

Strategic Analysis of the Specialized Operation of the General Hospital Transformed to the NCP Designated Hospital based on SCP Analysis

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Abstract: After the outbreak of COVID-19, many of the general hospitals in Wuhan turned to be designated hospitals to treat patients with COVID-19. For example, the west campus of Wuhan Union Hospital became one of the third batch of designated hospitals for febrile patients on January 25, 2020 and one of the hospitals for severe patients with COVID-19 on January 31, 2020. As a result, the structure and operational mode of the hospital changed. The article focuses on analyzing the changes based on SCP mode, in order to provide decision-making basis for general hospitals regarding promoting performance management system to meet actual needs at specific periods.

Keywords: General hospital; Designated hospital; Specialized operation; SCP Model

1. Introduction

SCP model is an analysis model, which provides a logical structure-conduct-performance analysis framework and can penetrate into specific links as well. It can be used to analyze the strategic adjustment and conduct change that may be brought about when the industry is affected by external shocks.

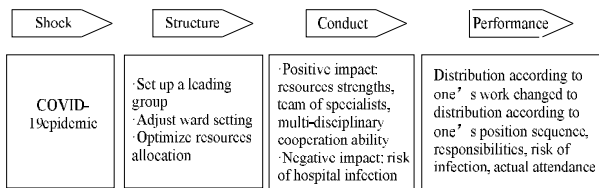


Figure 1. SCP analysis model

2. The SCP Analysis

2.1. Shock

After the outbreak of COVID-19, hospitals in Wuhan were successively appointed to be designated hospitals for treatment of COVID-19 to alleviate the difficulty of receiving and treating patients with fever. As one of the third batch of requisitioned hospitals, the west campus of Wuhan Union Hospital immediately carried out rectification according to the prevention and control requirements of the hospital, and equipped with masks, protective clothing, protective masks, disinfectant and other protective materials through various channels such as national allocation and social donation. Public general hospitals changed to specialized operation mode.

2.2. Structure

The west campus of Wuhan Union Hospital adjusted its internal management structure according to the actual situation.

2.2.1. Set up a leading group

The prevention and control mechanism of COVID-19 was established, in which the dean acted as the group leader, the deputy dean and the director of medical office acted as the deputy group leaders, and the multi-department coordination and cooperation between the hospital infection control, public health, nursing, publicity, logistics and other departments were involved. It was divided into six groups: medical treatment group, flow tracking group, human resources allocation group, hospital infection prevention and control group, materials and safety assurance group, financial-medical insurance-medical records-statistical information group, with clear division of responsibilities, including expert consultation and emergency treatment, medical staff deployment, training and assessment of hospital infection prevention and control.

2.2.2. Adjust ward setting

In the early stage of epidemic prevention and control, we made preparations for a protracted war, increased the supply of the ward as much as possible, accelerated the admission and treatment of patients, eased the pressure from the government and the headquarters, and completed the admission and treatment tasks assigned by the headquarters. In the shortest time, all the sick areas on

the west side of the inpatient building and some of the sick areas on the east side of the inpatient building were transformed into the "three areas and two channels" isolation ward in line with the requirements of hospital infection prevention and control.

2.2.3. Optimize resources allocation

Superior resources were concentrated on the centralized management of critically ill patients, so that they could receive prompt and active medical attention, improving the level of treatment and reducing the case fatality rate. Under the background of integrated management, the human resources of each hospital district were fully mobilized, and medical, nursing and technical staff were dispatched from the main campus to support the west campus. Medical staff were properly scheduled and orderly rotated, for instance, nurses were orderly on rotation after three weeks of work, so as to carry out cross-rotation between the old and the new, in order to ensure medical quality, hospital infection prevention and control and team stability, especially to ensure sufficient staff for critical care.

2.3. Conduct

After the public general hospital adjusted its internal structure to adapt to the specialized operation, the "conduct", that is to say, the hospital operation also changed.

2.3.1. Positive impact

The National Emergency Plan for Public Health Emergencies requires to strengthen the responsibility of disease prevention and control of medical and health institutions; establish an emergency mechanism for public health emergencies with complete functions, rapid response and coordinated operation. The law of the People's Republic of China on the Prevention and Treatment of Infectious Diseases requires that emergency facilities, equipment, medicine for medical treatment and medical equipment as well as other materials and technologies be reserved and used.

Compared with the traditional hospitals for infectious diseases, public general hospitals had obvious advantages in resources. According to the study, Severe cases were more likely to have hypertension (32.7% vs. 12.6%), cardiovascular diseases (33.9% vs. 15.3%), cerebrovascular diseases (50.0% vs. 15.3%), diabetes (34.6% vs. 14.3%), hepatitis B infections (32.1% vs. 15.7%), COPD (62.5% vs. 15.3%), chronic kidney diseases (38.1% vs. 15.7%) and malignancy (50.0% vs. 15.6%) compared with non-severe cases [1].

