⬡ **Roche**®

NAVIFY® Tumor Board

Data integration gives specialists more time for their patients

With cancer, time is of the essence. That's why Roche created NAVIFY Tumor Board — to support faster treatment decision-making. The workflow provides holistic patient profiles and easier access to curated medical and scientific information enabling specialists to better collaborate on personalized care plans. Roche created the digital data integration platform that automates clinical data upload to NAVIFY Tumor Board.

The digital data integration platform provides a vendor-agnostic foundation that helps Roche implement NAVIFY Tumor Board at institutions around the world including the University of Missouri Hospital where Roche successfully processed more than 12.3 million data communication messages since go-live in November 2018,[1] sending more than 465,000 relevant messages to NAVIFY Tumor Board for more than 4,400 patients.[1]

Optimizing clinical decision-making

Cancer care is complex and time-sensitive, and oncologists and other healthcare specialists need the most accurate, up-to-date patient information to do their jobs. For these professionals to arrive at the best treatment decisions, hospitals need to integrate many strands of patient data from different sources. Many important decisions for cancer patients are made at tumor board meetings in which experts from different disciplines review and discuss individual cases and treatment options.

Preparing for tumor board meetings is often labor-intensive and time-consuming, requiring patient data to be collected from various systems and consolidated manually. There is also no easy way to track whether and how the agreed upon decisions are put into effect.

Improving cancer care

Roche's vision is to drive personalized healthcare through digital solutions. NAVIFY Decision Support portfolio is designed to provide care teams with comprehensive data and powerful solutions that allow for more time to be spent on their patients. NAVIFY Tumor Board empowers multidisciplinary cancer care teams to be both more efficient and more effective in determining next steps for cancer cases.

> **"To make the best treatment decision, we have to apply the latest medical knowledge to a patient's medical history, personal preferences and circumstances, test results, images, reports and other information. NAVIFY [Decision Support portfolio] elevates our efficiency and confidence by aggregating these resources."**
>
> **Richard D. Hammer, MD**
> Director, Anatomic Pathology,
> University of Missouri School of Medicine

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Today, hospitals typically use a broad array of IT systems to store and work with electronic data around the patient — from electronic medical records (EMR), laboratory and radiology systems, and picture archiving communication systems (PACS) to discipline-specific systems. During a tumor board meeting, a cancer care team today needs to access data from a number of these systems individually.
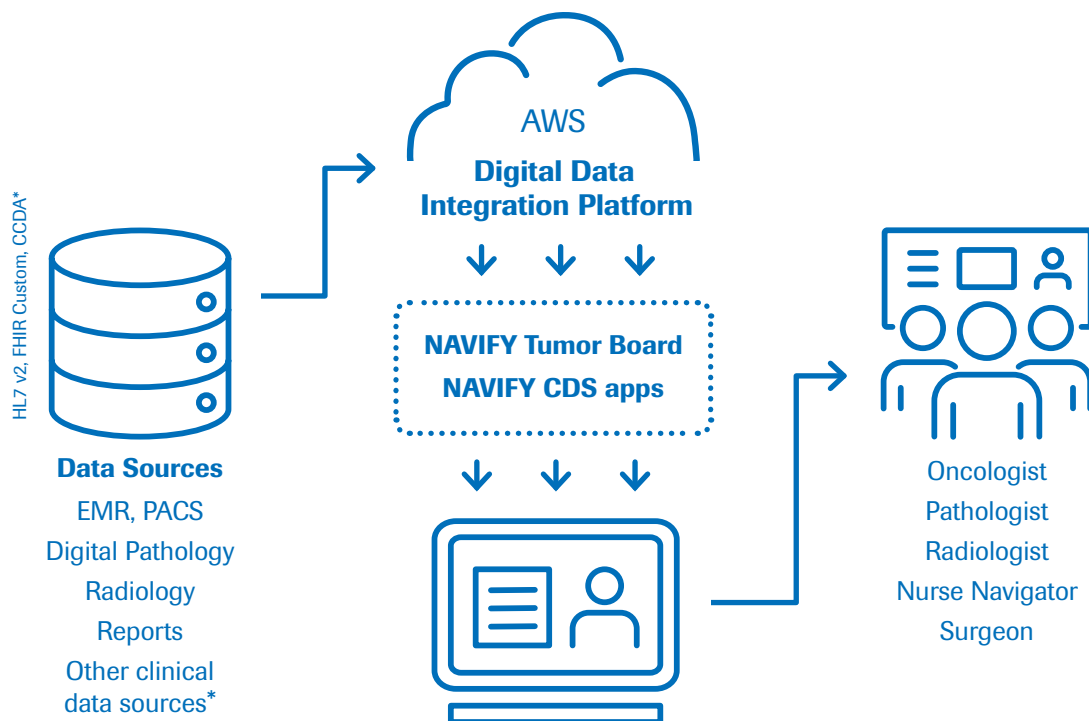
Strategy and Solution

