

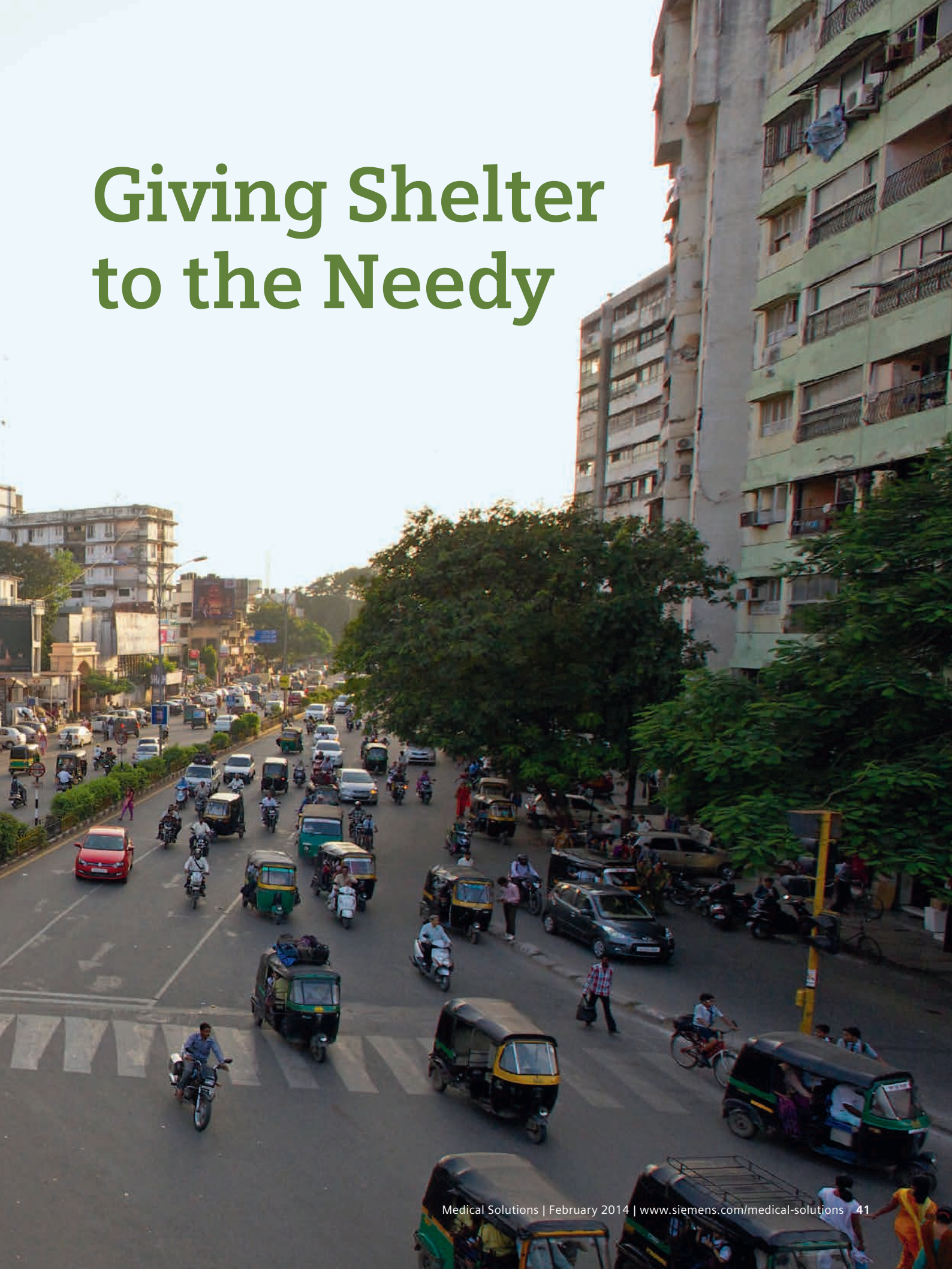


Surat

Population

4.5 million

Giving Shelter to the Needy



The Aatmajyoti MRI Center in West India provides magnetic resonance imaging (MRI) scans at less than half the market price, while the poor are examined for free. Interestingly, this center is not only viable, but also financially supports the adjoining charitable dialysis center.

Text: Swati Prasad Photos: Arush Mayank



Aatmajyoti MRI Center is run by Surat Manav Seva Sangh, a charitable trust popularly known as Chhanyado, which means 'to give shelter'.

