

Management Optimisation of F City People's Hospital from the Perspective of PDCA Cycle

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Abstract: *This case describes how F City People's Hospital, the largest hospital in F City, uses PDCA management tools to improve the quality of hospital management continuously. F City People's Hospital integrates PDCA management tools into its daily management by living and learning under the new form of medical reform, providing new ideas for public hospitals' healthy and sustainable development. We will summarise the effectiveness of continuous improvement of hospital quality management, gain experience and insights into PDCA application in hospital quality management, and provide a reference basis for the overall improvement of hospital quality management. The study will provide a reference basis to continuously improve the general quality management level of the hospital.*

Keywords: *PDCA, hospital management, public hospitals*

1. Introduction

To apply PDCA, we must first understand PDCA [1]. A person's excellent quality comes from his strict self-management, and an organization's excellent quality comes from the organization's self-management. Only by paying attention to details, can one achieve great things. A big problem is often caused by a minor detail. In fact, as President Wang Jian'an (2014) points out, many quality problems are caused by risk factors acting on the weak links of the system. In contrast, the PDCA management tool we apply is a scientific approach that integrates different management methods and techniques to enhance the organization's ability to combat risk and continuously improve the quality of management throughout the organization.

The PDCA cycle was first proposed by Walter A. Shewhart, an American quality management expert, and was popularized and popularized by Deming, also known as Deming Circle. The first stage is planning. The planning stage is mainly carried out through market research and user visits, and other methods to identify the potential needs of users to develop quality management plans and objectives for users. The second stage is implementation. The design and implementation stage is to implement the content created in the planning stage, usually the organization according to the quality management plan for product design and personnel training. The third stage is inspection. The inspection stage is mainly in the implementation process or, after the completion of the implementation, which checks the implementation to see if it is in line with the expected results of the planning stage. The last stage is processing, which adopts appropriate methods according to the inspection results (Fig.1). It standardizes the successful experiences, and leaves the problems that arise for the next PDCA cycle to solve. These four stages are interlocked. If a stage is successful, it will be included in the standard, and vice versa. If a stage is unsuccessful, it will be left to the next PDCA cycle to solve.

PDCA cycle is a fundamental thinking mindset in the management process. Between the upper and lower levels, the same departments should be clear in the management process of their own goals to find their positioning. The PDCA cycle is driven by work, and the levels of the PDCA cycle are a bit like Russian nesting dolls, with short cycles inside the big cycle and smaller cycles inside the trim cycle. The PDCA cycle is also like a tightly-knit cogwheel, with the cogs fitting tightly together and working together to drive the whole organizational structure. The PDCA cycle is an upward spiral. After a cycle is completed, it will improve the quality of the entire management. The PDCA cycle has been widely used since its inception and has provided ideas to those who use it to analyze the current situation and identify problems.

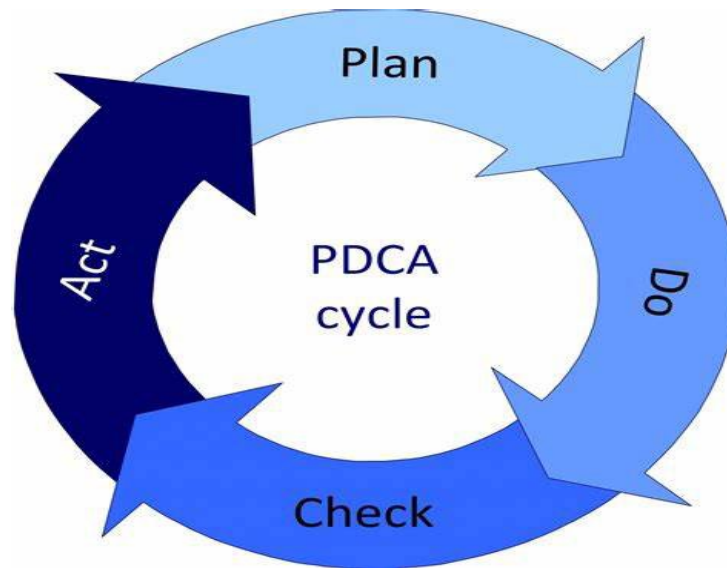


Figure 1: Plan-Do-Check-Act cycle.

F City People's Hospital, was founded on 23 August 1931 and has more than 90 years of history. It is the first county-level hospital in the province to establish a national drug clinical trial institution and the first county-level hospital to be certified as a national chest pain center (standard version), and it is qualified to provide standardized training for provincial residents and assistant general practitioners. It has been awarded the honors of National Baby-Friendly Hospital, National "Ankang Cup" Competition Winning Unit and the first batch of talent demonstration sites in the YiChun area.

