# Key Lab of Health Technology Assessment, National Health Commission (Fudan University)

WHO Collaborating Centre for Health Technology Assessment and Management

# NEWSLETTER

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## HIGHLIGHTS

- The Key Laboratory of Health Technology Assessment of the National Health Commission (NHC) and the National Respiratory Medicine Center jointly released the report titled Health Technology Assessment of Tubeless Minimally Invasive Surgery for Pulmonary Nodule Resection Based on Real-World Data
- ISPOR and HTAi News

# THE KEY LABORATORY OF HEALTH TECHNOLOGY ASSESSMENT OF THE NATIONAL HEALTH COMMISSION (NHC) AND THE NATIONAL RESPIRATORY MEDICINE CENTER JOINTLY RELEASED THE REPORT

On March 23, 2025, the project report "Health Technology Assessment of Tubeless Minimally Invasive Technique for Pulmonary Nodule Resection Based on Real-World Data," led by the Key Laboratory of Health Technology Assessment of the National Health Commission (Fudan University), was released in Guangzhou. Professor Chen Yingyao, Director of the Laboratory, Young Associate Researcher Liu Shimeng, and other project team members attended the release ceremony. The event also featured discussions on the value and role of HTA in promoting the clinical application of appropriate health technologies by experts including Professor Zhong Nanshan, Academician of the Chinese Academy of Engineering; Professor He Jianxing, Director of the National Respiratory Medicine Center; Professor Zhi Xiuyi, Director of the Beijing Lung Cancer Diagnosis and Treatment Center and Xuanwu Hospital, Capital Medical University; and over 50 representatives from 29 Tubeless Alliance institutions across China.

In his address, Professor He Jianxing highly commended the team from the School of Public Health at Fudan University for conducting a comprehensive and objective study on tubeless minimally invasive technology from an HTA perspective and expressed gratitude to the collaborating hospitals for their support. He emphasized that the assessment report, as an authoritative third-party study, provides high-quality evidence-based decision-making support for standardizing and promoting tubeless minimally invasive technology. It also offers robust scientific backing for future standards, guidelines, and consensus related to tubeless techniques, facilitating their expansion into pan-surgical fields. This achieves a win-win scenario for medical innovation and public health, advancing China's independently innovative treatment solutions onto the global stage.


Professor Chen Yingyao detailed the project implementation and the core findings of the assessment report. The project was launched in October 2023, involving 20 medical institutions from eastern, central, and western China. Using a prospective real-world study design, it systematically evaluated the clinical value of tubeless minimally invasive technology across multiple dimensions, including safety, efficacy, economic impact, and patient preferences. After two phases of investigation, 884 valid samples were collected. To reduce confounding bias, propensity score matching (PSM) was applied, resulting in 352 patients each in the Tubeless-VATS and VATS groups, covering indications such as lung cancer resection, pulmonary nodule resection, and tracheal tumor resection. Specific assessment results demonstrated that the Tubeless-VATS group showed significant advantages over the VATS group in postoperative mobility, self-care, pain discomfort, and anxiety/depression. The Tubeless-VATS group also exhibited significantly higher postoperative quality of life. MDASI-LC results indicated notably lower symptom burdens in areas such as postoperative pain, sleep disturbance, sadness, numbness, cough, sore throat, interpersonal relationships, life enjoyment, and general activity compared to the VATS group. The Tubeless-VATS group also had significantly shorter operation times and hospital stays. Economic evaluation analysis confirmed the absolute economic advantage of Tubeless-VATS over VATS. Patient preference analysis further revealed that hospitalization duration, postoperative pain, fatigue levels, and out-of-pocket costs significantly influenced patients' choice of surgical method. Compared to pre-surgery, VATS group patients showed a significantly higher willingness to pay for reducing pain and fatigue than the Tubeless-VATS group, indicating that patients who experienced pain and fatigue were more sensitive to mitigating these factors. The team also validated the clinical advantages of the technology through rapid HTA methods, systematic reviews, and Meta-analyses, providing solid evidence for its promotion and application. Additionally, Professor Chen highlighted the close collaboration between clinical and public health fields in this study, which opened new perspectives and directions for HTA and expressed hope for deeper future cooperation.