Surat – known for its diamond industry the world over – is quite a dazzling city. The second largest in the state of Gujarat in West India, it has clean, broad roads, plenty of shopping malls and high rises. But what's even more impressive is its history, and the fact that it knows how to spring back from crises – such as in 1994, after the outbreak of plague, and after the August 2006 floods.

In one corner of the Government Medical College and New Civil Hospital campus is the Aatmajyoti MRI Center, run by Surat Manav Seva Sangh, a charitable trust popularly known as Chhanyado, which means 'to give shelter' in Gujarati.

Surat has eight other MRI centers with 1.5 Tesla systems. But the Aatmajyoti MRI Center is different. Take the case of Peer Mohammed Hussain Miyan, a man in his sixties. He walks into the office of Bharat Shah, President of Surat Manav Seva Sangh. Miyan can't afford the fee of INR 2,500 (approximately US\$ 40) for his daughter-in-law Yasmeen's magnetic resonance imaging (MRI) scan. Yasmeen, 28, is suffering from acute backache and is unable to walk. Private centers charge INR 6,000 (approximately US\$ 96) or more for a similar MRI investigation. Miyan and his son Mohammed Arif

Ghulam Abbas Sheikh embroider sarees and together make only INR 6,500 (US\$ 104) per month. For them, even INR 2,500 is a huge sum.

It's a Friday. Within a minute, Bharat Shah has asked Miyan to bring Yasmeen on Monday for the exam. The scan would be done for free. Miyan and Sheikh go back home happy.

"Even after 65 years of independence, 40 percent of India lives hand to mouth. How are they supposed to afford a INR 6,000 MRI scan?" questions Bharat Shah, who is a practising chartered accountant and also started a real estate firm before he decided to work for the poor.

The trust provides free MRI scans to patients who are below poverty line (BPL), to patients over 70 years of age, those who are economically poor, and through the New Civil Hospital Surat, prisoners, patients who work in the police department, and patients whose medical cases are of special academic interest to the Government Medical College.

Need for Affordable MRI Scans

BPL is an economic benchmark and poverty threshold used by the Indian government to identify the poor in

need of government aid. Each state in India has its own criteria to identify the poor.

According to the Planning Commission of India, those who earn below INR 816 (US\$ 13) per capita per month in rural areas and INR 1,000 (US\$ 16) per capita per month in cities fall into this category¹. Although the Planning Commission says only 22 percent of Indians live below the poverty line, the definition has often been criticized². "With rising inflation, a family with a monthly income of INR 10,000 (approximately US\$ 160) finds it difficult to make ends meet," says Bharat Shah. Miyan's is one such household, although it isn't a BPL family. Thus, many non-BPL patients are getting additional benefit from this center.

Moreover, income-based poverty lines consider the bare minimum income to provide for food. They do not account for essentials such as healthcare and education. Since 85 percent of the Indian population does not have medical insurance, many middle-class Indians get dragged into poverty as they often sell their assets to meet medical expenses³. Or, they choose not to get treated.

Chhanyado was born from this need. Set up in 1998, Chhanyado started out by feeding the poor who came to the

New Civil Hospital for treatment. The trust then started a medical store that sold subsidised medicines and opened a dormitory for relatives and carers of patients. The 800-bed New Civil Hospital takes patients from a radius of 250 to 300 kilometers around Surat. Most patients belong to poor and middle-class families living in Gujarat and neighboring Maharashtra.

In 2007, the medical superintendent of the New Civil Hospital, Dr. Mahesh Kumar Vadel, spoke to Bharat Shah about setting up an MRI facility within the hospital campus. Since the Government Medical College was offering a postgraduate course in radiology, it was imperative that the hospital have all radiology equipment, including an MRI system.

"The government gave us land for the MRI center," says Bharat Shah. The needs of the medical college and Shah's desire to do more for the needy took the form of the Aatmajyoti MRI Center in 2008. The next step was to study the market and look at various MRI systems.

Bharat Shah realized that players who were charging INR 6,000 or more for an MRI investigation were factoring in capital expenditure and operating costs, while keeping aside a sizeable sum as profits. So there was scope to offer an MRI scan at a lesser price, if return on capital employed and profits were not the key concerns.

The trust installed a Siemens MAGNETOM® ESSENZA. For Siemens, this was the first order of the 1.5 Tesla system from Asia. For Surat, this was the first 1.5-Tesla MRI system.

Surat Manav Seva Sangh signed a memorandum of understanding (MoU) with the Gujarat government, which stated that the MRI center would operate at subsidized rates and would perform free scans for certain categories of patients.

