

# Promoting better diagnostic services by supporting the wider adoption of digital and network technologies in healthcare

As a pioneer of radiographic film in Japan, Konica Minolta has a long track record of offering diagnostic imaging technology and other products and services that respond to healthcare field. In recent years, we have contributed to the realization of faster, more accurate diagnostic services by offering a comprehensive selection of devices, systems, and IT services that promote the wider adoption of digital and network technologies in healthcare.

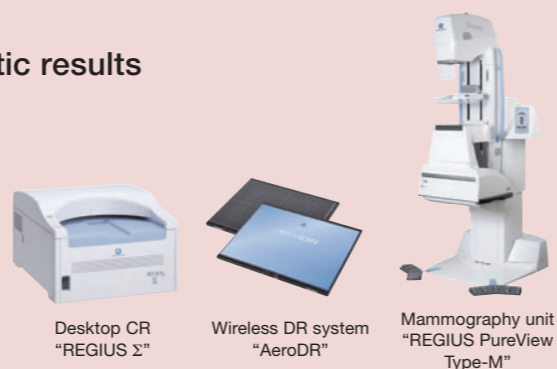
## Products

### Digital imaging systems for more accurate diagnostic results

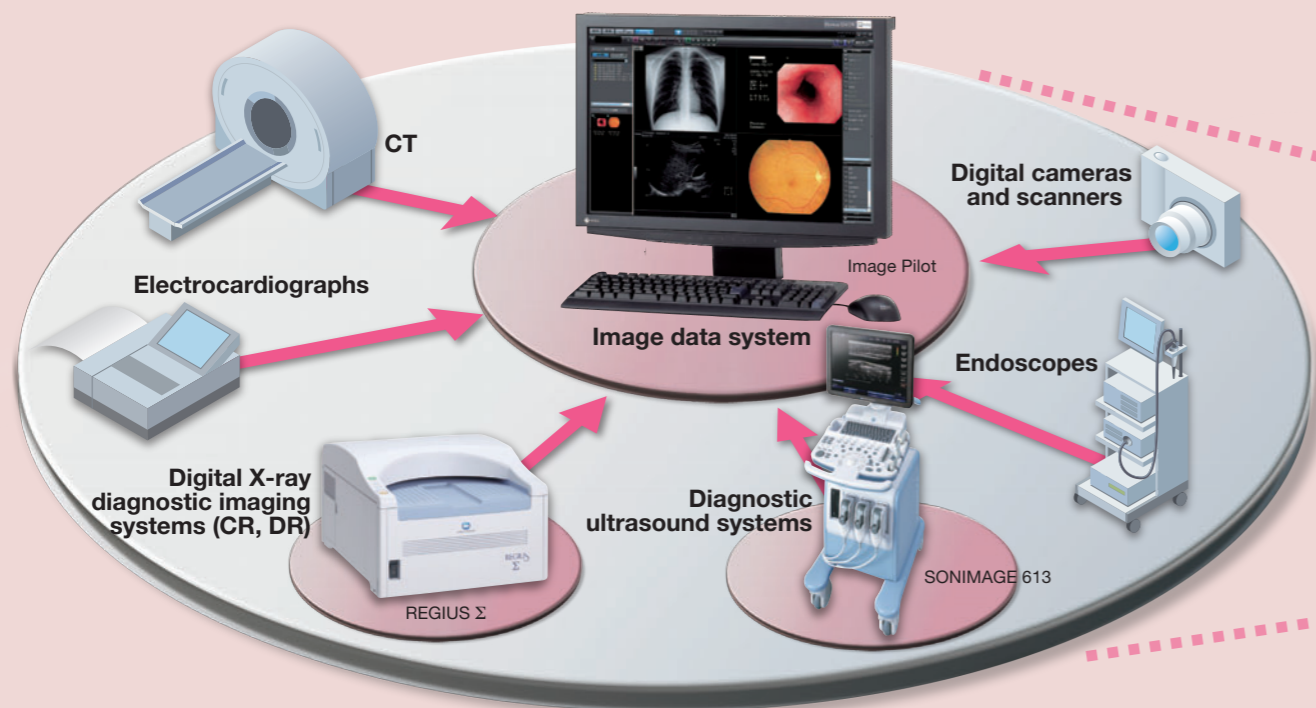
Mainly with its digital X-ray diagnostic imaging systems, as well as mammography, ultrasound, and other cutting-edge diagnostic systems, Konica Minolta has led the digitalization of diagnostic imaging. By efficiently providing high-resolution, high-precision diagnostic images, we have helped to improve the accuracy and speed of diagnoses, thereby easing burdens on patients.