Dean Huang Jinkun noted in his speech that tubeless minimally invasive technology aligns with the direction of new quality productive forces, achieving a leap from "Chinese innovation" to "global promotion." He emphasized the need to accelerate its application across multidisciplinary fields, positioning tubeless technology as a leader and solid foundation for innovation in modern surgery.

Academician Zhong Nanshan fully affirmed the research work of the Fudan University School of Public Health team and stressed the strategic importance of systematic HTA for the development of innovative technologies. He stated that tubeless technology focuses on breakthroughs in critical areas, offering both social and economic benefits. Establishing an assessment mechanism based on real-world data and conducting timely, independent, and objective HTA will benefit more people while promoting global recognition of tubeless technology, truly advancing Chinese solutions onto the world stage.


The "Tubeless Minimally Invasive Technique" is a revolutionary innovation in the field of surgery independently developed by the National Respiratory Medicine Center. Having demonstrated significant advantages in thoracic surgery over years of mature application, it has recently been successfully extended to pan-surgical fields such as transplantation, orthopedics, and urology. This project integrated rapid systematic reviews and real-world studies to conduct an HTA, systematically demonstrating the advantages of tubeless minimally invasive technology in safety, efficacy, economy, and patient value. It provides strong evidence-based support for standardizing and promoting the technology nationwide. Participating experts unanimously agreed that independent and objective HTA holds strategic significance for advancing medical innovation, optimizing resource allocation, improving patient outcomes, and promoting the global reach of Chinese medical technologies.

# ISPOR AND HTAi NEWS

## ISPOR NEWS

### International Organizations Jointly Release HTA Guideline Development Standards

On January 14, 2025, the International Society for Pharmacoeconomics and Outcomes Research (ISPOR), in collaboration with Health Technology Assessment International (HTAi) and HTAsiaLink, jointly released a tripartite task force report titled Good Practices for Health Technology Assessment Guideline Development. This report will be concurrently published in January 2025 in ISPOR's flagship journal Value in Health and HTAi's official journal International Journal of Technology Assessment in Health Care.

Manit Sittimart, an HTA expert from Thailand and author of the report, noted that Health Technology Assessment (HTA) guidelines provide support for evidence-based decision-making by enhancing standardization and transparency throughout the entire assessment process. He emphasized that guidelines must be rooted in the actual HTA development context of a country, and their implementability must be ensured through a stakeholder consensus mechanism. Currently, there is a lack of professional guidance for HTA guideline development globally, and this report is the first to systematically propose guideline development standards applicable to different levels (e.g. national, sub-national). Co-developed by three major international organizations—HTAi, HTAsiaLink, and ISPOR—the report pays special attention to how countries at different development stages can select appropriate HTA implementation pathways.

The report puts forward six core recommendations covering the entire life cycle of HTA guideline development:

Clarify the objectives, scope, and principles of the guidelines;

Establish a high-caliber development team;

Formulate a stakeholder engagement plan;

Integrate existing resources to develop guideline content;

Establish supporting implementation mechanisms;

Build an effectiveness monitoring and evaluation system.

These recommendations highlight the importance of transparency building, trust cultivation, and continuous improvement mechanisms, and advise countries to dynamically adjust guideline content based on the maturity of their HTA systems. The report also systematically compiles existing international guideline resources to provide references for countries at different development stages. Sittimart added that as HTA plays an increasingly prominent role in decision-making across countries, it is necessary to

continuously optimize guidelines through practical feedback to ensure they remain applicable and effective.

