



What is DICOM?

DICOM is a global Information-Technology standard that is used in virtually all hospitals worldwide. Its current structure, which was developed in 1993, is designed to ensure the interoperability of systems used to:

Produce,	Store,
Display,	Process,
Send,	Retrieve,
Query or	Print

medical images and derived structured documents as well as to manage related workflow.

Who needs DICOM?

Hospitals, clinics, imaging centers and specialists. By purchasing only equipment and information systems that conform to the DICOM Standard, you can ensure that these tools will work together to produce, manage and distribute your images regardless of your previous, current or future vendors.



Manufacturers of imaging equipment and imaging information systems. DICOM conformance ensures that every medical imaging facility is a potential customer, because your equipment can work with any workflow or electronic health record systems.



Manufacturers of peripheral equipment (e.g., film scanners, printers, computer monitors and workstations, image archives). DICOM conformance ensures that your products can work with all current or future imaging modalities and related peripheral equipment – regardless of vendor.

DICOM's purpose is to meet each of these diverse requirements.

Who Benefits from DICOM?

Physicians have better access to images and reports when DICOM standards are in place. This allows them to make a faster diagnosis, potentially from anywhere in the world.



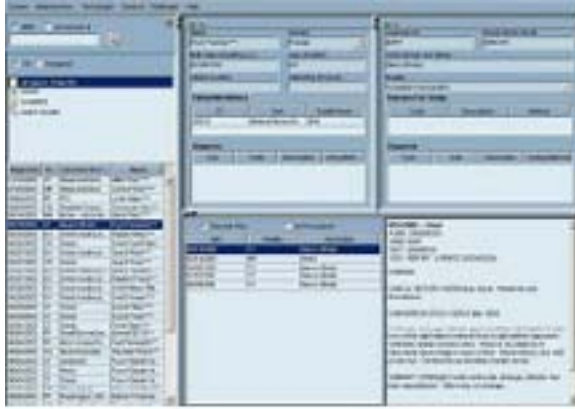
Patients can potentially obtain faster and more effective care when the DICOM Standard is used to send their information through the healthcare enterprise.

Payers benefit from this faster and more effective process through potentially lowered cost of care.



Is DICOM relevant to Electronic Health Record (EHR) Systems?

DICOM will be required by all EHR systems that include imaging information as an integral part of the patient record.



Which medical specialties rely on DICOM?

DICOM is used in:

- radiology · breast imaging
- cardiology · radiotherapy
- oncology · ophthalmology
- dentistry · pathology
- surgery · veterinary
- neurology · pneumology

How does DICOM keep up with advances in technology?

Over 750 technical and medical experts participate in more than 20 active DICOM working groups. As a consequence of their efforts, the DICOM Standard is up-

dated four to five times each year and re-published approximately once every year or two.

Does DICOM work with other standards-development organizations?

Absolutely! A joint DICOM/HL7 working group has existed for many years to:

- Contribute to the development of the HL7 Reference Information Model,
- Propose extensions to the DICOM and HL7 standards where appropriate and
- Develop information linkages between the DICOM and HL7 standards.

DICOM is also an integral part of **Integrating the Healthcare Enterprise (IHE)**, which is an initiative to help both users and vendors develop approaches for integrating various medical imaging and information systems.

The DICOM Standards Committee has an active liaison to **ISO's** TC 215. In fact, a joint DICOM/ISO working group produced a new standard enabling Web Access to DICOM Objects. The DICOM Standard is expected to become an ISO reference standard by the end of 2005. It has been a European Standard (**EN**) for years.

Wherever possible, DICOM utilizes relevant parts of other mature standards such as **LOINC, SNOMED, JPEG, MPEG, BI-RADS, TCP/IP** and other Internet Standards.

MORE ABOUT DICOM

The **DICOM Standard** is a product of the DICOM Standards Committee and its many international working groups. Day-to-day operations are managed by the National Electrical Manufacturers Association (NEMA), which holds the copyright to the Standard.

The **DICOM Standards Committee** consists of approximately:

- 25 – 30 Producers (companies)
- 10 – 12 User organizations (e.g., professional societies) with thousands of members and
- 6 – 8 General Interest members (e.g., government agencies or trade associations).

For more information, please visit:

<http://DICOM.nema.org>

The official Dicom website gives you:

- A **free** download of the DICOM Standard
- Directions for ordering a **paper copy** of the Standard
- A list of **DICOM members**
- Details regarding **DICOM's strategic plan**
- Just about anything you need to know about DICOM.