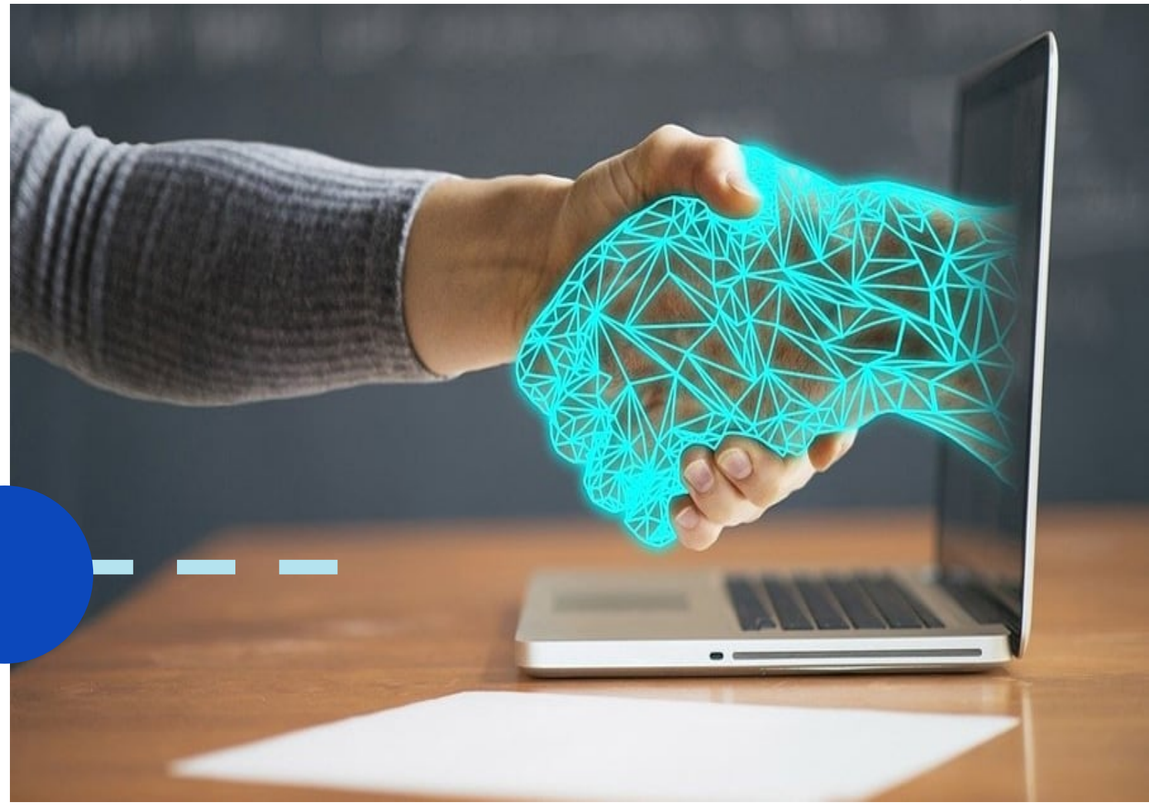
Nxtgate Connect

- Elevate, Connect, Innovate:
Powering Tomorrow's Interaction with Today's System Interface Engine



