imaging reached Thailand with the first installation of the new **PET/CT Biograph Vision** at Chulabhorn Hospital.

2017

Two **ARTIS pheno** robotic imaging systems were installed in Chulalongkorn Memorial Hospital and Chiang Mai Medical University Hospital to perform minimally invasive procedures in the country.

SIEMENS Healthineers

Our Business Areas

We are at the center of clinical decision making across the full healthcare spectrum. An estimated five million patients worldwide everyday benefit from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics and molecular medicine as well as digital health and enterprise services.

- Medical Imaging
- Laboratory Diagnostics
- Customer Services
- Digital & Enterprise Services

Digital & Enterprise Services

Digital Health Solutions

AI is a key technology for digitalizing healthcare and enables you to transform care delivery, expand precision medicine and improve the patient experience. We have developed a portfolio of more than 45 AI- powered solutions that help to automate and standardize not only workflows but also complex diagnostics to meet the needs of the individual patient.

Value Partnerships

Value Partnerships combine our strength in holistic medical technology management and digitalization into a long-term performance-oriented engagement focusing on the creation of value. With our sustainable healthcare consulting and transformation services as well as our future-proof design planning,we are well positioned to co-create a solution with and for you, which will generate clinical, operational and/or financial benefits.

Enterprise Services

We provide flexible, comprehensive solutions for healthcare providers that help reduce costs, improve clinical outcomes, and enhance the patient experience. By combining our technology leadership with profound experience in clinical consulting and workflow optimization, we're creating value beyond our product business for your healthcare institution.

Asset Planning

Asset Planning Services are designed to address challenges in your organization by identifying potential gaps between what the market is doing, what you are doing, and your strategic goals.
By aligning your assets to your strategy, it allows you to identify the potential for reducing costs and increasing revenues with your existing fleet.

THE JCI ACCREDITED HOSPITALS IN THAILAND 2019

"A hospital may strive to reach and maintain high quality, but it is imperative that safety is not overlooked in these efforts."

DR. SIRIPONG LUENGVARINKUL, M.D.
Director of Ramkhamhaeng Hospital

"What defines 'quality' hospital treatment?"
A hospital may strive to reach and maintain high quality, but it is imperative that safety is not overlooked in these efforts. The JCI standard is an internationally recognised certification, which plays a vital role in ensuring the rights and safety of patients. We are proud to say we have received JCI certification, which will enable us to monitor information technology and documentation of data within the Outpatient Department. Patient profiles will be quickly and easily retrievable by trained staff from our secure network.

Hospitals who have received the JCI standard are considered safe for patients, visitors and staff but what guidelines can guarantee and measure quality? In my opinion it is being able to provide the correct and best medical care to patients. A good quality hospital has doctors, technology and nursing systems, which are smart and strong in order to deliver Precision Medicine. Having the right technology, such as CT and MRI scanners, which can provide clear images allows doctors and nurses to achieve the best results for the patient. This technology needs to be precise, safe and serve to benefit the patient first and foremost.

Therefore, manufacturers and suppliers of medical instruments must offer the best products, which respond to the hospital's and patients' needs, bearing in mind that safety and accuracy are of the utmost importance.

Ramkhamhaeng Hospital Group recently placed an order with Tin Filter technology for CT Scanner from **Siemens Healthineers**, which will reduce the level of radiation patients receive by a factor of 30 while still providing clear and stable image data. We chose to work with **Siemens Healthineers** as we trust them to deliver the quality of care for which we strive.

THE JCI ACCREDITED HOSPITALS IN THAILAND 2019

SIEMENS Healthineers

Medical Imaging

Computed Tomography

We offer groundbreaking CT products and services that are constantly innovating to maximize clinical outcome, and to contribute to patients' well-being by minimizing radiation and contrast media dosage.

