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ONE-STOP OPERATIONS OF QUALITY MANAGEMENT

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INTRODUCTION

Due to the rapid development of healthcare industry, not only are the monitoring items of performance indicator increased, but also the variety of hospital accreditation system. Those bring a challenge on the work of hospital quality management. Chung Gang Memorial Hospital aims to improve the efficiency of quality management, cross system communication and information transparency by implementing an automated monitoring and analyzing of key performance indicators system with different modules customized to each hospital unit.

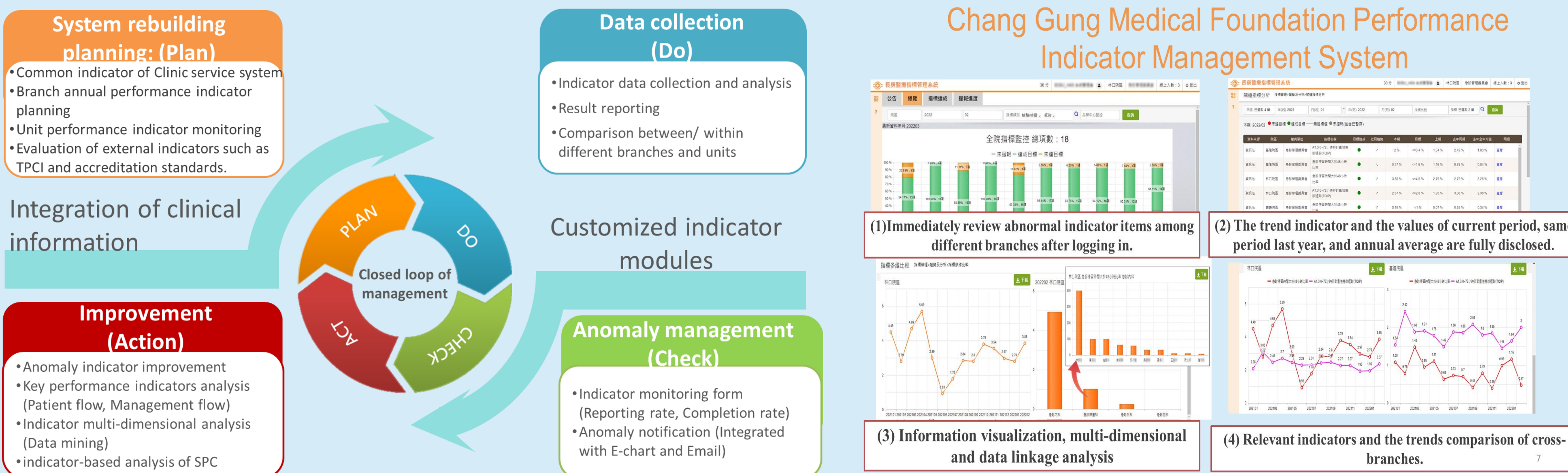
AIM

1. Integration of clinical information
2. Customized indicator modules
3. Information visualization
4. Multi-dimensional analysis