In recent years, along with the development of "interventionalist internal medicine and minimally invasive surgery," the hospital has pioneered many firsts in YiChun area, and some of the specialized technologies have reached the highest level in the province.

In the existing competitive medical market, competition for patient resources is fierce [2]. The impact on F City People's Hospital comes not only from the two new large private hospitals but also from other provincial-level tertiary public hospitals. With the nationwide implementation of the Sanming medical reform, the reform of the DRG payment method continues to deepen. Optimizing hospital management and improving the quality of hospital management is critical in this context. PDCA management tools are quite necessary, which can improve the market competitiveness of the hospital.

2. Using PDCA tools to reduce the rate of secondary patient complaints

F City People's Hospital should not only be based on professionalism and technical excellence but also on exemplary service to patients [3]. We need to provide more humanized service and keep attentive to our patients. Pay attention to the needs of the patient to achieve a hospital and patient win-win pattern, cultivate the patient's feelings for the hospital, and build the hospital's brand reputation, which is the fundamental way to reduce the rate of secondary patient complaints.

In the second half of 2022, a patient at F City People's Hospital complained to the doctor after an outpatient visit because he did not understand the medical insurance policy and was dissatisfied with the doctor's attitude. After going through several departments, the situation remained unresolved. Finally, he came to the office of the President's Representative for mediation, and the President's Representative of the day came out to coordinate the hospital's multi-departmental staff and patiently explained the medical insurance policy to the patient, which finally answered the patient's doubts and won his understanding. From the patient's point of view, the hospital function department has more names; complaints do not know where to go. In addition, the hospital's medical nursing, finance, and other departments have their own duties, and it is easy to cause patients to run back and forth between multiple departments and suffer. As a result, patient satisfaction with the hospital is significantly reduced.

Suppose patients do not receive timely communication and resolution from the hospital at the time of the initial complaint. In that case, it will generate secondary complaints or even complaints to the higher levels. This complicates the resolution process and exacerbates the negative impact, and affects the hospital's brand image. At a time when human rights consciousness is becoming more popular,

patients resolve their doubts and grievances through complaints, and hospitals help cultivate patients' trust in hospitals by providing them with convenient complaint channels.

Almost all hospitals have experienced medical disputes, which makes medical dispute resolution very essential. The complaints department is an important window for patients in the hospital. Therefore, the hospital launched the "President's Representative Reception Room," prominently located at the entrance of the hospital's outpatient clinic to solve various problems and questions that occur during the medical process, greatly improving the patient's admission experience. The Dean's Representative Reception Room solves various problems of patients in the medical process and dramatically improves the patient admission experience.

In general, the main reasons for secondary complaints are the followings: the hospital departments have more management issues and do not have the energy to take on additional patient complaints; patients are usually not transparent about which department to go to and look for the complaints department only by imagination; the receiving department is not clear when there are more complaints, and it is more challenging to deal with repeated complaints effectively.

Using the PDCA cycle to solve this problem.

By the decision of the Hospital Council, the President's Representative Reception Room is piloted next to the entrance of the outpatient clinic, and all patient complaints are classified and fed back upward by the president's Representative Reception Room, coordinating multi-departmental resources and linking upward and downward to solve patient complaints promptly. In the hospital, the working hours of the President's Representative Reception Room and the active telephone number are prominently displayed. At the same time, the information is synchronized with the hospital's official website so patients can easily find complaint channels. Problems are solved on the spot by coordinating resources, so patients come with their complaints and leave with them. (Plan stage P)

The hospital established a system related to the President's Representative Reception Room, in addition to organizing each shift department to study the relevant complaint acceptance system and clarify the responsibilities of each department to implement cooperation. All shift staff should keep records of patient visits and do an excellent job of handing over uncompleted matters to improve efficiency. To do an excellent job of service details, a glass of water, a smile, and a please will comfort the patient who complained. Regularly summarise complaints, see patients' complaints as a motivation for their progress and gain patients' trust. (Stage D implementation)

We surveyed in-patients and their families to find out the level of awareness of the complaints procedure, asked complainants how they found out about the complaints procedure and how they felt about it, counted the number of secondary complaints, and significantly reduced the rate of secondary complaints. (Check impact level C)

Establish standards, develop a unified complaint acceptance process and rules, further clarify each functional departments responsibilities and work scope, strengthen the communication link between functional departments, and promote a successful experience for the whole hospital. The success of the Dean's Representative Reception Room lies in its ability to quickly open up the communication channels between patients and the hospital and make optimal solutions. The representative reception room of the hospital president not only facilitates patients and families, optimizes the complaints process, and improves the quality of complaints but also gains the reputation and prestige for the hospital. (Improvement level A)

