



IMPROVING THE MANAGEMENT EFFICIENCY OF MEDICAL QUALITY INDICATORS: EVALUATING THE APPLICABILITY OF INDICATORS AND REPLACING INAPPROPRIATE INDICATORS.

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INTRODUCTION

Medical quality indicators are quantitative measurement tools used to monitor, evaluate, and enhance the quality of patient care. However, when there are too many indicators, it becomes challenging for clinical personnel to collect data, and the process can devolve into a mere numbers game, failing to accurately reflect the true quality of medical outcomes. To address this issue and effectively manage and monitor indicators, we undertook an indicator applicability assessment project in October 2021, which led to a reduction in the number of indicators used.

METHODS

- Inventory of existing indicators:** In September 2021, a total of **437 departmental quality indicators** were counted in **61 departments of the hospital**. Based on every two years, according to the status of the indicators, the departments evaluated whether to add, revise, repeal and revisit thresholds.
- Assess and select key indicators:** We held three briefing sessions on October 21, November 2 and November 10. We explained the selection principles of indicators: indicators with **high risk, high incidence, high cost, and patient problem oriented issues**, priority should be given to monitoring and evaluation.
- Use the control chart to set the target value and threshold:** After the department selects the indicator, it must **set the threshold as the basis for daily monitoring**. We use the control chart to count the stable average of the past two years as the target value and use the target value to be 2 standard deviations above and below as the suggested basis for setting the threshold.
- Discuss and decide with the department:** The department discusses and decides to add, revise, abolish, and set thresholds at the meeting. When the thresholds we propose are significantly different from those of the department, we will communicate with the department for confirmation, ask the threshold setting standards and basis, and ask the department to reply and explain.
- Complete the official document submission and verification, and update the indicator system:** In January 2022, the official documents of all department indicators were submitted for approval. In February 2022, all items and thresholds of the indicator system were updated.



Figure 1 The briefing session

醫品部評核		醫品部提供(2019/01-2020/12)					單位評核					醫品部審核結果		
醫院評鑑相關指標	目前閾值	穩定平均值	穩定平均值 兩個標準差	醫品部建議			專科評鑑	高風險	高發生率	高成本	病人問題導向		結果	
				目標值	閾值	刪除							刪除(原因)	閾值
醫中評鑑 2.4.6	<11.53 % ³	0.90% (108-109年數據無特別差異)	0% 4.24% (分母小於30，合併3個月計算)	0.90%	4.24% (108-109年有1個點未達)				V	V				