Aug 2023

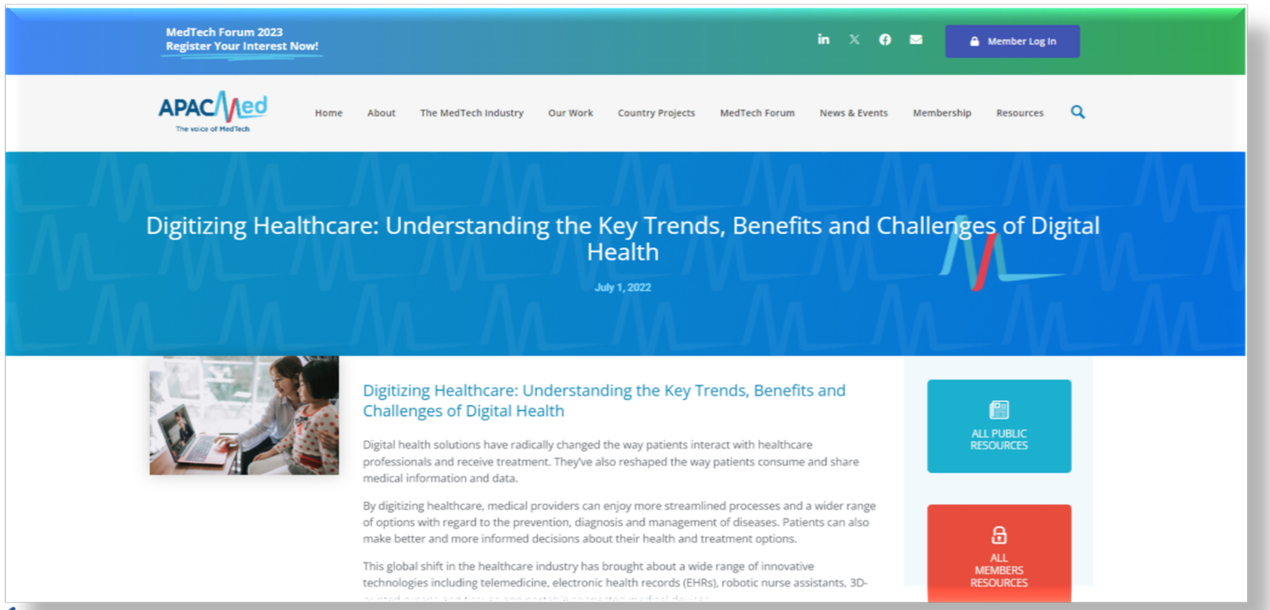
Agenda

Bringing Interoperability to Life

- ✓ Digitalizing Healthcare – “*The Good, the Bad and the Ugly*”
- ✓ The Digital Radiology Department
- ✓ Interoperability – The Ways Moving Forward
- ✓ Living Interoperability – Use Cases

Digitalizing Healthcare

"*The Good, the Bad and the Ugly*"



Source: https://apacmed.org/digitizing-healthcare/

- Benefits of Digitizing Healthcare
  - Improves accuracy of diagnosis
  - Improves quality of healthcare
  - Improves access to healthcare
  - Reduces cost of healthcare
  - Increases efficiency

Benefits

- Healthcare Digitization around the World
  - Electronic health records
  - Telemedicine
  - Wearable devices
- Challenges in Digitizing Healthcare
  - Regulations and legislations
  - Reimbursement
  - Interoperability
  - Digital literacy
  - Data security and privacy
  - Willingness to adopt technology