METHOD

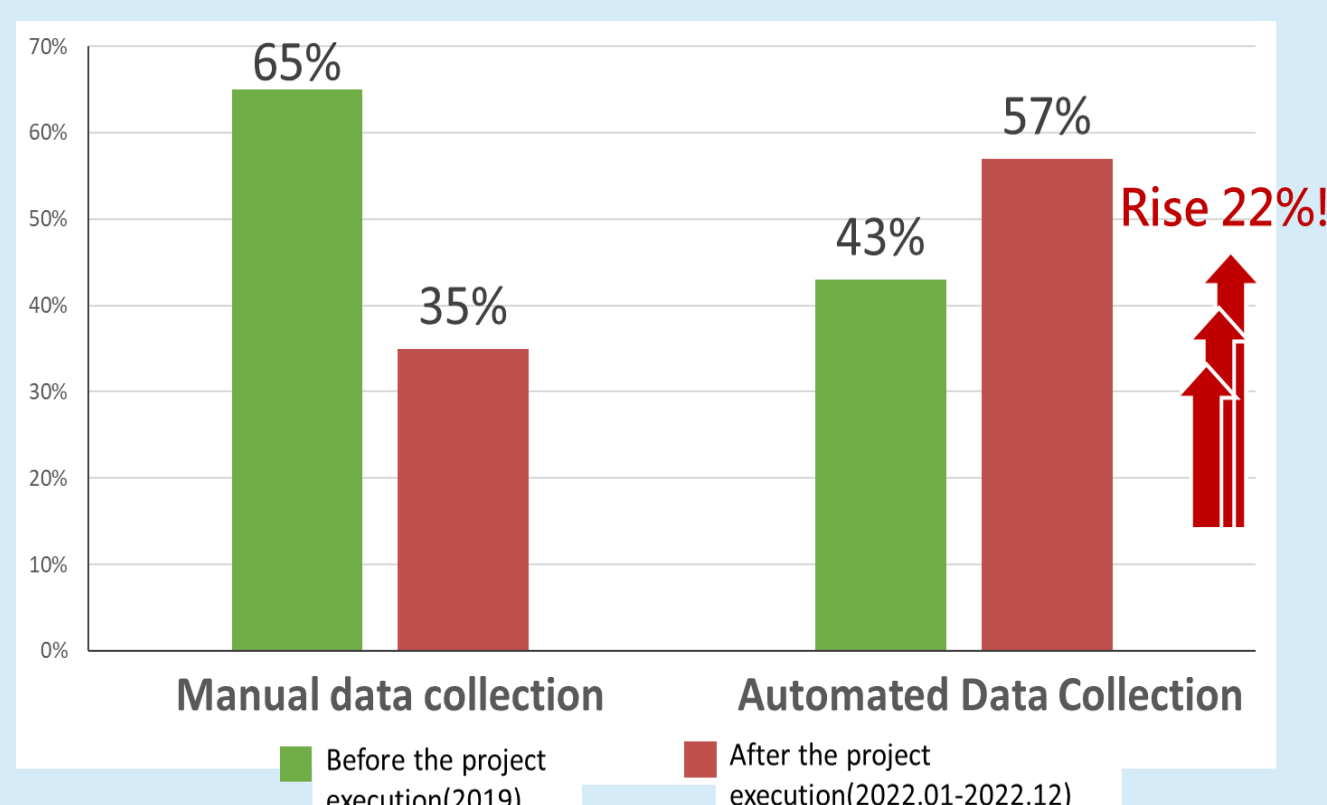
Based on PDCA cycle and DAMIC model, we rebuilt the hospital performance integrator system by integrating 3 different systems, E-Chart system, E-mail system, and the personnel management system. The employee performance management satisfaction were evaluated after the launch of new system. The new system has 3 key features as follows,

1. A systematic indicator monitoring and structured management mechanism:
According to PDCA cycle, the system rebuilding was divided into four parts which are system rebuilding planning, data collection, indicator anomaly management, and improvement.
2. Customized indicator modules:
Transform the Know How of structured query language into simple modules of screening condition and calculation. With this system model, user can calculate an indicator by yourself even you are not a data engineer.
3. Information visualization & multi-dimensional analysis:
Display options include (1) comparison with the previous period or the same period last year, (2) associative pointers/ key performance indicators (patient flow, management flow), cross-district, peer comparison, (3) comparison within or between departments, physicians, wards.



RESULT

Due to the launch of the new system, the time for manual management has been reduced from 82.7 hours to 25 minutes. The workhour of data analysis had reduced from 1 hour to 5 minutes. The rejection rate of indicator informatization requirement had declined from 8.04% to 0%. The employee performance management satisfaction had increased from an average of 69.6 to an average of 85.1. It was an increase of 22.4%.



CONCLUSIONS

The automated monitoring and analyzing of key performance indicators system with different customized modules achieves the goal of one-stop management. With the three major features which are systematic & structured management flow, customized indicator modules, and Information visualization & multi-dimensional analysis, the system greatly improves the efficiency of indicators management and reduces the labor hours of relevant personnel such as quality manager, analyst and IT engineer. The system creates a win-win situation for the personnel in quality management, IT, and clinical medicine.