Radiography

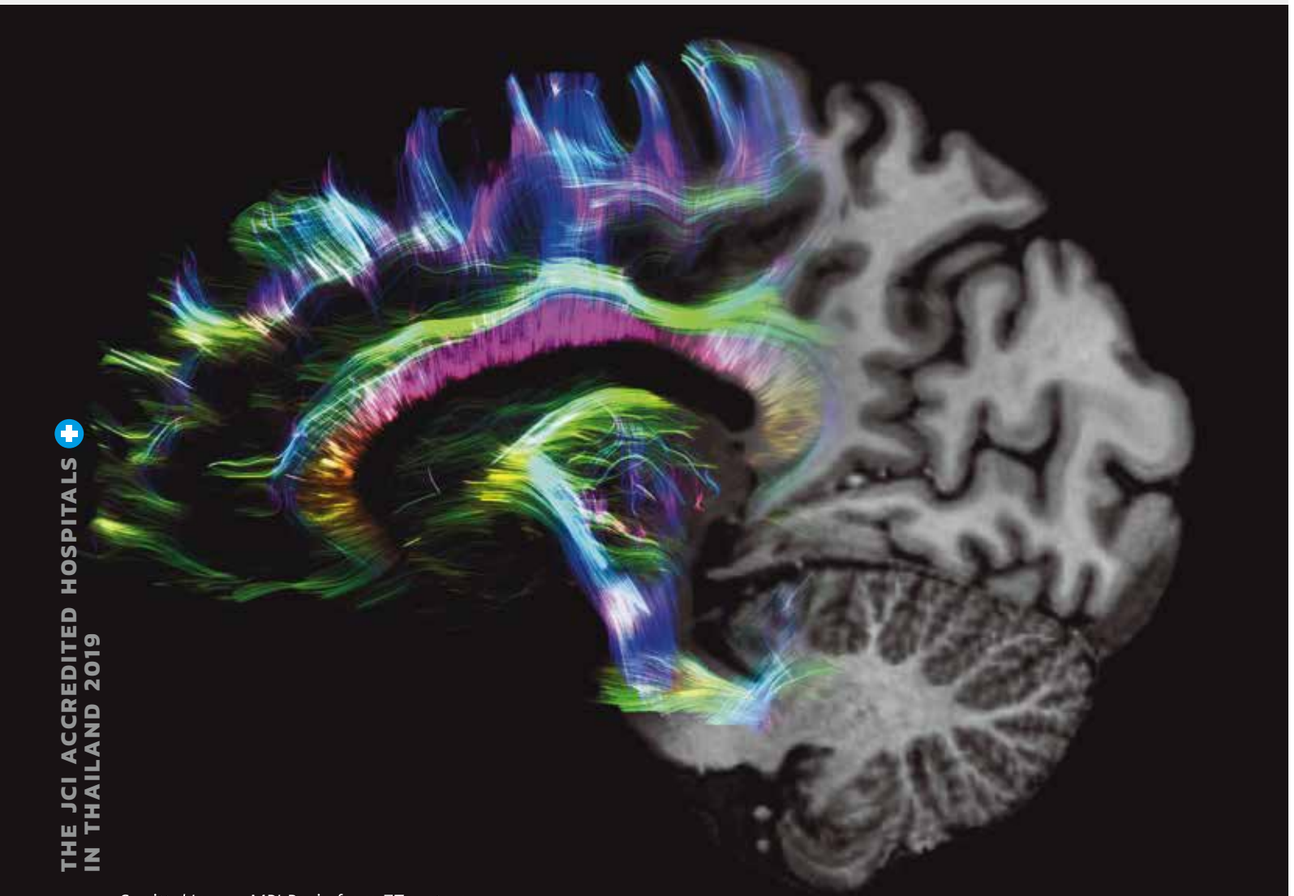
We provide Digital radiography systems that cover virtually all clinical applications, and offer workflow optimization,imaging excellence and investment confidence.