Proprietary Interfaces

Disconnected Workflow and Data

The Digital Radiology Department

Best of both worlds – Efficiency and Effectiveness

- ✓ The Digital Radiology Department

Clinical

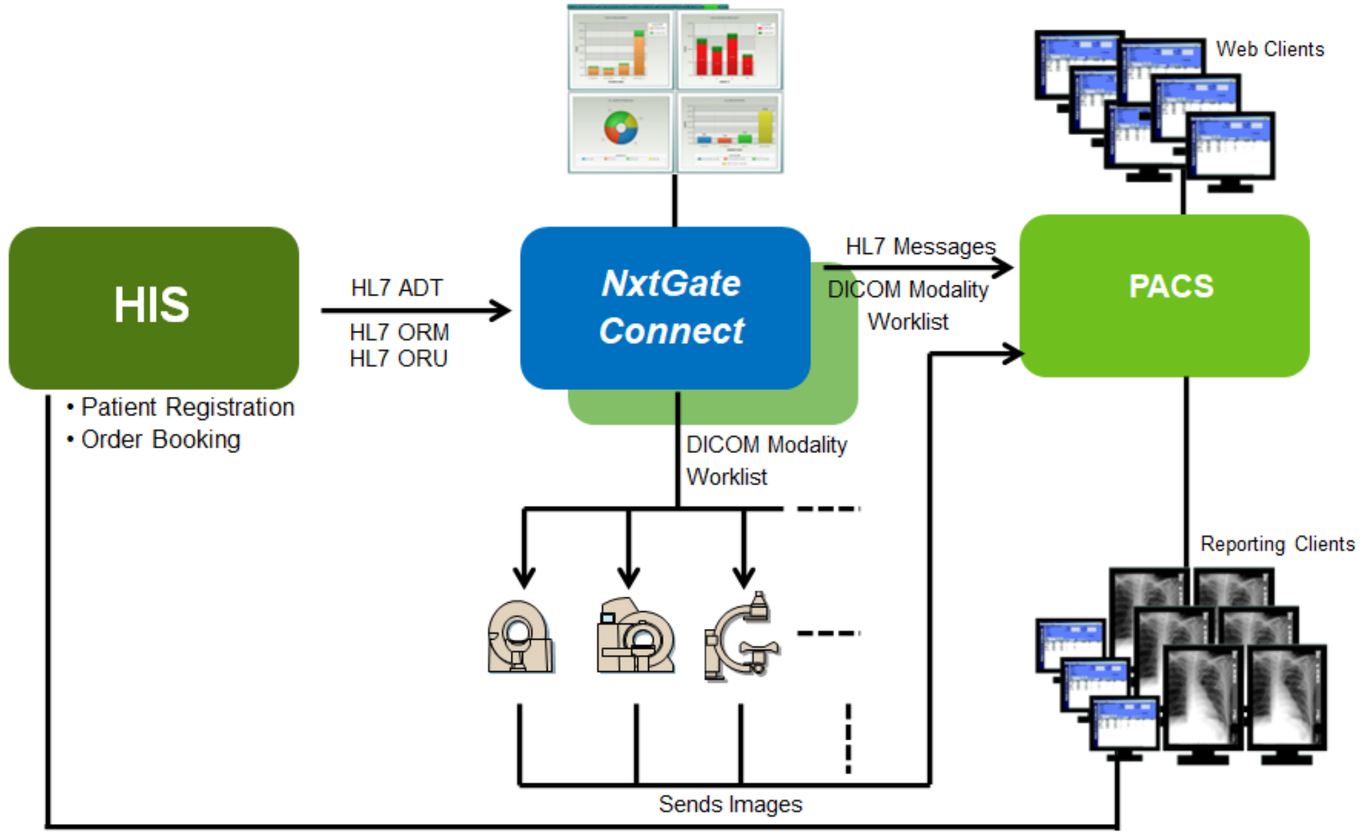
- o Replace data entry time to spending more time with patients
- o Efficient flow of data for faster outcome

Operation

- o Data connected/driven department for productivity gain
- o Data automation for efficient workflow (e.g. automated data provisioning at the modalities)

Financial

- o Connect islands-of-efficiency to maximize Return-of-Investment
- o Enhance key KPI → Report Turnaround Time



The Digital Radiology Department

Data at Your Fingertips

- ✓ From HL7 messages to real-time operational data at your fingertips

Dashboard – Instant KPI

- o Patient throughout
- o Number of examinations by modality type
- o Number of examinations in each room
- o Statuses of examinations by modality type
- o Statuses of examinations in each room