As per the MoU, the trust can charge up to INR 3,000 (US\$ 48) per scan. But Bharat Shah pegged the rate at INR 2,500. "I calculated that if we get 22 patients a day, out of which four to five get their MRI scan done for free, a charge of INR 2,500 for the remaining scans was enough for us to cover our recurring expenses such as salaries and

electricity," says Bharat Shah. For patients of the New Civil Hospital, the center charges INR 2,100 (US\$ 33.68); for children the charge is INR 1,800 (US\$ 29).

Charity Begets More Charity

The Aatmajyoti MRI Center performed a lot better than Bharat Shah's estimates. First, doctors – both in and around Surat – referred patients to the center due to the excellent image quality of the MAGNETOM ESSENZA. Second, since Aatmajyoti charged less than 50 percent of the market rate,

poor and middle-class patients preferred it to other centers for MRI scans.

Understandably, the center is always full of patients. Each day 45 to 50 patients come to Chhanyado for an MRI scan. "The ESSENZA is running from seven in the morning to mid-night," says Bharat Shah. Fortunately, the system has not seen many down-times in the last five years. "We are very happy with the service. The repairs get done at night," says Bharat Shah.

This, according to Bharat Shah, probably has something to do with the blessings of the poor. "People come ▶



"Even after 65 years of independence, 40 percent of India lives hand to mouth. How are they supposed to afford a INR 6,000 MRI scan?"

Bharat Shah, President of Surat Manav Seva Sangh, Surat, India



Per day, around 50 patients come to the center for an MRI scan (above) and around 40 for dialysis (below).

here expecting they will get a scan done for INR 2,500. If our system does not work, they have to fork out more than twice that amount somewhere else. Their blessings ensure our MRI system does not shut down," he says.

Since its inception in May 2008, the Aatmajyoti MRI Center has performed 65,366 MRI scans, out of which 6,802 have been for free (figures up to September 30, 2013). Vinay Shah, MD, radiologist at the center explains: "We do around 30 to 40 percent brain MRI scans, 30 percent spine scans, 10 to 15 percent knee and shoulder scans; the remaining are scans of ankles, wrist, abdomen, pelvis, and so on."

"The Aatmajyoti MRI Center is achieving more than breakeven on operating costs," says Vinay Shah. From the surplus of the MRI center, the trust has started a dialysis center.

"The total cost of a dialysis session is around INR 1,050 (US\$ 17). We provide it here for only INR 350 (US\$ 5.6), along with the dialyzer, blood tube, and the disposable kit," says Vinay Shah. The center performs 40 dialyses per day, of which nearly 25 are done free of charge.

Sadiqbhai M. Shaikh, a 42-year-old driver who has been on dialysis for the last 18 months says: "For someone like me, this center is a blessing. At this subsidized rate, I can afford dialysis, return to my job, and earn a living."

The center does around 12,500 dialyses annually. "The dialysis center faces a shortfall of INR 11 million (US\$ 176,421) each year. Of this, nearly INR 4 to 5 million (US\$ 64,159 to 80,214) comes from the Aatmajyoti MRI Center. This is a big contribution," says Vinay Shah. The remaining is met through donations.

Spreading More Good

Since the beginning, the trust has seen no shortage of philanthropists. The walls of the MRI center are adorned with photographs of donors. Often patients look for donors they might know. That's because donors get coupons for the donations they make. For instance, if someone has made a donation of INR 500,000 (approximately US\$ 7,960) towards the MRI center, the donor will get 50 coupons worth INR 500 (US\$ 8) each with a validity of ten years. The

Superior Scans for Less Than Half the Market Rate

A magnetic resonance imaging (MRI) investigations in India costs INR 6,000 (US\$ 96) or more at private MRI centers, a sum that is prohibitive for the poor and the lower middle-class. Since 85 percent of Indians do not have medical insurance, a majority of the economically weaker sections avoid going for an MRI scan. Often, they sell off their assets to organize funds for medical treat-

ment. Surat Manav Seva Sangh, a charitable trust in Surat, Gujarat, invested in a MAGNETOM® ESSENZA 1.5-Tesla system which provided MRI scans at less than half the market rate in West India. The very poor and certain other categories of patients can get their scan done for free. This way, high-end MRI investigations are within the reach of the very poor and the middle-class.

donor can give these coupons to the needy. Chhanyado has extended the coupon scheme to the medical store, the laboratory, as well as the dialysis center – with each unit having different coupons.