Magnetic Resonance Imaging

Our innovative MRI technologies offer you exceptional image quality, efficiency, and speed, while providing patient friendliness and investment protection.

Mammography

Our innovative portfolio of mammography systems and reading solutions provides the highest depth resolution diagnostic accuracy and enables personalized breast care – from screening to diagnostics to follow-up.



Sagittal Image MRI Brain from 7T system

"Our passion is to provide quality care to all"

DR. WITOON YONGMETHAWUT, M.D.
Director of Overbrook Hospital Chiang Rai

The Overbrook Hospital, Chiang Rai Province is part of the Foundation of the Church of Christ in Thailand. The medical mission was founded by William A. Briggs, M.D. in 1903 with an ethos that has remained the same for 116 years; to honour God by providing quality medical care to all people and classes regardless of nationality, religion or economic status.

As a non-profit hospital we provide services within a tight budget and generate our entire income ourselves in the absence of any foreign donation. We have independently been awarded the internationally recognised JCI standard certification, which we feel has been achieved because of our unstinting philosophy of providing top quality care. Besides the JCI standard, we also have received the HA standard and became the fourth hospital in the country to receive the ISO 27001 (Security Standards of Information).

All the work we do here is done with dignity and pride; by doing so we continue to honour God.

A recent investment was a CT scanner from **Siemens Healthineers** following recommendations from team members. Such a large investment cannot be taken lightly and certain questions must be addressed in order to ascertain the benefits. Do we have the volume of patients to warrant it? How long to see a return on the outlay? We were able to finance this cutting-edge instrument for the benefit of our team and patients due to maintaining a strict budget and thanks to God. **Siemens Healthineers** has impressed us with their professionalism throughout the process; in consultation with us, the client; in their relationships with each other and in the sustainability, which results from joint solutions.

A hospital's reputation does not grow overnight and we have been developing ours for over a century now. We are known and respected both locally and in the neighbouring countries of Laos and Burma. Indeed 30% of patients come from abroad and we expect to maintain a steady increase. This growth in patient numbers will enable us to continue building on our foundation of care and become a better and more sustainable hospital moving into the future.

ARTIS icono biplane

Medical Imaging

Mobile C-Arms

We have a broad lineup of Mobile C-arms that combine excellent image quality with unique features designed for easy operability, versatility and efficiency.

Molecular Imaging

We provide PET/CT, SPECT and hybrid SPECT scanners (SPECT/CT) to help clinicians diagnose, treat, and monitor disease more confidently.

Advanced Therapies

We empower innovative therapy concepts and minimally invasive procedures with our angiography systems, mobile C-arms, and hybrid OR's for image guided therapy.

Ultrasound

Our portfolio of ultrasound machines, sonography equipment and advanced technologies address your clinical requirements offering the versatility and functionality you need for confident diagnosis.

"Making Artificial Intelligence work For Us"

Asawin Puwatanasan, M.D.
Assistant Hospital Director,
Bangkok International Hospital

A Hybrid Operating Room is a surgical theatre equipped with advanced medical imaging devices e.g. robotic C-arms, CT scanners. At Bangkok International Hospital (BIH), we strive to provide our patients with the highest quality of care where "Patient Safety" is the cornerstone. We are moving towards surgical techniques that are associated with less pain, smaller size of incisions, lessen wound healing time, a shorter hospital stay and fewer complications. These surgical techniques are called Minimally Invasive Surgeries or MIS. With the improvement of imaging system integrated with an artificial intelligence (AI), a robotic imaging system has been introduced to ensure that the MIS will be performed with great accuracy, precision and safety. The high quality and precised images allow surgeons to visualise the 3-D images intra-operatively e.g. in Orthopaedic surgery, Spine surgery, Vascular surgery. The robotic imaging system also possesses memory function that is automatically synchronized with the operating table.

