

# Making the connection to collaborate

Radboud university  
medical center

**Nijmegen, the Netherlands**

**Key facts**

- Achieves its mission “to have a significant impact on healthcare” through care, education and research
- Collaborates with other hospitals via an IHE standards-based Health Information Exchange network using XDS and XCA-based connections
- Epic EHR integration means clinicians can easily and efficiently consult information from other caregivers
- Participates in regional and national initiatives to help maintain high quality, support information exchange and promote care collaboration

A patient in your network is diagnosed with a late-stage adenocarcinoma in the upper lobe of the right lung. The right treatment plan calls for specialized input from several clinical disciplines. But how will caregivers across the network be able to help the patient quickly and efficiently in the electronic health record? Sharing clinical information between systems isn't as easy as you would expect.

To support its mission of connecting care and driving care innovation, Radboudumc had a need to enhance the exchange of clinical information between referring institutions and their Epic EHR. The Radboudumc team opted to build a smart link between their Philips Interoperability Solution and Epic systems. Physicians can now see information from referring institutions in Epic,

and patients can give their consent to sharing their information through Radboudumc's patient portal. With the Philips Interoperability Platform in place, Radboudumc is able to exchange clinical information with other healthcare providers in the network through standards-based interoperability, facilitating care collaboration without jeopardizing patient confidentiality.

# Laying the groundwork for interoperability

True interoperability between information systems paves the way for effective, efficient care collaboration and growth by allowing patient information to be exchanged and accessed across multiple care settings – whenever and wherever this information is needed.

**Radboudumc**

## Use case 1:

Publish patient summaries, images and radiology reports on the Philips Interoperability Platform to share this information with other healthcare facilities in the region.

### How the systems securely communicate:

- As an XDS document source, Epic publishes C-CDAs using ITI-41
- XDS documents are then registered into the XDS registry using ITI-42
- The XDS registry then checks the validity of the XDS metadata
- If the metadata is valid, the registration is accepted

## Use case 2:

View documents and images published by other healthcare facilities in the Radboudumc environment through the Philips Interoperability Platform.

### How the systems securely communicate:

- XDS document consumer queries the XCA gateway (ITI-18) for XDS documents
- The connected registry (ITI-18) and other connected XCA gateways (ITI-38) are then queried
- To retrieve the documents, a request is sent to the XDS repository (ITI-43) or the connected XCA gateways (ITI-39)

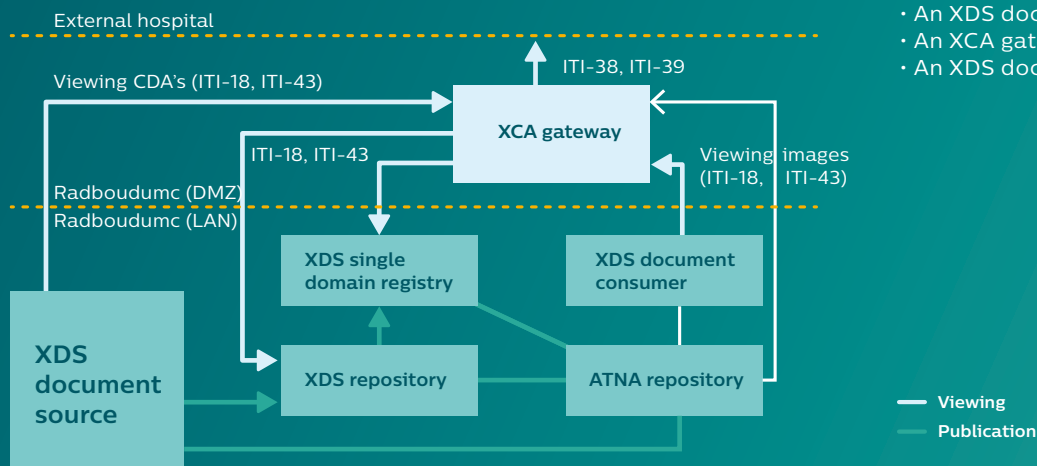
Epic information that is shared within the region is exchanged in the form of HL7V3 CDA documents throughout the Health Information Exchange network.

## One infrastructure to promote collaboration

The Philips Interoperability Platform establishes flows of information between the Epic and Radboudumc environments – bringing the right information to the right people at the right time.

This XDS infrastructure consists of:

- An XDS single domain registry
- An XDS repository
- An ATNA repository
- An XDS document consumer
- An XCA gateway
- An XDS document source (Epic)





# Simple and secure information exchange



## **Raising the standard of care through IT**

Radboudumc believes that making the best use of the data in the electronic health record (EHR) helps its medical professionals deliver excellent care. A clinical information exchange strategy based on open standards such as IHE XDS unlocks that data. Our standards-based interoperability solution empowers caregivers across the network to share and work with all types of documents – not just images. By gathering input from multiple sources, they can reach informed decisions on what's right for the patient.



## **Preparing for the future now**

Radboudumc's long-term goal is to stay at the forefront of interoperability by exchanging structured information which can be read by humans but also processed and reused by machines. To eliminate redundancy of information and move toward a 'single source of truth' – the electronic patient dossier – the Philips Interoperability Platform is designed to allow users to retrieve documents from the Epic on-demand document (ODD) source component.



## **Designed around patient consent**

Healthcare organizations such as Radboudumc must always handle patient information in a way that assures high levels of security and privacy, while fully respecting patient consent. Against this background, the interoperability platform delivered by Philips Interoperability Solutions is designed around explicit and specific patient consent. This practice helps maintain control over the entire chain within which information can be shared.

The solution is also designed to give IT managers clear peace of mind, with a component which enables accountability by monitoring and storing all relevant activity within a Health Information Exchange, keeping a record of who accessed what information and when. These elements work effectively with Radboudumc's internal patient identifier system to enhance data security – bringing people and data together securely.



Results are specific to the institution where they were obtained and may not reflect the results achievable at other institutions.

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