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Improve the Learning Effectiveness of New and Transferred Technicians

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INTRODUCTION

The key to providing good quality of examination medical services by examination technicians is whether the technician has a reliable professional ability (EPA), which is closely related to the training of new personnel in the examination room and the teaching ability of clinical teachers. The literature also points out that the high turnover rate of new recruits will increase the administrative operation cost and waste of training resources for hospitals, so it is necessary to pay attention to the learning effectiveness of new personnel.

AIM

The purpose of this improvement project is to explore the learning effectiveness of new and transferred technicians in the use of EPAs under the CBME framework.

RESULTS

1. The proportion of new and transferred technicians who achieve Level 4 learning effectiveness has increased from 25% to 100%.
2. The 2nd, 6th, 7th, and 9th of the 10 true causes have been eliminated by implementing measures.
3. Additional benefits:
 - (1) The number of patient complaints or abnormal events after improvement is 0.
 - (2) The degree of clinical teachers' teaching distress decreased from 2.5 points (between some troubles and few troubles) to 1.3 points (between little trouble and no trouble), a decrease of 48%.
 - (3) The retention rate of new technicians is 100%, saving NTD151,600 in the appointment and training costs of new technicians.

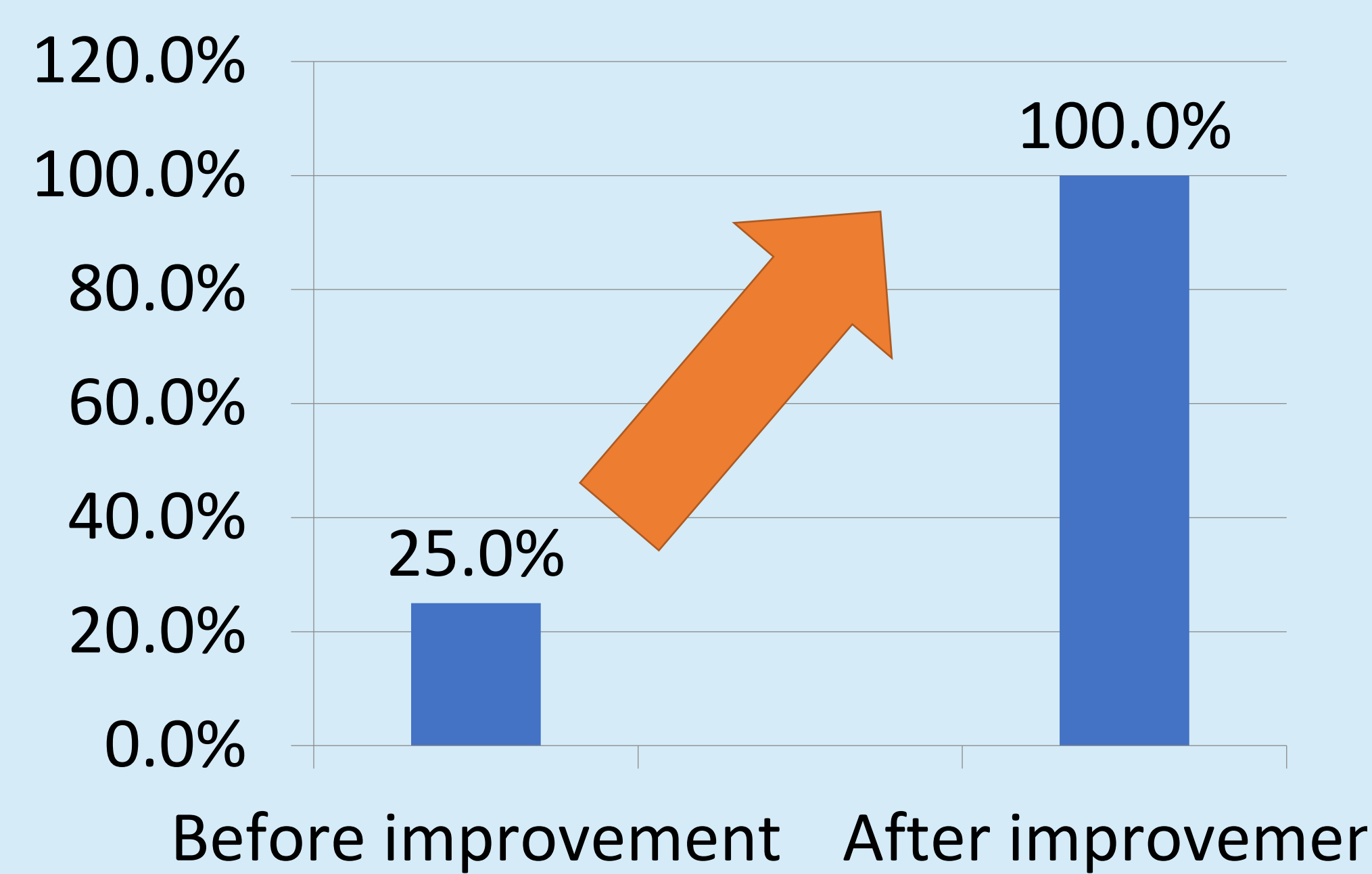


Figure 1: Comparison of before and after improvement in the pass rate of new recruits and transferred technicians to achieve EPA level 4