The release of this joint report fills the global gap in methodologies for HTA guideline development and provides crucial technical support for establishing more standardized HTA systems that better adapt to local needs. For additional learning resources, please refer to the webpage: https://www.ispor.org/heor-resources/news-top/news/view/2025/01/14/global-expert-panel-releases-good-practices-guidance-for-developing-or-updating-health-technology-assessment-guidelines

## Generative AI Set to Reshape Health Technology Assessment, ISPOR Report Finds

On February 11, 2025, the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) released a key report in the journal Value in Health, which systematically elaborates on the application prospects and regulatory requirements of generative artificial intelligence (AI) in health technology assessment (HTA). Dr. Jagpreet Chhatwal, the lead expert of the report, emphasized that although AI technology has transformative potential, strict human oversight mechanisms and ethical standards must be established.

The report points out that generative AI can significantly improve assessment efficiency in the following areas:(1) Systematic Literature Reviews: Automatically generating search terms, screening abstracts, and extracting data;(2) Real-World Evidence Analysis: Processing unstructured clinical records and imaging data;(3) Health Economic Modeling: Assisting in model development and validation.

At present, AI applications still face risks related to reliability and equity. The report puts forward the following recommendations:(1) Formulating norms for the use of large language models (LLMs);(2) Establishing standardized processes to ensure transparency;(3) Strengthening professional training for practitioners;(4) Focusing on safeguarding health equity.

It is reported that the research team is developing an evaluation framework to measure the quality and rigor of AI-assisted research. This report provides an important roadmap for the HTA field to embrace AI technology, while also defining necessary safety boundaries. For additional learning resources, please refer to the webpage : https://www.ispor.org/heor-resources/news-top/news/view/2025/02/11/generative-ai-set-to-reshape-health-technology-assessment--ispor-report-finds

# HTAi NEWS

## EU HTA Regulation Takes Effect

On January 12, 2025, the European Union's Regulation on Health Technology Assessment (EU 2021/2282) officially entered into force, marking a crucial turning point for Europe's healthcare systems. For the first time, the new regulation introduces an EU-level joint clinical assessment mechanism, which aims to improve the review efficiency of innovative health technologies and promote cross-border cooperation.

This initiative will accelerate patients' access to breakthrough therapies, simplify procedures for innovative enterprises, and reduce duplicate filings. Meanwhile, it will help healthcare systems optimize resource allocation by strengthening evidence-based decision-making. However, challenges such as coordinating differences among member states, resource constraints, and the complexity of legal procedures still need to be addressed.

Health Technology Assessment International (HTAi) stated that it will actively promote multi-stakeholder dialogue and collaboration, and respond to changes with a flexible and inclusive attitude. This regulation not only reshapes the landscape of HTA in Europe but also sets a new benchmark for global assessment systems, calling on the industry to jointly explore the future development direction. For additional learning resources, please refer to the webpage: https://htai.org/in-the-news-eu-hta-regulation-takes-effect/

## Health Technology Assessment International (HTAi) and PAHO/RedETSA to Co-Host a Series of Meetings in Buenos Aires, Argentina, in June 2025

Health Technology Assessment International (HTAi) and the Pan American Health Organization/Latin American Network for Health Technology Assessment (PAHO/RedETSA) will co-host a series of meetings in Buenos Aires, Argentina, in June 2025. The RedETSA Annual Meeting is scheduled to take place from June 13 to 14, followed by the HTAi Annual Meeting, which will run from June 14 to 18.During the two meetings, special Spanish-language workshops will be set up, focusing on the development of Health Technology Assessment (HTA) in the Latin American region. This collaboration aims to promote regional experience exchange and professional cooperation. By bringing together expert resources from various parties, it will jointly advance HTA capacity building and the improvement of healthcare systems in Latin America. For additional learning resources, please refer to the webpage: https://htai.org/htai-and-paho-redetsa-to-host-joint-annual-meetings-in-buenos-aires/

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