Or the next slide

Your real-time KPI Dashboard

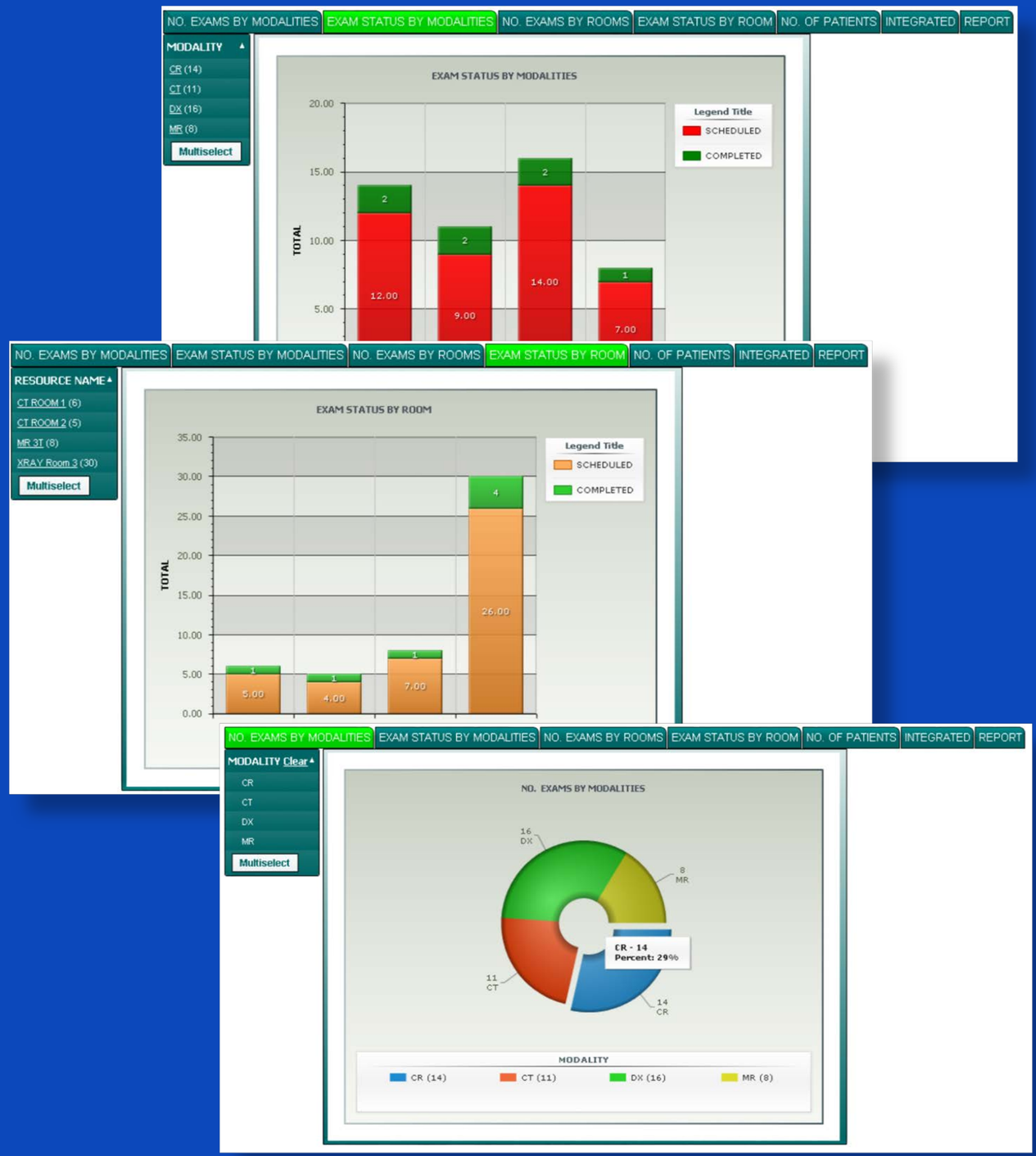
Key Operational Data At Your Fingertips

Web-based charts
on workstations and mobile devices

Displays key parameters
such as examinations by modalities or rooms etc

KPIs at your fingertips
KPI tracking using real-time data exchanges

Access from anywhere
Using personal computer or mobile devices



Interoperability – The Ways Moving Forward

Broker between Proprietary Systems and Standards-based systems

Normalization of System Interfaces