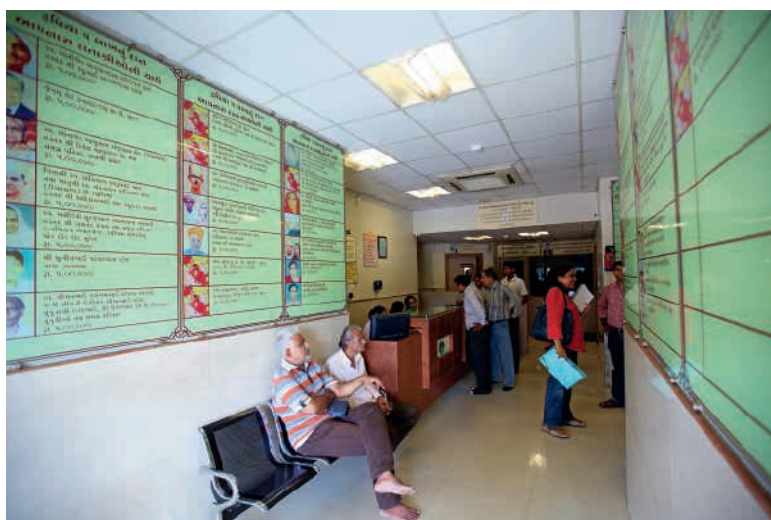
But more than the rich philanthropists, Shah appreciates donors who come from economically weak backgrounds, such as a 15-year-old boy from Amroli, a city near Surat, who had lost his mother a few years back. When his school principal announced the school would collect money for Chhanyado, the boy took up a job at a restaurant to earn INR 200 (US\$ 3.2), which he donated to the trust. The boy wanted to be part of the good work he had personally experienced when his mother was admitted to the New Civil Hospital.

Bharat Shah tells a similar story of an old lady – a daily wage earner – who came from Bardoli, a city 33 kilometers away from Surat. She handed Bharat Shah a bag with lots of loose change. She wanted Bharat Shah to use the money to sponsor one day's meal at the hospital. Eighteen months back, when her husband was admitted to the New Civil Hospital, she ate there every day. After that, the couple saved some of their meager earnings to give back to Chhanyado.

Bharat Shah now wants to step up the activities of the trust. Chhanyado is setting up a polyclinic in the Parvat Patiya area of Surat, which will offer all services at a concessional rate. It also has plans to set up a cardiac center, for which it is seeking government aid.

Besides this, Bharat Shah is awaiting Gujarat government's approval for more land at the New Civil Hospital to set up another MRI system. He wants to invest in a 3-Tesla MRI system, so that patients don't have to seek an appointment four to five days in advance due to the heavy rush at the center.

Bharat Shah is looking forward to more support from the government in the area of healthcare. He feels India must follow the Canadian model. In Canada, healthcare is delivered through a publicly funded healthcare system, which is mostly free at the point of use and has most services provided by private entities. "To begin with, all government hospitals in India at least should have the latest medical equipment. If not that, at least every state in India must have a Chhanyado," says Bharat Shah. ■



The walls of the MRI center are adorned with photographs of donors. They get coupons for medical services in return which they can give to the needy.

➔ www.siemens.com/magnetom-essenza

¹ http://planningcommission.nic.in/news/pre_pov2307.pdf. Last accessed January 23, 2014

² <http://indiatoday.intoday.in/story/poverty-line-planning-commission-tendulkar-methodology-congress/1/296149.html>. Last accessed January 23, 2014

³ <http://www.dnaindia.com/health/1891509/report-health-insurance-in-india-still-remains-untapped-market>. Last accessed January 23, 2014

The statements by Siemens' customers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" setting and many variables exist there can be no guarantee that other customers will achieve the same results.

© 2014 by Siemens AG, Berlin and Munich,
All Rights Reserved

Publisher:

Siemens AG
Healthcare Sector
Henkestrasse 127,
91052 Erlangen, Germany

Responsible for Contents:
Michael Sigmund

Director, Customer Communication:
Silke Schumann

Chief Editor: Tanja Berbalk

Production: Norbert Moser

All at: Henkestrasse 127,
91052 Erlangen, Germany

Phone: +49 9131 84-7529,
Fax: +49 9131 84-4411

email: editor.medicalsolutions.healthcare@
siemens.com

Design and Editorial Consulting:
independent Medien-Design,
Munich, Germany

Art Direction: Horst Moser

Layout: Claudia Diem, Heidi Kral,
Irina Pascenko

Editorial Coordination: Claudia Diem

Photo Editor: Florencia Serrot

All at: Widenmayerstrasse 16,
80538 Munich, Germany

Editorial Consultation, Content and
Journalist Network:
Primafila AG, Hornbachstrasse 50,
8034 Zurich, Switzerland
Viviane Egli, Roman Elsener,
Simon Froehling

