

## RAYCARE CONNECTIVITY

This paper explores the integration of oncology information system RayCare\* between hospital information systems to support a complete view of the patient's data for clinicians.

### **DESIGNED FOR CONNECTIVITY**

Information systems at hospitals support the collection and communication of everything from patient tracking to billing information and treatment history. Commonly, there are multiple information systems, which should seamlessly communicate with each other to support efficient and safe care by avoiding manual transfer of data between hospital systems. Furthermore, the need to repeat procedures and fix administrative errors, is both time consuming and costly. RayCare is designed for integration with external healthcare information systems, such as EPIC.

# CONNECTIVITY THROUGH DICOM, HL7 AND OTHER STANDARD PROTOCOLS

RaySearch is committed to following global industry standards such as HL7, FHIR and DICOM for exchanging data with other hospital information systems. For each release, RayCare adds additional interfaces and extends the already supported interfaces to support connectivity to other systems.

The standard interfaces which are part of RayCare can be configured through a built-in integration engine which is part of RayCare. This allows support for common integration challenges such as user-defined HL7 tables, where data encoding can differ from site to site. The integrations are run as projects where the specific integrations are specified, implemented and tested in collaboration with the customer.

#### SUPPORTED INTERFACES

## INBOUND AND OUTBOUND ADT

RayCare supports patient data interface and merges via ADT. The inbound admissions, discharges, and transfer (ADT) interface supports the transfer of patient demographics and related contacts (such as name, address, phone number, next of kin) as well as allergies and insurances. There is also an outbound ADT interface, intended for installations where the OIS is the main system of record for patient registrations. This interface allows downstream applications to receive notifications when a patient is registered or when its demographic information is updated in RayCare.

Outbound scheduling RayCare is capable of exporting information about appointments relating to the oncology workflow, so that these can be displayed in the main calendar of practitioners in the HIS.This is done using the SIU message type.

#### **OUTBOUND CHARGES/BILLING**

Billing is made easier by capturing charges for tasks performed during the oncology workflow. These charges can then be exported via HL7 to a billing system for reimbursement. The exported messages include information about the CPT charge code, modifiers, the user who performed the task, attending and referring doctor, supporting diagnosis, patient identification, and insurances.

#### **INBOUND PDF DOCUMENTS**

RayCare offers HL7 interface to import PDF documents and patient photos into the patient chart. These files can be sent in ORU^RO1 messages (observation messages). Apart from the document itself, it is possible to include metadata such as document type, document title, origin, and date. For integration with systems which do not support HL7, there is also a possibility to automatically import PDF files into the patient chart from a network disk.

#### RAYCARE PACS

Designed to unify RayCare and treatment planning systems, RayCare PACS enables oncology departments to streamline and automate image workflows using custom rules and scripting. RayCare PACS enables automated import and export of images and treatment plans, supports advanced customization rules and scripting, and works with any storage solution. All image information managed using the RayCare PACS is managed in accordance with the DICOM Conformance Statement. RayCare PACS is an easy to manage oncology DICOM-RT oncology PACS with a DICOM-RT viewer.

\*RayCare is designed to support the workflow in a modern oncology center, connecting the different oncology disciplines, boosting efficiency, and ensuring optimal use of resources. RayCare is being continually developed in collaboration with some of the leading cancer centers worldwide. It is subject to regulatory clearance in some markets.