Supports proprietary and standards-based inbound and outbound system interfaces

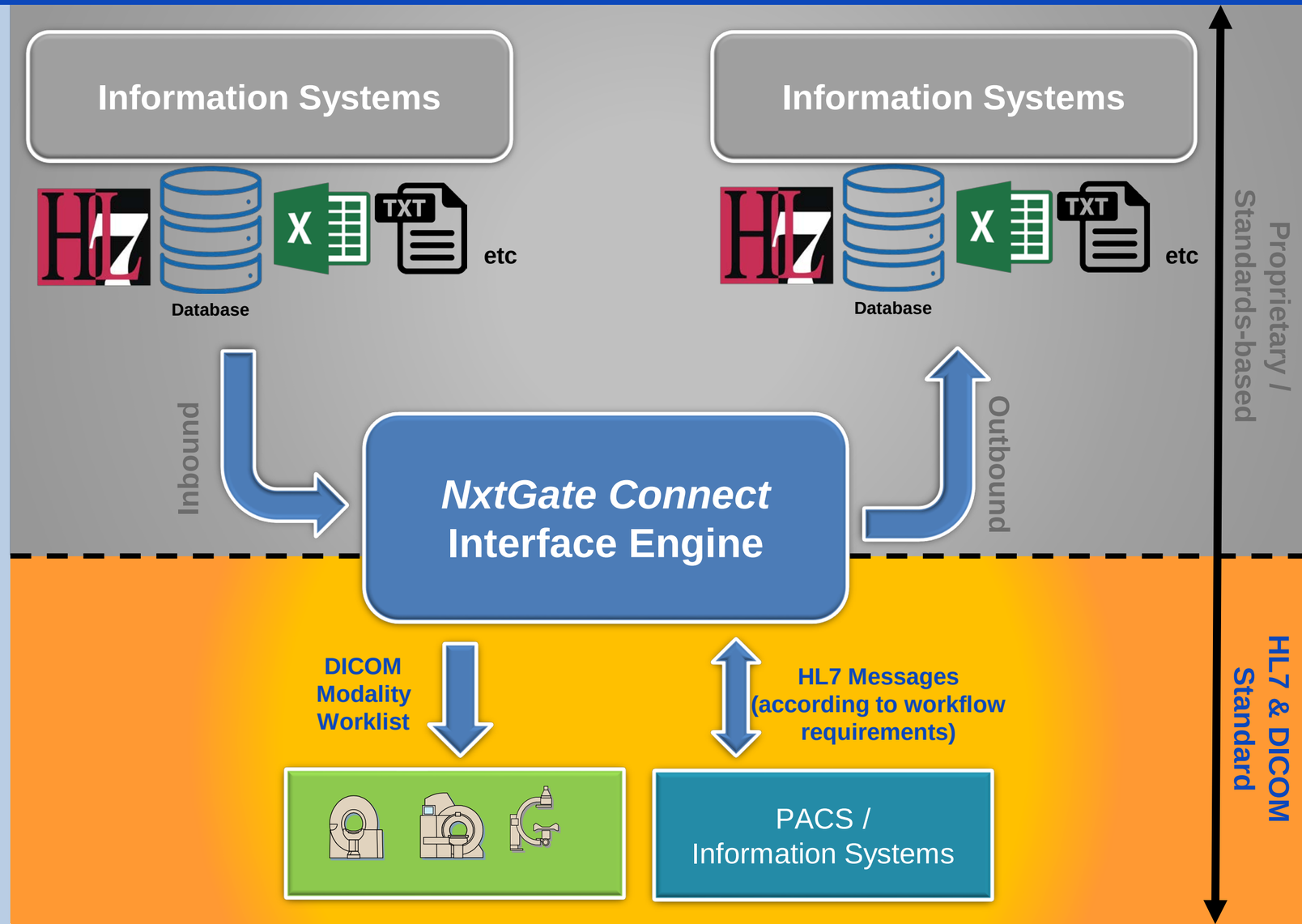
Preserve existing IT Investments

Maximize utilization of existing IT Systems' investment

Connected Systems; Connected Workflow

Orchestrate overall workflow via connected systems

Improved Productivity & Improved Patient Safety



Living Interoperability – Use Case Example 1

Meaningful Use of Data

From Technical Data to Operational Data

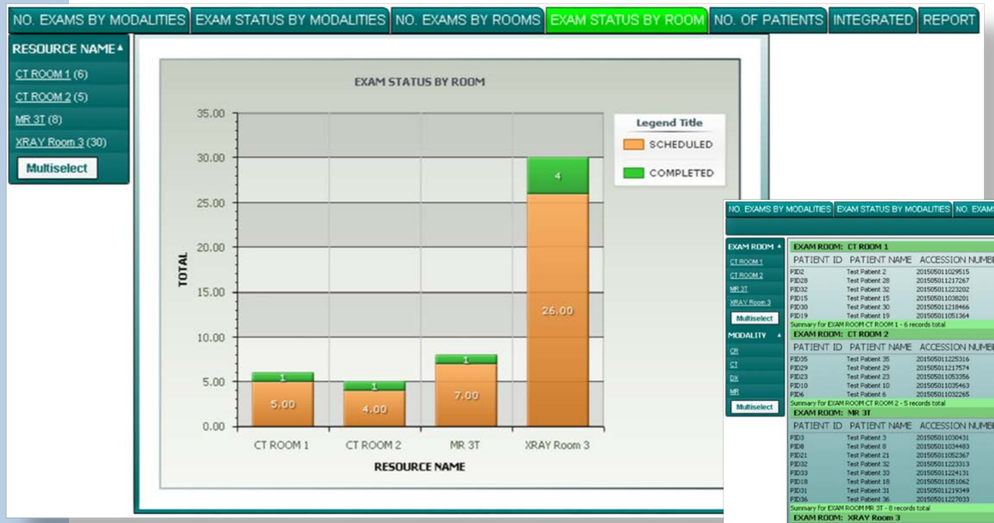
Translate HL7 data content into meaningful operational representation