Copy Editing:
Sheila Regan, UNIWORKS,
Kirchenstrasse 10,
91054 Erlangen, Germany

PrePress:
Reinhold Weigert, Typographie und mehr ...
Schornbaumstrasse 7,
91052 Erlangen, Germany

Printer: G. Peschke Druckerei GmbH,
Schatzbogen 35,
81829 München, Germany

Note in accordance with section 33 Para.1
of the German Federal Data Protection Law:
Dispatch is made using an address file which
is maintained with the aid of an automated
data processing system.

We remind our readers that when printed,
X-ray films never disclose all the information
content of the original. Artifacts in CT, MR,
ultrasound, and DSA images are recognizable
by their typical features and are generally
distinguishable from existing pathology. As
referenced below, healthcare practitioners
are expected to utilize their own learning,
training, and expertise in evaluating images.

Partial reproduction in printed form of indi-
vidual contributions is permitted, provided
the customary bibliographical data, such as
author's name and title of the contribution as
well as date and pages of Medical Solutions,
are named. The editors request that two
copies be sent to their attention. The consent
of the authors and editors is required for the
complete reprint of an article. Manuscripts
submitted without prior agreement as well
as suggestions, proposals, and information
are always welcome; they will be carefully
assessed and submitted to the editorial con-
ference for attention.

Medical Solutions on the Internet:
www.siemens.com/medical-solutions

DISCLAIMERS: Practice of Medicine: "The information presented in this magazine is for illustration only and is not intended to be relied upon by the reader for instruction as to the practice of medicine. Healthcare practitioners reading this information are reminded that they must use their own learning, training, and expertise in dealing with their individual patients. This material does not substitute for that duty and is not intended by Siemens Healthcare to be used for any purpose in that regard." **Contrast Agents:** "The drugs and doses mentioned herein are consistent with the approved labeling for uses and/or indications of the drug. The treating physician bears the sole responsibility

for the diagnosis and treatment of patients, including drugs and doses prescribed in connection with such use. The Operating Instructions must always be strictly followed when operating your Siemens system. The source for the technical data are the corresponding data sheets." **Trademarks:** "All trademarks mentioned in this document are property of their respective owners." **Results:** "The outcomes achieved by the Siemens customers described herein were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that others will achieve the same results."

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this brochure are available through the Siemens sales organization worldwide. Availability and packaging may vary by country and is subject to change without prior notice. Some/All of the features and products described herein may not be available in the United States.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features which do not always have to be present in individual cases.

Local Contact Information

Asia/Pacific:

Siemens Medical Solutions
Asia Pacific Headquarters
The Siemens Center
60 MacPherson Road
Singapore 348615
Phone: +65 9622-2026

Canada:

Siemens Canada Limited
Healthcare Sector
1550 Appleby Lane
Burlington, ON L7L 6X7
Canada
Phone: +1 905 315-6868

Siemens reserves the right to modify the design, packaging, specifications, and options described herein without prior notice.

Please contact your local Siemens sales representative for the most current information.

Note: Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

Europe/Africa/Middle East:

Siemens AG, Healthcare Sector
Henkestr. 127,
91052 Erlangen
Germany
Phone: +49 9131 84-0

Latin America:

Siemens S.A., Medical Solutions
Avenida de Pte. Julio A. Roca No 516, Piso 7
C1067ABN Buenos Aires
Argentina
Phone: +54 11 4340-8400

USA:

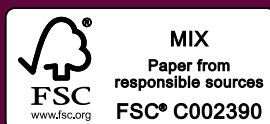
Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway
Malvern, PA 19355-1406
USA
Phone: +1 888 826-9702

Global Siemens Headquarters

Siemens AG
Wittelsbacherplatz 2
80333 Munich
Germany

Global Siemens Healthcare Headquarters

Siemens AG
Healthcare Sector
Henkestrasse 127
91052 Erlangen
Germany
Phone: +49 9131 84-0
www.siemens.com/healthcare



ClimatePartner°
climate neutral

Print | ID: 53152-1401-1003

Order No. A91CC-00060-M1-7600 | Printed in Germany
CC 1790 021427.0 | ISSN 1614-2535 | © 02.14, Siemens AG

www.siemens.com/medical-solutions