#### Principal products

- Digital X-ray diagnostic imaging systems (CR, DR)
- Digital mammography
- Diagnostic ultrasound systems
- Diagnosis medicine



# Digital Imaging System

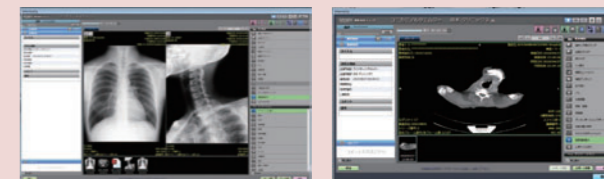


# Products

## Digital Imaging System

Medical imaging data systems that support diagnostic activities by streamlining the management and application of digital medical image data

The adoption of digital technology in medical imaging not only improves the efficiency with which the data is stored and managed, it also brings various forms of innovation to medical diagnostic settings. For example, greater diagnostic accuracy has been obtained through the ability to enlarge or reduce images, and through access to gradation processing. Medical imaging data systems enable the retention and processing of diagnostic images. Konica Minolta provides systems capable of comprehensively managing X-ray image, CT scan, endoscopic, and other types of image data, including that generated by other companies' products. Our systems make it possible to efficiently and effectively apply medical image data.



#### Principal systems

- Medical imaging filing systems "Acies"
- All-in-one medical imaging information workstations "Image Pilot"
- Diagnostic workstations
- Medical management support and service "infirmity"

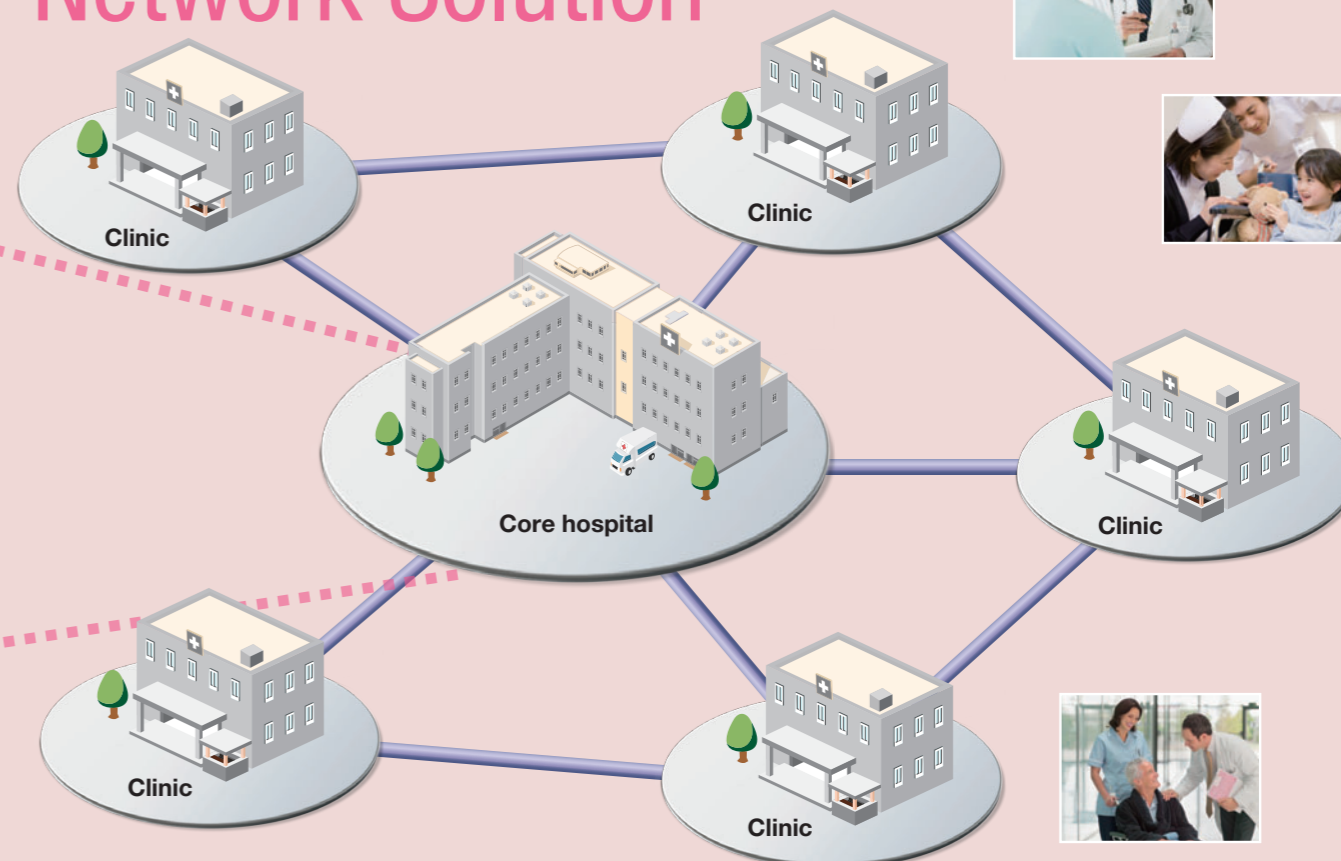
## Network Solution

"infirmity" network service incorporating cloud computing for medical data

Expectations for medical IT services employing networks are building along with advances in the application of digital technology in medical settings. Among the earliest to respond to these developing needs, Konica Minolta offers "infirmity"—comprehensive services supporting the adoption of medical network technology. Examples of "infirmity" services include remote support for diagnostic equipment, support for the sharing of information among hospitals, and the distribution of news on developments in medical regulation. Through innovations like "infirmity" we are helping to make the operational aspects of medicine smarter and more efficient.



