

The implementation of value-based care
in Shuang Ho Hospital

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Introduction

The principles of value-based care derive from assessing health outcomes in relation to the costs incurred, prioritising the patient’ s maximum benefit. Engaging in dialogue with patients to eliminate unnecessary medical interventions enables them to spend less while achieving better health outcomes. This approach represents a shift in the traditional healthcare culture, improving the quality of communication and understanding with the public, ultimately offering genuine support to the community.

Methods

Shuang Ho Hospital conducts a comprehensive review of medical treatments and processes, promoting the implementation of value-based care. This includes strategies such as Shared Decision Making (SDM), Choosing Wisely, Enhanced Recovery After Surgery (ERAS), and smart healthcare initiatives.

Results

- SDM:** Developed 64 PDA tools, serving 52,268 individuals. For example, with the introduction of SDM in intensive palliative care, the acceptance rate increased from 70% in 2019 to 90.7% in 2023. Among these, the rates for "palliative care in the intensive care unit" and "withdrawal of life support equipment to receive palliative care in the ward" reached 83.3%. Patient satisfaction rose from 3.8 to 4.32 points (out of 5), and satisfaction with "reducing decision conflicts" reached 4.27 points.
- Choosing Wisely:** Implemented 15 initiatives. For example, starting in August 2019, patients fainting in the emergency room without neurological issues were no longer given head CT scans. This reduced the previous head CT scan rate from 49.8% to 2.56% in 2023. Therefore, each avoided head CT scan saved patients approximately 4,900 NTD, amounting to 2.05 million in annual savings. With an average reduction of 35 scans per month, radiation exposure decreased by roughly 70 millisieverts—equivalent to the exposure from 7,000 chest X-rays.
- ERAS:** Implemented 12 procedures, serving 577 individuals. By integrating SDM with ERAS, structured medical consultations and forms were developed to enhance teamwork and optimize medical resource use. For total knee replacement (TKR) surgeries, the postoperative VAS score decreased from 3.1 to 2.1. Additionally, for total hip replacement (THR) surgeries, the average hospital stay decreased from 7.5 days to 6.6 days.
- Smart Healthcare:** Promoted intelligent care processes across six areas, including outpatient, emergency, inpatient, surgery, laboratory, and administration. For instance, AI-driven prevention and treatment models for heart failure used electronic alerts and intelligent recognition through wearable devices. The data were tracked on a cloud platform, with AI assisting in interpreting risk trend warnings. This enabled bidirectional interaction between patients and healthcare providers, improving medical care. This initiative not only reduced the mortality rate from falls by 12.33% but also lowered healthcare costs by 3,000 yuan per person per year. Then, accredited as a Smart Hospital by National Healthcare Quality Award in 2023..