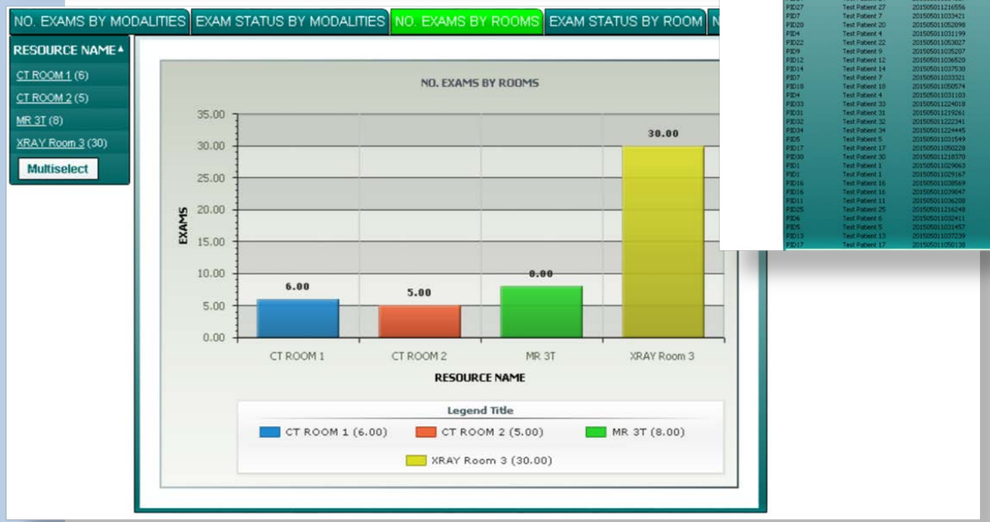
Operation Statuses at a Glance

Quick overview of exam statuses, room utilization and patient wait-times

Operation Data Transparency

Know latest scanner operation statuses





Living Interoperability – Use Case Example 2

Automated PhilHealth Forms / Claims Submission

Effective & Efficient Data Input

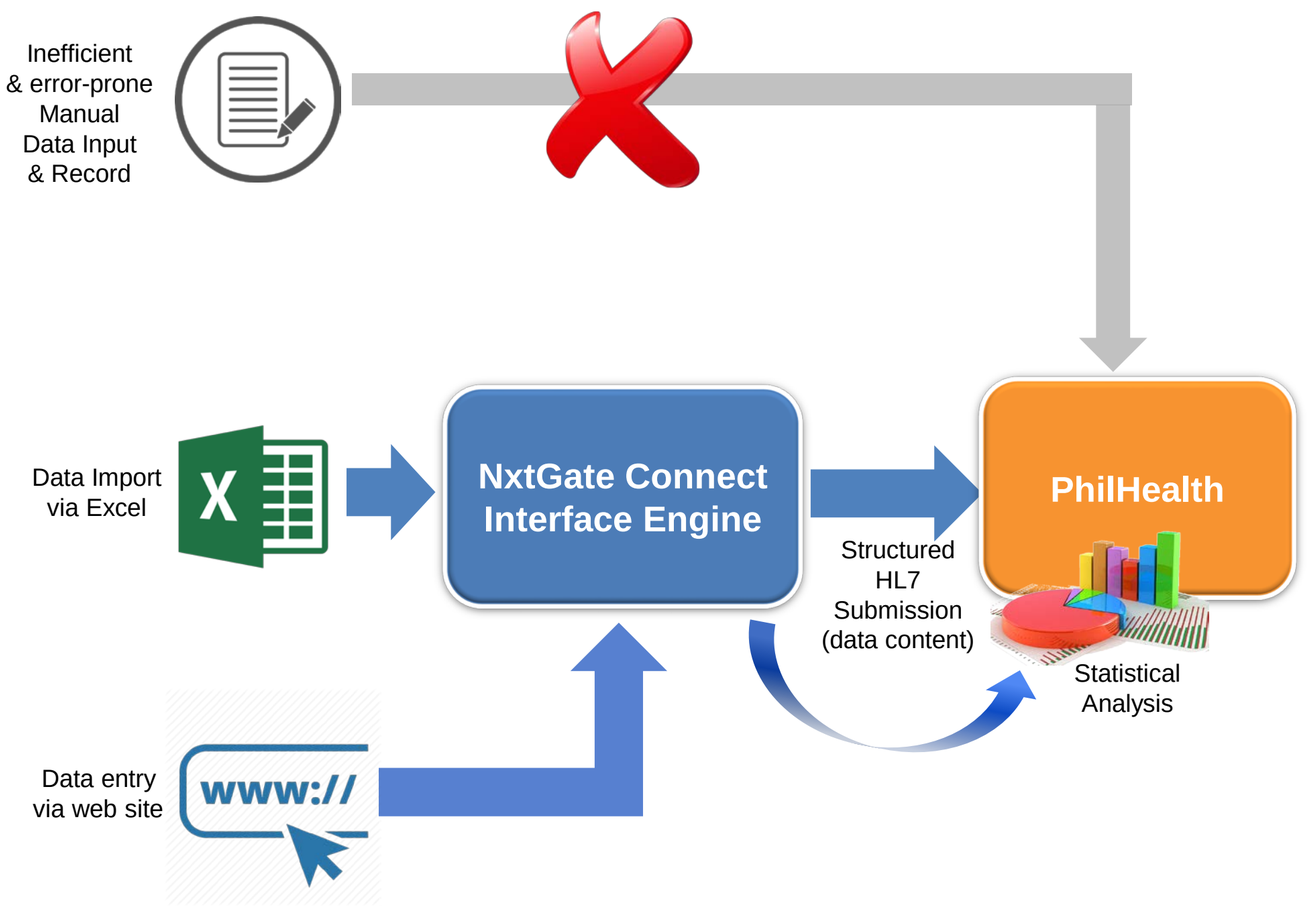
Guided data collection via Excel file import or data entry in customized web link

Structured HL7 Data Content Submission

Automated forms / claims submission in structured data format
Statistical analysis based on structured data

Statistical analysis based on structured data

via standardization of content submission



Living Interoperability – Use Case Example 3

Alerts Management for Patient Monitoring (vital signs)

Alert Triggering
Based on preset threshold for various vital signs

Improved care management
Alerts displayed on-screen with alarm, or
SMS or WhatsApp messages sent to care stakeholder

Data Repository
Keeping record of all vital signs of patients for any purposes

HL7 message (vital signs)

Alert triggered at Nurse Station when preset threshold exceeded

NxtGate Connect Interface Engine

Alert triggered as notifications when preset threshold exceeded

Values of *Connected Interoperability*

Clinical Benefits

- ✓ Eliminates data entry error with DICOM Modality Worklist
- ✓ Ensures data integrity between systems (HIS/RIS, modalities and PACS)
- ✓ More time spent caring for patients

Operational Benefits

- ✓ Boost productivity with digital workflow (DICOM Modality Worklist)
- ✓ Dashboard presenting real-time operation status of the department
- ✓ Improved quality of patient handling

Financial Benefits

- ✓ Improved efficiency and effectiveness, hence cost savings by eliminating manual processes
- ✓ Improved productivity creating opportunity to handle more examinations
- ✓ Maximize equipment investment. Ensure all modalities are better utilized

Thank You

Backup Slides

Before we begin

Questions around digitalization and system interfacing

- **Points to ponder:**

<u>Digitalization</u>

- Where can I start with digital workflow in my department?
- What data automation can I achieve?