# Network Solution



## Konica Minolta diagnostic imaging technology advancing together with increasingly sophisticated medical needs

### Products

#### High-precision, more flexible cutting-edge “AeroDR” digital X-ray system

Digital Radiography (DR) exposes patients to less radiation than does film imaging and makes it possible to display high-precision images immediately after they are taken. Until recently, however, DR posed significant usability issues in terms of the weight of the equipment and the need for power and data transmission cables.

Konica Minolta’s “AeroDR” responds to these issues through painstaking engineering that resulted in a significantly lighter system that incorporates wireless technology to eliminate data cables. “AeroDR” resolves usability issues that previously plagued DR and will help to promote the adoption of DR technology.

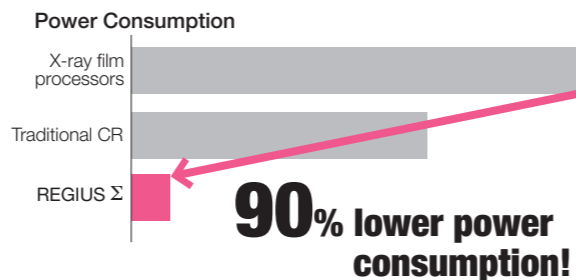


### Products

#### “REGIUS Σ”—the newest generation CR with 90% lower power consumption

Amid the accelerating application of IT in medical applications, there are growing desires among neighborhood clinics to adopt digital X-ray imaging. In response, Konica Minolta developed the compact, lightweight “REGIUS Σ” desktop CR for use in clinics.

“REGIUS Σ” emits no sound while in standby mode and poses no obstacle to medical examinations even when located in the same room. Furthermore, with power consumption of only 100VA, less than 10% that of X-ray film processors, “REGIUS Σ” is an environmentally conscious product that saves electricity and fights global warming.



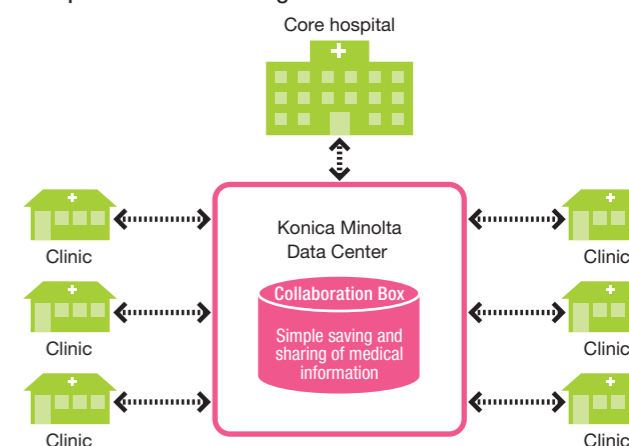
### Network Service

#### “Collaboration Box Service” helping hospitals to share medical information

Konica Minolta, as part of its “informity” network service for medical institutions, offers the “Collaboration Box Service,” which allows multiple medical institutions to share imaging data, biopsy data, report content, and other types of diagnostic information.

This system makes it possible for physicians in community clinics to consult with specialists at major hospitals, and allows specialists in different fields to share opinions while viewing the same image. To cite one example of an actual implementation, a group of nine medical institutions, including a regional core hospital, in Aomori, Japan, has adopted this system and used it to engage specialists in timely, remote consultations on how to handle neurological problems and other emergency situations.

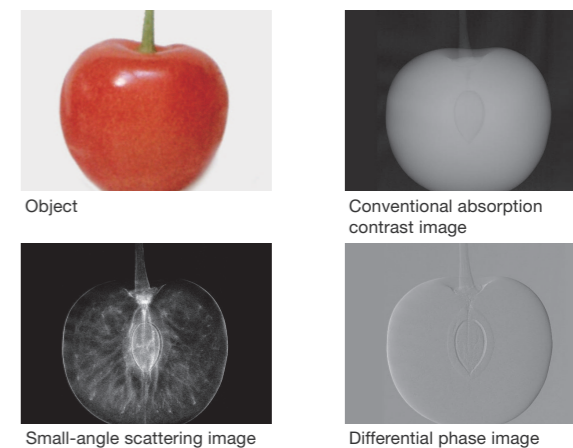
Cooperation Network Diagram



### New Technology

#### Research based on industry-government-academia cooperation promoting the development of innovative, highly sensitive X-ray imaging devices

Konica Minolta is actively working with academic and government research institutes in the pursuit of R&D. For example, in recent years, we have been collaborating with partners, including the University of Tokyo and the University of Hyogo, to develop an innovative X-ray imaging device that employs X-ray refraction. This device uses the Talbot-Lau interferometer to produce X-ray images with nearly 1,000 times the sensitivity of conventional X-ray technology. Images with that degree of sensitivity make it possible to identify very early-stage breast cancer, cartilage abnormalities due to rheumatoid arthritis, and other conditions that so far have evaded simple detection.



A single exposure produces three types of data including that equivalent to a conventional X-ray image (upper right). These sample images are of a cherry.