Traditional infectious disease hospitals were based on internal medicine treatment, subjects were too simplex [2]. However, after the specialized operation of general hospital, it still retained the experienced expert teams and the capability of multi-disciplinary cooperation. First, it

could quickly integrate the human and material resources of medical technology departments such as inspection, radiation and pathology, and invest them in the prevention and control of infectious diseases. Secondly, it could effectively carry out characteristic diagnosis and treatment, actively establish specialized teams of liver protection, heart protection, lung clearing, bone strengthening, etc., and comprehensively improve the level of treatment. In addition, it could meet the needs of the patients with complications comprehensive consultation in time, so as to adapt to China's public health emergency system and the prevention and treatment of infectious diseases.

Besides treating COVID-19 patients, public general hospital also gave full play to the advantages of nonprofit nature and comprehensive disciplines, to fulfill the responsibility of the national medical team and fully coordinate facilities, equipment, personnel and technology, establish a unified and strict treatment system, such as MDT consultation team, multidisciplinary team operation, etc. Therefore, even in the period of epidemic prevention and control when medical resources were cut off, we still had the conditions and ability to carry out emergency surgery for patients with special conditions.

2.3.2. Negative impact

Compared with general hospitals, infectious diseases hospitals had some natural advantages: clear positioning, rich experience in specialized operation and management, and obvious market demand [3]. In the treatment of infectious diseases, general hospitals had some deficiencies compared with specialized hospitals. The most obvious one was the risk of hospital infection.

2.4. Performance

The Evaluation Standard of Tertiary Hospitals requires that the performance evaluation of hospitals should focus on the service quantity, service quality and patient burden, etc. The design of the performance indicator system of public hospitals should follow the following principles: highlighting the guide of social benefits, giving consideration to the results of economic benefits, being simple and operable [4]. During the normal operation period, it was difficult to compare between various departments in horizontal way. So the principle of distribution was according to the workload (the in-patient quantity, bed utilization rate, operation volume), medical cost management (medicine proportion, medical consumables proportion), cost index (inpatient average fee per time), work quality and work efficiency, medical service satisfaction. Moreover, in order to fully reflect the value of the staff and fully mobilize the work enthusiasm, under the guidance of the principle of giving priority to efficiency and giving consideration to fairness, the departments are allowed to conduct secondary allocation.

With the transformation of general hospitals into specialized hospitals, the business contents of different wards tended to be the same, and the differences in the responsibilities between medical staff were reduced, so it was more suitable to adopt the post performance management evaluation method. The most scientific method was to add the assessment of the post risk (especially in the infectious disease epidemic period) on the basis of the workload identification, and comprehensively verify the performance level of each post. Moreover, it gave preference to front-line medical staff, especially those who treated severe patients, and reflected the principle of performance evaluation that gave priority to efficiency while giving consideration to fairness [5].

3. Conclusions and Suggestions

3.1. Conclusions of the model

The outbreak of COVID-19 constituted a certain external shocks to the normal operation of the hospital management, especially to the general hospitals that had been designated hospital for COVID-19 patients, prompting general hospitals into specialized operation mode in the special period. On the one hand, they could make full use of their advantages in resources to raise the level of treatment through the strict treatment system and multi-disciplinary cooperation. On the other hand, there existed more risk of hospital infection than infectious disease specialist hospitals. During the specialized operation, the pattern of performance distribution changed from the routine distribution according to work to that on the basis of job sequence, job responsibility, infection risk and actual attendance, which fully reflected the principle of favoring clinical front-line positions, risk positions and key positions.

3.2. Policy suggestions

3.2.1. Improve the multi-channel compensation mechanism

Increase government subsidies to public general hospitals. During the period of the epidemic, the normal operation of the hospital was affected to a large extent, which resulted in the shortage of capital flow and made it difficult to ensure the full payment of the performance. Espe-

cially, as to the medical personnel who participated in the second-line shift were not included in the scope of temporary financial subsidy, so they needed to be subsidized by the hospital, which increased the financial burden of the hospital.

3.2.2. Expand the autonomy of the use of hospital funds

Due to the impact of the normal work order during the epidemic, some issues could not be discussed and publicized according to the conventional procedures. Therefore, it is suggested that the designated hospitals involved in the prevention and control of the epidemic should be given flexible decision-making authority, and the performance policies for the special period should be formulated according to the actual operation of the hospitals, so as to form effective incentives for medical staff.

3.2.3. Optimize the medical care capacity and resources allocation at supply-side

In the special period of epidemic prevention and control, the consumption of key medical equipment, medical protective materials and sterilizing materials is huge. It is advised that the higher authorities provide policy support and relevant guarantee to help improve the treatment efficiency and quality, and ensure the sustainable operation of designated medical institutions.

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