There are more than 5,000 surgical robots were used in more than 1 million procedures worldwide in 2018. In terms of Orthopaedic surgery at BIH, we are one of the first hospitals in the country that have started using the new Robotic X-ray system to offer real-time verification of surgical implants and instruments positioning which will potentially lower complication rates, and improve the outcomes of procedures.

The technology associated with surgical robots and AI will continue to improve as the stored data is analysed, revised and developed for future processing with the aim to maximise the best possible outcomes for our patients.

In this time of digital disruption, I strongly believe that bringing a human element with high human touch to a high-tech world is more important than ever. People need to feel trusted, supported and understood by their healthcare providers – all these still require a seamless communication by making a human connection.

We should not risk letting technology get in the way of that goal. A sincere service with personalised touch will continue to require a "person" to fulfill the 360-degree loop of human interaction in healthcare. The technology available today should be seen as an instrument to assist surgeons to achieve the zero complication rates in operating theatres.

THE JCI ACCREDITED HOSPITALS IN THAILAND 2019

"This is not only due to strong leadership, but also teamwork."

"Laboratory Instruments are an integral part in ensuring our work is managed efficiently. We demand accuracy and speed and therefore we require top quality laboratory instruments.

Ramkhamhaeng Hospital is both a heart center and a stroke center. Often a doctor will need a quick lab result, within 30 minutes of a patient arriving at the center. **Atellica by Siemens Healthineers** can respond – taking only 11 minutes to get a result. Furthermore, **Atellica**'s working potential enables the laboratory to work alongside the emergency room resulting in a laboratory which is open 24 hours. With doctors obtaining faster lab results, patients can be treated

SOMJIT JINAPUK, *Medical Technologist. Chief of Laboratory Department Ramkhamhaeng Hospital*

faster - meaning the chance of a successful outcome is increased.

Quality systems are continuously monitored and received consistently good scores in certification. "This is not only due to strong leadership, but also teamwork."

"Our patients are at the heart of what we do and their care is of the utmost importance."

"Our patients are at the heart of what we do and their care is of the utmost importance. Point of Care guidelines are vital in establishing a standardized control on testing of patients. Thailand did not have a national policy to meet these guidelines hence the Ministry of Public Health, realizing the importance of such a control, drafted the Thailand National Guideline (POCT) to ensure our hospital, and others around the country, meet international standards.

Middleware software has been invaluable in safeguarding POCT guidelines. With a number of staff in the system, not all at the same level of training, it is imperative that only able users

DR. JATUPON KRONGVORAKUL, M.D.
Head of General Clinical Pathology laboratory Department of Pathology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University.

are able to access certain instruments. Middleware employs user management to lock in only those who have received the specific training, thus ensuring that international standards are continuously met and maintaining the POCT system."

Laboratory Diagnostics

Laboratory Diagnostics

We offer a broad spectrum of immunoassay, chemistry, hematology, molecular, and urinalysis testing systems, in conjunction with automation, informatics and services to serve the needs of laboratories of any size.

Point of Care

We provide Point-of-Care solutions that are designed to provide immediate, convenient and easy-to-use diagnostic testing. From the ED to the physician's office, clinical management decisions can be made immediately and result in improved patient safety, clinical outcomes, and overall patient satisfaction.

Molecular Diagnostics

We provide molecular testing solutions for the detection of major infectious diseases; monitoring of treatment efficacy; and selection of individualized treatment options. Our one-step syndromic real-time PCR products simultaneously detect viruses, bacteria, fungi, and parasites,allowing molecular laboratories to lower cost and drive better outcomes.

Customer Services

We are with you every step of the way – may it be today or in the future, wherever and whenever you need us. We support you with a complete range of innovative services. Services that you can rely on. Services that support your long-term business success.

Siemens Healthineers Thailand
Siemens Healthcare Limited
Charn Issara Tower II, 26th Floor
2922/292 New Petchburi Road Huaykwang, Bangkok 10310
Phone +667154006
Siemens-healthineers.com