3. Improving the hospital canteen

With the development of the hospital, the number of staff is increasing. The canteen only has a capacity of one hundred people and has to satisfy the needs of, more than 1,700 employees. With more and more new workers, the pressure on the canteen catering supply is increasing. There are also increasing problems. A cafeteria is a special place where hospital employees interact closely and is closely linked with the employees' quality of life. To strengthen the canteen management, F City People's Hospital organized a canteen satisfaction survey to get a more comprehensive understanding of the current situation and, proposed a program to improve staff satisfaction with the canteen after discussion.

The survey showed hospital staff is generally dissatisfied with the canteen's food, service attitude, environmental hygiene and other aspects. The staff canteen is small, which results in crowded staffing. Employees are less satisfied with the canteen because of the poor taste. On the one hand, there is a severe

problem of leftovers in the canteen. On the other hand, workers who leave work late are often unable to get a meal because there are no more dishes.

The staff canteen is not only related to the health of the staff but also has a positive effect on improving the efficiency of the hospital staff. For medical workers, who often work overtime and do not eat on time, a good meal can satisfy them and help them cope with the heavy workload. Ensuring three meals daily for hospital staff reflects the hospital's humanistic care and better serves the patients.

Using the PDCA cycle to solve this problem.

Several factors affecting the satisfaction of the cafeteria were reflected in a "scale", which was divided into five levels of perspectives according to the different attitudes of the workers interviewed in the staff canteen. These five attitudes are listed as following: very satisfied, somewhat satisfied, average, dissatisfied and very dissatisfied, and they are given corresponding scores. The indicators are taste, service attitude, hygiene condition, and cafeteria environment. The ratings correspond to very satisfied (5 points), satisfied (4 points), average (3 points), dissatisfied (2 points), and very dissatisfied (1 point). The questionnaire survey was based on the valid questionnaires completed by the randomly selected cafeteria staff and the valid questionnaires returned by the administration building. The data monitoring was tested once a month from September 2022 to December 2022, and the target value of the test was 3 points. (Program phase P)

The survey data in September 2022 was 2.3 points, 0.7 points below the target of 3 points. The main problems are overcrowded queues in the after-hours cafeteria, single and bad tasting food, and the bad attitude of the cafeteria staff. The following measures can be taken to solve these problems: differentiate the after-hours time to avoid crowding, develop a rich canteen menu and increase the supply of dishes, and strengthen the hygiene training of canteen staff.

In response to the improvement measures summarised above, further requirements have been put forward for the staff canteen. These include: rotating the menu every three to four weeks to avoid onemotonous dish every day; purchasing high-quality rice and cooking oil and keeping samples of meals for sampling at any time to ensure the health and safety of employees; optimizing the canteen's ordering and packing service; managing the flow of people appropriately to avoid overcrowded queues, improve the efficiency of the queues and save meal time; cultivating the hygiene awareness of canteen staff; and improving the service awareness of canteen staff. (Implementation phase D)

After continuous monitoring, satisfaction with the canteen at F City People's Hospital increased with the implementation of improvement measures. Employee satisfaction with the canteen increased from 2.3 points in September 2022 to 2.8 points in October 2022 and rose to 3.2 points in December, exceeding the inspection target of 3 points by 0.2 points. (Inspection effectiveness level C)

Based on the three months of continuous monitoring of the canteen staff, we can draw three lessons from this initiative to improve canteen service. The first is that the staff canteen should establish evaluation standards. The standards aim to supervise canteen staff to improve their service attitude and efficiency. It is necessary to conduct regular training and assessment of canteen staff.

The second is to expand communication channels, collect employees' opinions promptly, and provide feedback and corrections to ensure that the problems reflected by employees can be solved as soon as possible.

The third is to establish and improve the HACCP system to strictly control and manage the processes of transportation, processing, production and storage of food to ensure food safety. (Level of improvement A)

4. Conclusion

PDCA cycle has gradually entered modern hospital management activities. Being familiar with and applying of PDCA cycle can better play the role of hospital management to enhance the level of hospital development.

The complaint rate of patients was lower than the rate before the implementation, and the difference was significant. After implementing the PDCA management method, the hospital Canteen satisfaction indicators the pass rate, and patient satisfaction are higher than before implementation. The difference is of statistical significance. Implementing the PDCA management method can improve hospital management's quality, ensure patients' safety, obtain higher satisfaction, and have high application value.

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