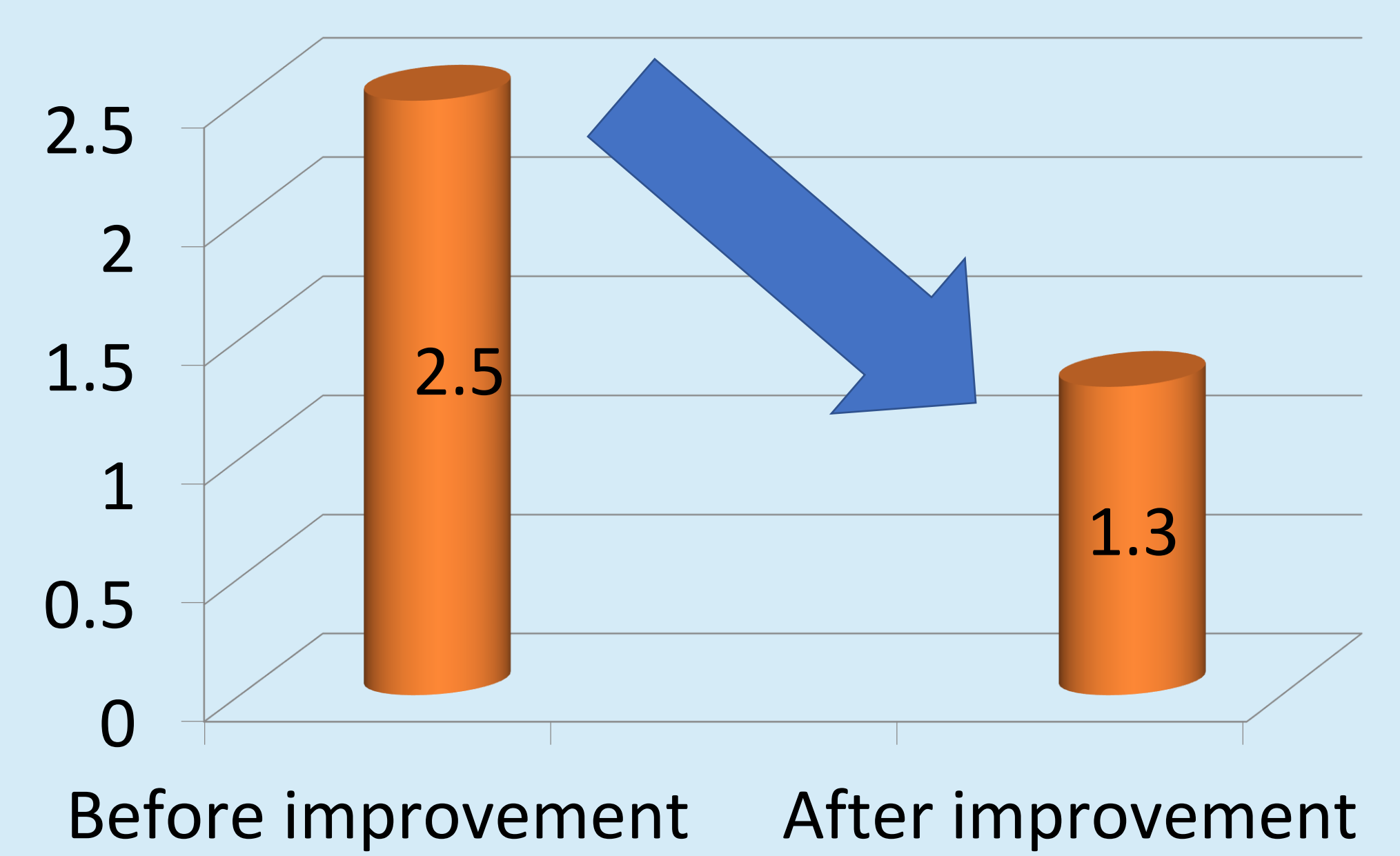


Figure 2: Comparison of clinical teachers' teaching distress before and after improvement

METHOD

Operate in the quality control circle

- Conduct multi-faceted status analysis, including reviewing the training methods of new technicians in the examination room, turnover rate statistics, analysis of the reasons for leaving or transferring, and formulating the new technician learning needs questionnaire and clinical teacher experience questionnaire for investigation and analysis.
- Finally determine the 10 true causes, 12 measures were formulated according to the real cause.
- 7 measures were selected after evaluation, which were integrated into five strategic groups:
 - Strategy 1 - Establish new technician learning materials,
 - Strategy 2 - Establish a new technician learning passport,
 - Strategy 3 - Set the recruitment conditions for new technicians,
 - Strategy 4 - Establish a mentor and reward system,
 - Strategy 5 - Establish a new technician ability assessment system, including three examination room EPA and CCC.
- After three months of strategy implementation, the Clinical Competency Committee (CCC) was convened to evaluate and review the learning effectiveness of new and transferred technicians.

CONCLUSIONS

By establishing EPAs for examination technicians under the CBME structure, combined with the study passports of examination technicians, reintegrating digital teaching materials and fixed clinical teacher guidance, it is easier for new recruits to learn, and the ability of new recruits is evaluated by an objective consensus of many people in the Clinical Competency Committee, which also eliminates the subjectivity of a single clinical teacher and the heavy pressure of judging whether newcomers are suitable.

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