NAVIFY Tumor Board consolidates data across these systems and presents it in a tailor-made user interface to provide sophisticated data integration services to NAVIFY Tumor Board customers.

Roche provides digital data integration services for NAVIFY Tumor Board through a proprietary data integration platform that is based on MuleSoft technology and leverages the public cloud as its foundation.

The digital data integration platform

The digital data integration platform automatically pulls a broad set of patient data into NAVIFY Tumor Board, including patient histories and care plans, medication information, lab results, pathology and radiology reports, genomic sequencing information, procedures and more.

The digital data integration platform securely validates and streamlines patient data and propagates it to NAVIFY Tumor Board so that all relevant patient data is available in one place, following a consistent data model. It uses a specifically developed data integration architecture that can take in data via a widely used format referred to as "Health Level 7" (HL7) or via individual solutions when HL7 is not an option.

AWS

Digital Data Integration Platform

NAVIFY Tumor Board

NAVIFY CDS apps

HL7 v2, FHIR Custom, CCDA*

Data Sources

EMR, PACS

Digital Pathology

Radiology

Reports

Other clinical data sources*

Oncologist

Pathologist

Radiologist

Nurse Navigator

Surgeon

*Under development

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Transformation

NAVIFY Tumor Board is fundamentally changing the way tumor board meetings are organized and conducted. The benefits include:

- less time required to prepare for tumor board meetings[2]
- easier access to data across multiple systems
- more time for specialists to discuss their patients versus manage the technicalities of meeting operations
- reduced manual entry
- significant improvements in overall workflow efficiency
- better continuity and comparability across tumor board meetings

These benefits greatly contribute to helping healthcare professionals make the best decisions for cancer patients swiftly, along tight schedules where the quality and speed of decision-making can be critical.

A closer look: University of Missouri Hospital

The University of Missouri Hospital (MU) was seeking a way to manage the complex processing of records from multiple systems automatically — as many as 30,000 clinical messages about patients per day.[2]

They selected NAVIFY Tumor Board. Working with Roche automated data integration via the platform for four tumor boards: hematology/pathology; breast; ear, nose and throat; and multidisciplinary. Since go-live in November 2018, the digital data integration platform feeds the patient data required for respective tumor board meetings into NAVIFY Tumor Board on an ongoing basis.

>12M Data communication messages processed in the first 9 months at MU[1]

>465,000 Relevant messages sent to NAVIFY Tumor Board[1]

>4,400 Cancer patients[1]

The cancer care teams of MU report tumor board processes are more streamlined. They also highlight time savings in preparing patient cases for review and the more comprehensive view of patient data. And they praise automated data integration for making an important contribution to how they're able to help their cancer patients.[3]

[1] Accenture Monthly Operational Integration Report, November 2020.

[2] Hammer et al. JCO Clinical Cancer Informatics no. 4 (2020) 757-768 DOI: 10.1200/CCI.20.00029

[3] Roche Diagnostics press release, "University of Missouri School of Medicine, Roche collaborate on US implementation of tumor board software that improves treatment decision process for cancer patients," June 19, 2018.

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