Figure 2 The departmental indicator applicability assessment form

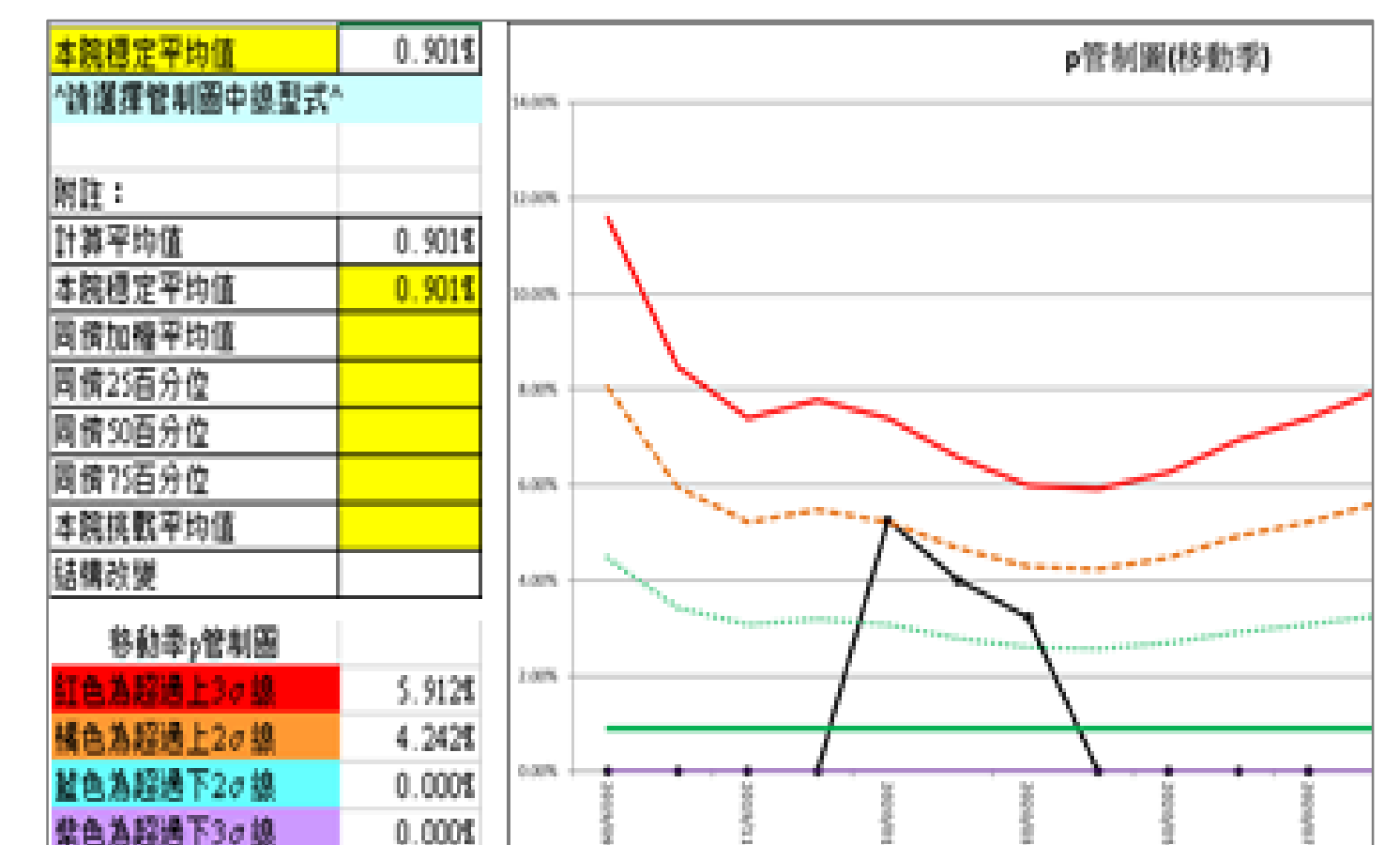


Figure 3 The control chart

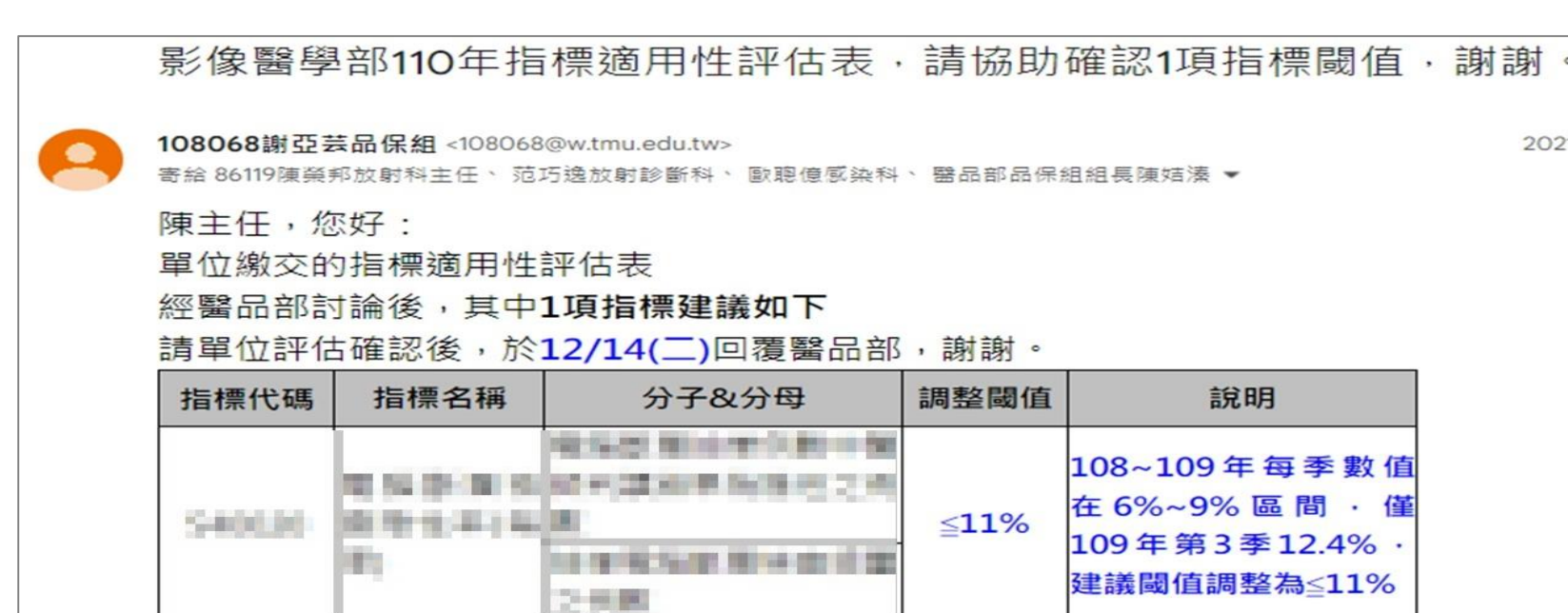


Figure 4 Discuss with the department



Figure 5 Department meeting resolution

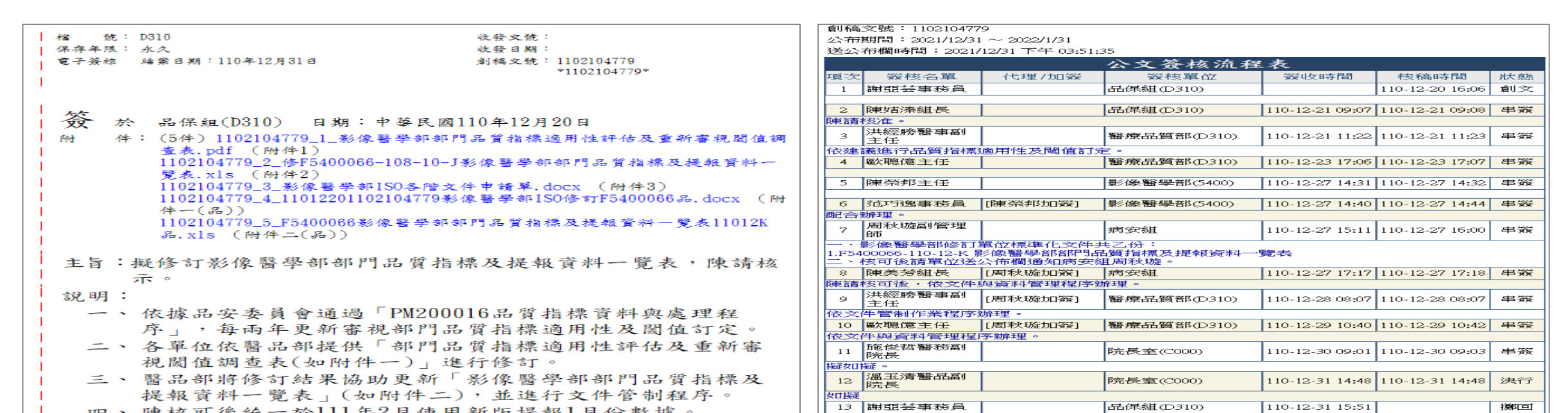
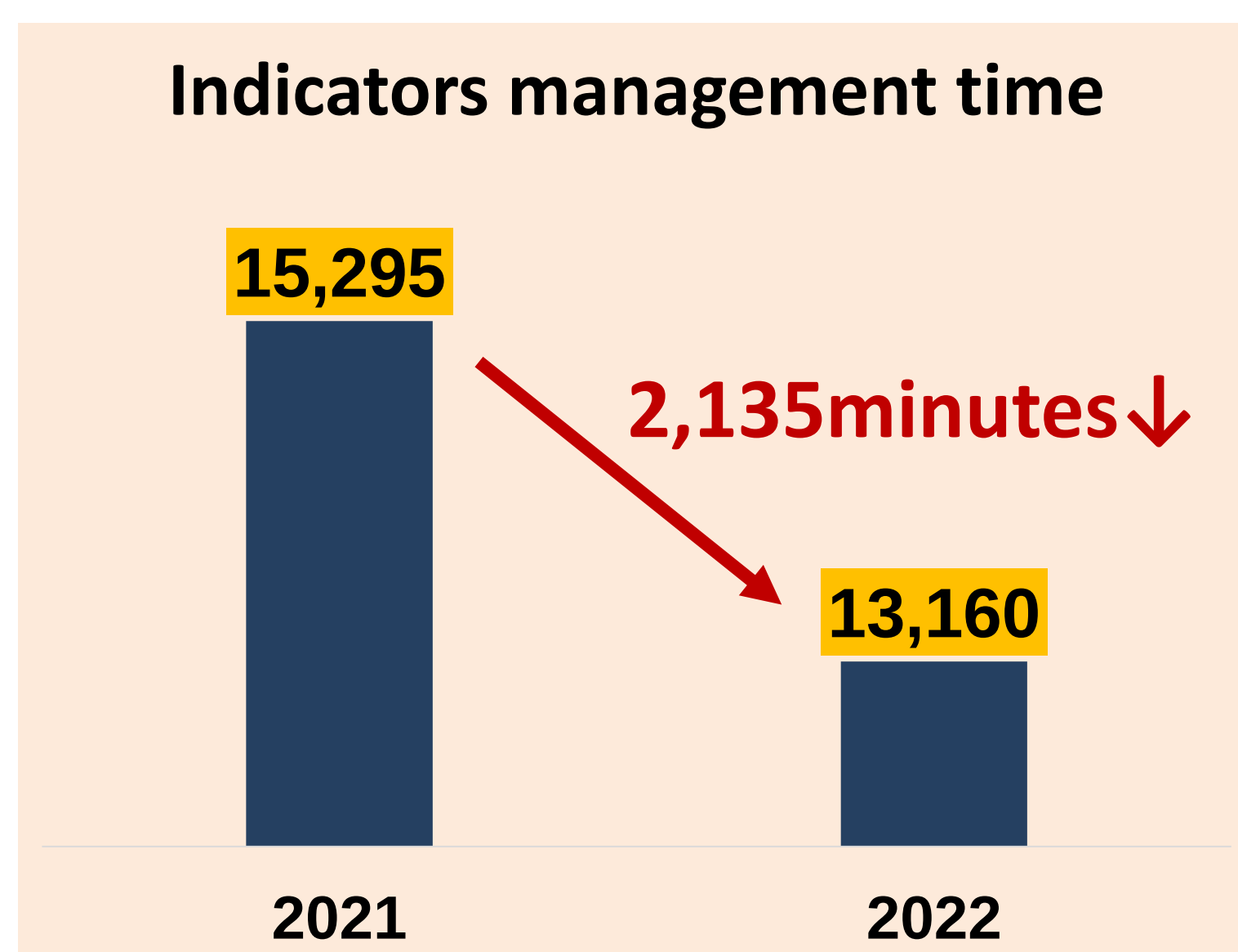
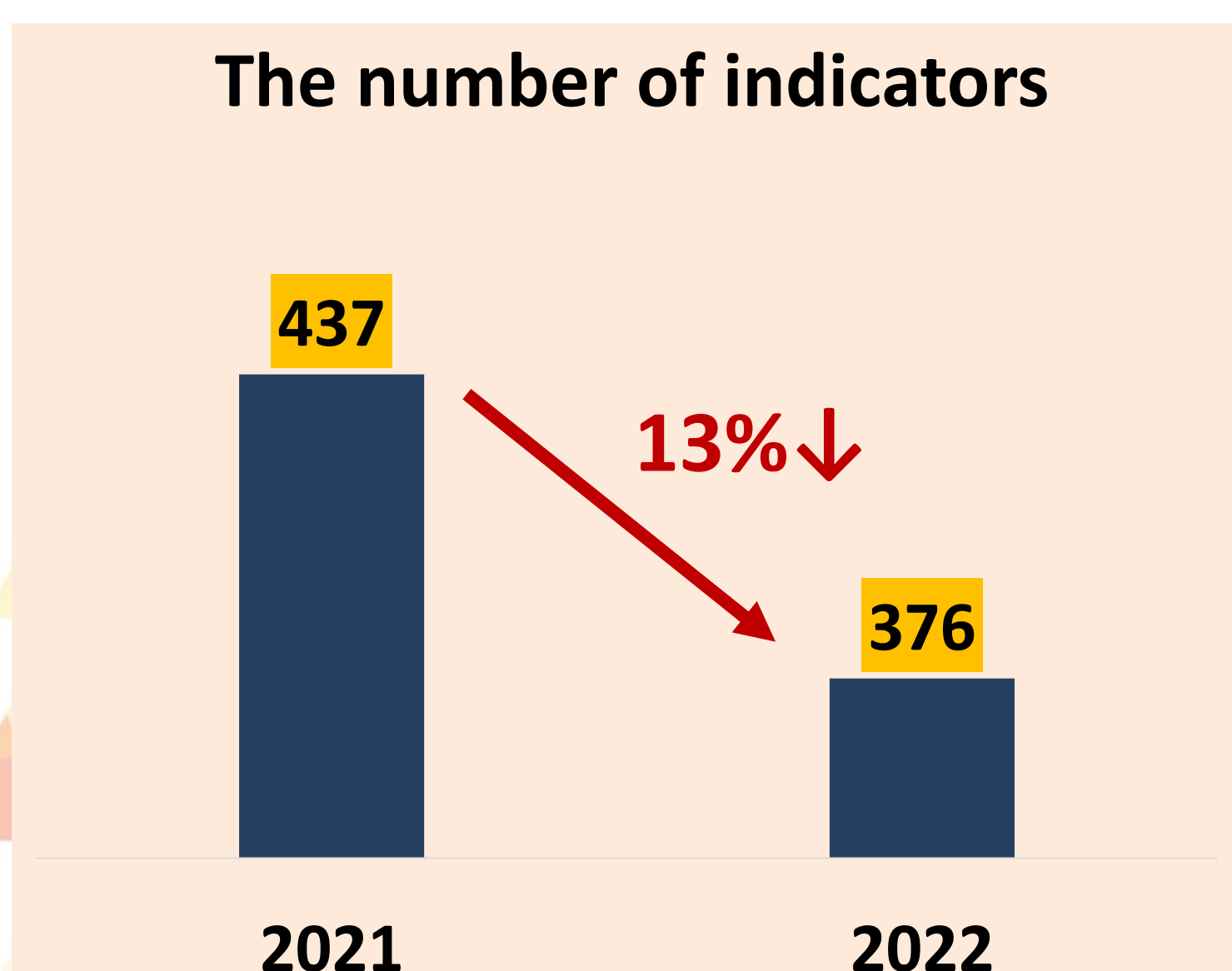


Figure 6 Official document submission and verification

RESULTS

- The number of indicators was reduced from 437 to **376 indicators, a reduction of 13%**. (Added 38 indicators and abolished 99 indicators)
- The indicator management time is reduced by **2,135 minutes** per month, which is approximately equivalent to a reduction of **4 working days**.
- We raised the thresholds of **64 indicators** to improve daily monitoring standards.



CONCLUSIONS

Indicator monitoring is not as many as possible. Too many indicators not only waste resources, but also make the department management at a loss. Therefore, selecting indicators that are representative and can reflect the actual quality of clinical care is the key factor for the success of indicator management. When there are clear measurement indicators, the department can move towards specific goals, and with the different characteristics of the indicators, consider the entry and exit mechanism of the indicators in a timely manner, and continue to improve and innovate through analysis, review, and improvement to create high-quality medical care.

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