<u>Operational</u>

- Do I know at any point in time, how is your department performing?
- Do I know if patients are waiting longer at certain examination rooms?
- I would like to increase patient throughput in my department?
- How many examinations are scheduled and how many of them are completed?
- Which examination room is experiencing issues handling patient load?
- Can I automate the process of forms / claims submission and eliminate manual errors?

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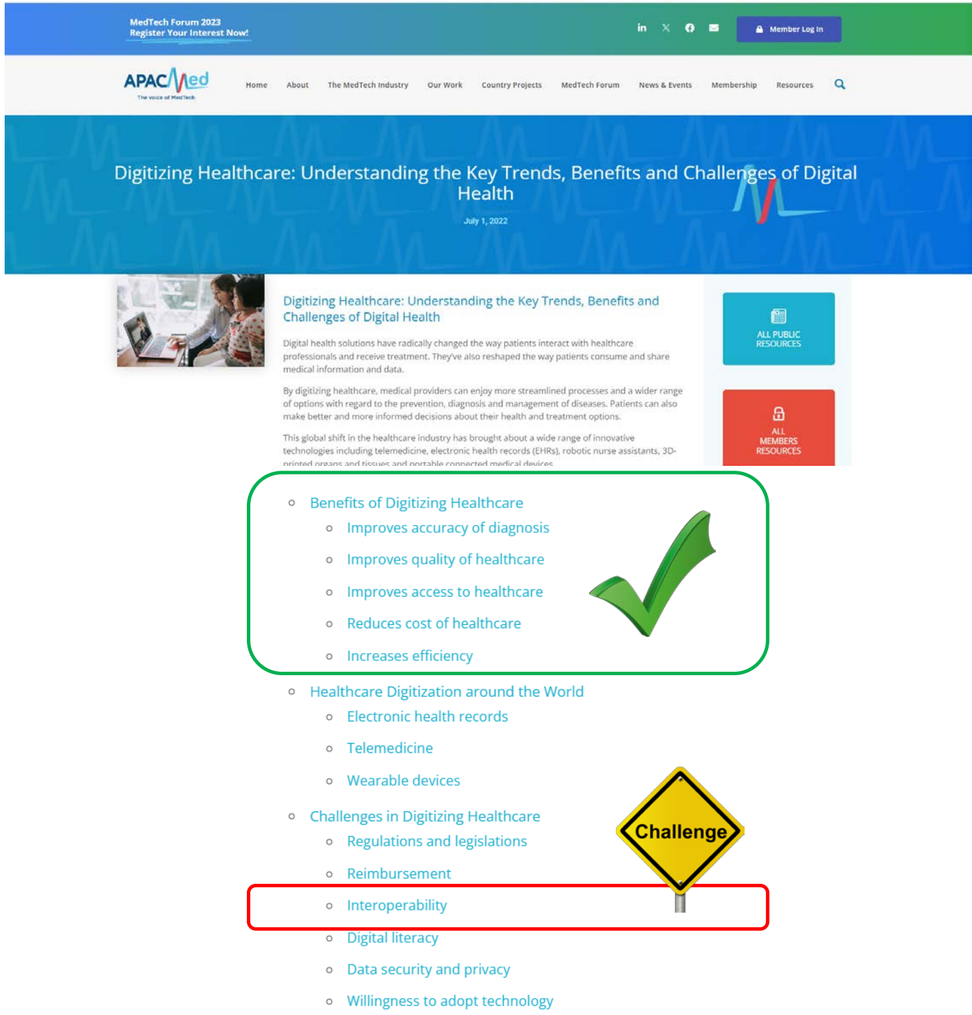

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