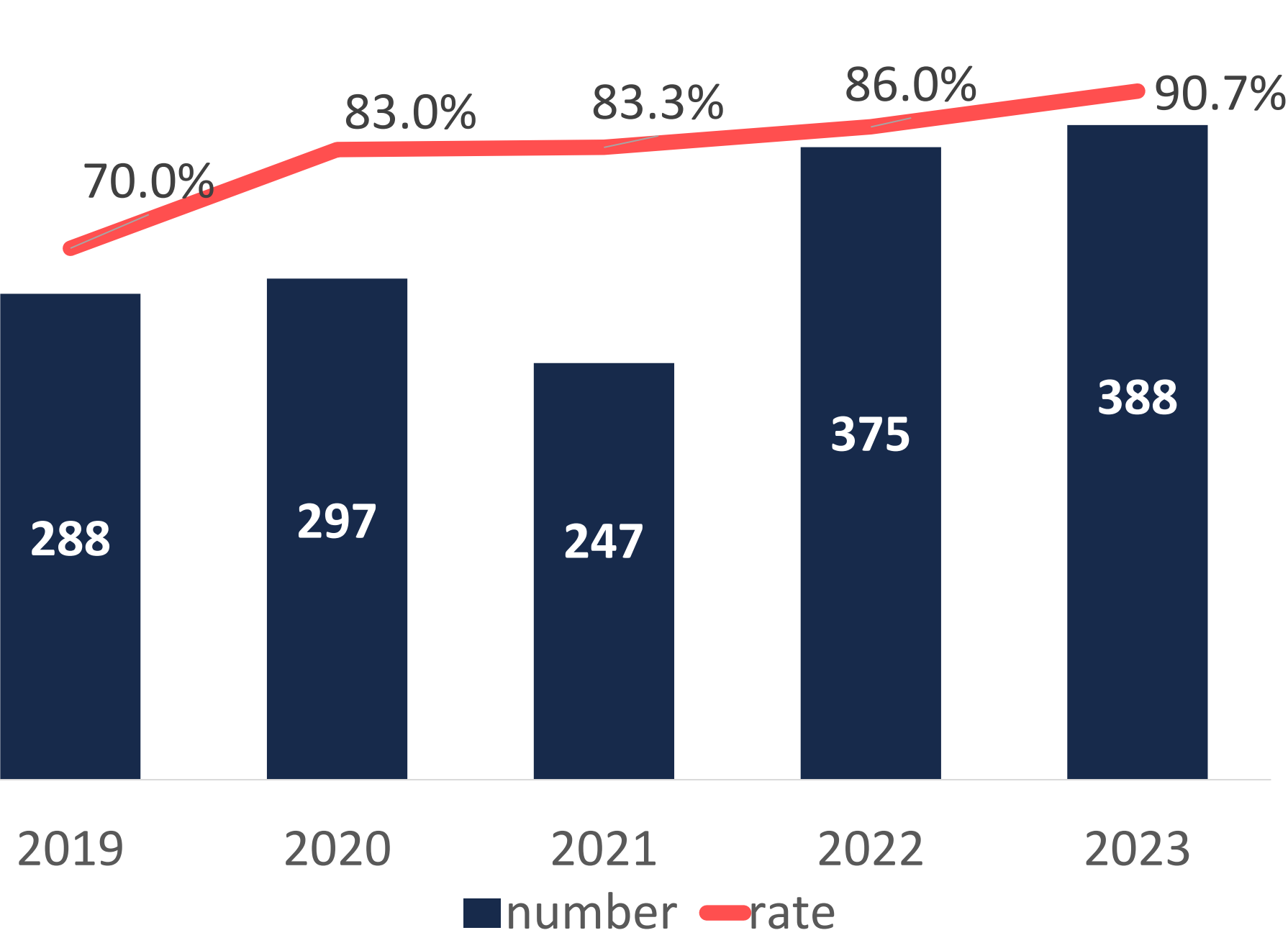


Figure 1. The acceptance rate of intensive palliative care

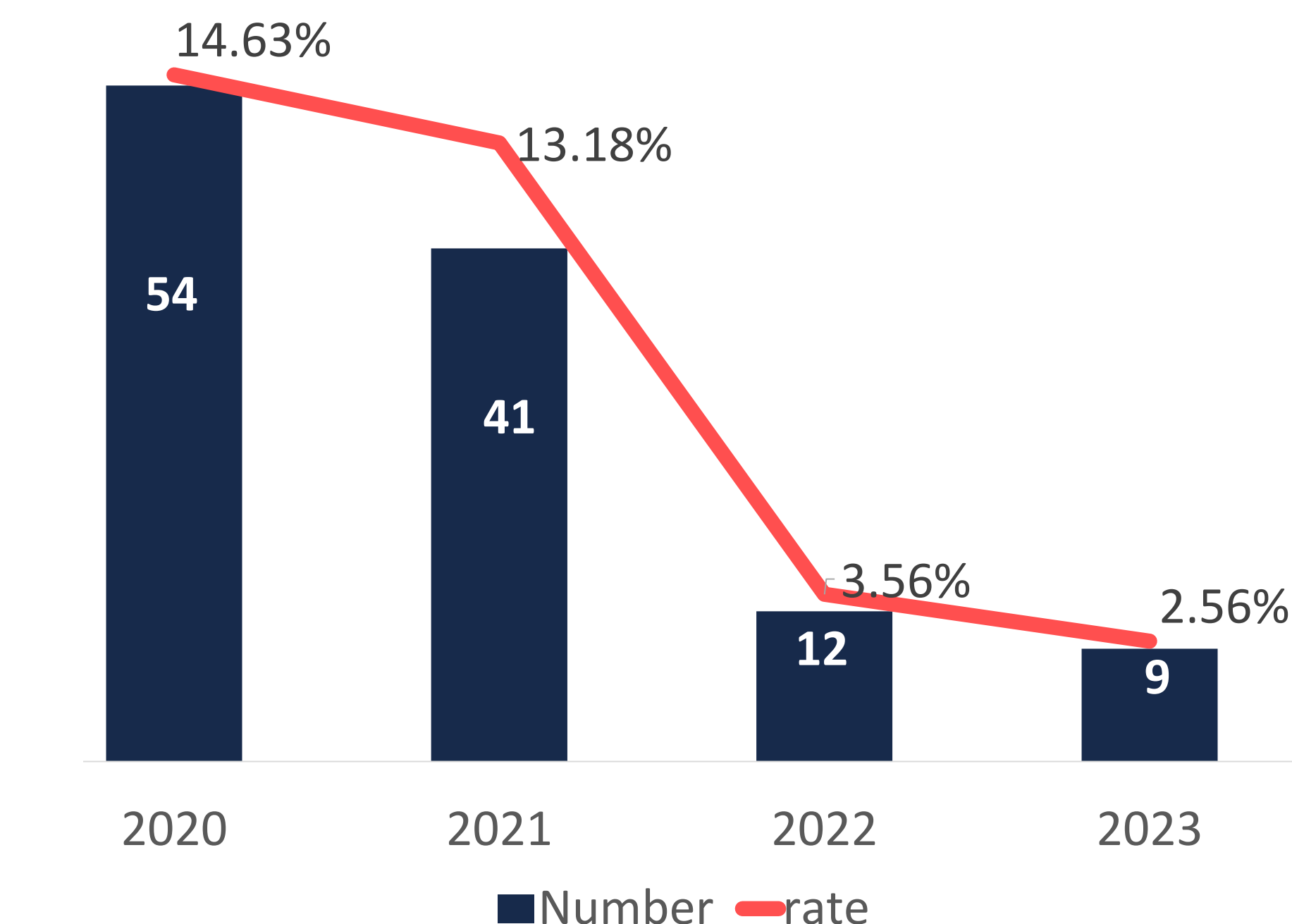


Figure 2. The implementation rate of Brain CT scans for asymptomatic patients with syncope in the emergency department.



Figure 3. Smart Hospital Award

Conclusion

Our hospital's promotion of value-based care focuses on enhancing patient communication. This approach not only helps patients gain a deeper understanding of their symptoms and treatments but also facilitates faster recovery from illness or injury. Additionally, it reduces unnecessary expenses, improves the efficiency of healthcare professionals' treatments, and increases patient satisfaction.