

## navify Tumor Board

# Optimizing complex cancer care with streamlined tumor boards

navify Tumor Board enhances multidisciplinary collaboration and clinical decision-making at Changhua Christian Hospital, Taiwan

As a medical center accredited by the Joint Commission of Taiwan – and one of Taiwan’s top 10 hospitals – Changhua Christian Hospital (CCH) specializes in diagnosing and treating the most complex cancer cases. Each year, the oncology team treats more than 5,100 new patients,<sup>1</sup> an average of 425 new cases per month. In response to such high demand, CCH physician leaders established a Cancer Management Committee and set up 10 types of multidisciplinary, subspecialized cancer teams. They envisioned, and have demonstrably achieved, a highly efficient and effective way to ensure excellence in cancer care for every patient.

With robust collaboration and intelligent, intuitive technology at the core of their approach to patient care, CCH physician leadership recognized **navify** Tumor Board as an innovative platform capable of supporting their vision and streamlining the processes involved in their clinical decision-making.

### Problem

Preparing, conducting and documenting tumor boards is labor-intensive and time-consuming, especially where high volumes of complicated cases are involved. For example, CCH takes on approximately 800 new head and neck cancer cases per year<sup>1</sup> and has two case managers to coordinate care for all of them. The head and neck tumor board convenes once a week and discusses 5-7 cases each time – enough to meet accreditation requirements but not enough to cover all new cases.

When CCH physicians first began assembling tumor boards, each meeting required 83 steps to amass the necessary information across multiple platforms. Decentralized patient data also made it difficult for physicians to access information needed for quick assessments during subsequent treatment discussions. They needed a solution they could position as their ‘Clinical Decision Platform-Across All Cancer Types’ to support their accomplishments in three primary areas:

1. Labor and time savings for case managers, doctors, pathologists and other specialists
2. Improved communication and collaboration among the multidisciplinary team
3. Standardization and structuring of tumor board operations and management

### Solution

With weekly or biweekly tumor board meetings across 10 cancer types, CCH physician leaders knew the path to better clinical management required digitization, integration and automation from intelligent, purpose-built technology. Since 2020, CCH has been using **navify** Tumor Board to optimize multidisciplinary collaboration on patient diagnoses, staging and treatment plans. They began with the lung cancer team working closely with Roche to complete systems integration and operational optimization before incrementally rolling the platform out to all tumor board types.

<sup>1</sup>Taiwan Cancer Registry Annual Report, 2021.

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During the initial system setup phase, CCH conducted clinical interviews and surveys to gather valuable feedback from physicians, clinical teams and the IT team, then held intensive weekly meetings with Roche to ensure smooth progress. With all 10 tumor boards now using the platform,

they are making plans to expand the technology to other hospitals within the larger CCH health system. As the first Asia-Pacific hospital to achieve HL7 FHIR R4 integration, they are well on their way to achieving their vision of becoming the leading Smart hospital in Taiwan.

*“We set a clear goal to complete systems integration within the first year. Since then, by following the principle of ‘start small and move fast,’ we’ve been able to quickly and effectively expand the platform to all CCH tumor boards.”*

**Dr. Li-Chung Hung**

Cancer Center Director and Radiation Oncologist

### Results

Within three years of implementing the platform, CCH has achieved several impressive outcomes:



**50-75% time savings** in tumor board preparation



**72% fewer steps** (from 83 to 23)



**75% less time required** of case managers



**50% faster preparation** of pathology images

Physicians at CCH have achieved a much higher level of efficiency in diagnosing and treating cancer patients because they can now quickly retrieve fully integrated patient information that is stored and structured by time sequence. By enhancing preparation time, in-depth patient discussions are facilitated. Patients with stage II or III lung cancer are automatically submitted into **navify** Tumor Board (no manual action needed). For additional cases the doctors choose to discuss, sending case data from the EMR to the tumor board platform requires only a few clicks. CCH also implemented the HIMSS Stage 7 closed-loop management to send discussion records from the platform back to their in-house EMR, allowing physicians to easily access tumor board conclusions in both outpatient and inpatient systems.

CCH's accomplishments with integration and digitization have significantly improved multidisciplinary communication and collaboration. Different specialists can now simultaneously organize patient data on the same platform, which also streamlines access to the latest literature and clinical trials by specific cancer type. Case managers can easily check for any missing information, which promotes better collaboration among healthcare professionals, and the process of tracking and scheduling tumor boards is much more straightforward. The physicians have collaboratively standardized points of discussion for each case, as well as a checklist feature for recording their discussions and subsequent decisions, ensuring that each treatment plan is reviewed for clear conclusions.

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*“The most significant benefit we’ve experienced is having all the data automatically integrated around the patient. That has saved a lot of time for our doctors and case managers, which accelerates the path to diagnosis and treatment for our cancer patients.”*

**Dr. Ming-Yu Hsieh**  
Otolaryngologist

The CCH team is pioneering methods that extend their use of the platform beyond tumor board discussions. For example, the head and neck team uses it to review complex cases before surgery, which improves quality management. It also enables CCH to accumulate richer case data to aid in education and gradually form a cancer database that

can further expand into research. With robust analytical features, CCH is able to integrate and share patient data more effectively to deliver better healthcare through care and education, benefiting patients and the central Taiwan community.

*“Roche has been a longtime partner for our hospital, and the tumor board platform has had a profound impact on clinical decisions, patient care and medical education at CCH.”*

**Dr. Ching-Hsiung Lin**  
Vice Superintendent and Pulmonologist



### About Smart Healthcare

Smart Healthcare combines intelligent and intuitive systems that improve care quality. This integration supports holistically predictive, preventative, personalized and participatory healthcare.