

Research on Public Management Strategy of Optimizing the Service Efficiency of NHS System in Britain

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ABSTRACT

In this paper, the optimization of the service efficiency of the National Health Service (NHS) in Britain is deeply discussed, and the corresponding public management strategies are put forward. In order to improve the service efficiency of NHS system, this paper puts forward a number of public management strategies. First of all, improve the management system, introduce performance evaluation mechanism and strengthen cross-departmental cooperation to motivate medical service providers and managers to improve their work efficiency. Secondly, optimize the allocation of resources, dynamically adjust the allocation of medical personnel and beds according to seasonal and regional needs, and improve the efficiency of human resources. Finally, strengthen information construction, promote electronic medical record system, and use big data and artificial intelligence technology to improve the accuracy and efficiency of medical services. By drawing lessons from successful public management strategy cases at home and abroad, this paper provides practical reference for optimizing the service efficiency of NHS system. The British government and relevant institutions should formulate detailed implementation plans to ensure that these strategies are effectively implemented, so as to improve the overall service level and patient satisfaction of the NHS system. The research in this paper provides valuable insights and strategic suggestions for optimizing the service efficiency of NHS system in Britain, which is of great significance for improving the quality and efficiency of medical services.

KEYWORDS

NHS System; Public Management; Service Efficiency; Britain.

1. INTRODUCTION

National Health Service (NHS), as a world-renowned public health care system, has been bearing the heavy responsibility of providing comprehensive health care for the British people since its establishment. However, with the development of social economy and the aging of population, NHS is facing unprecedented challenges, among which the most prominent problem is how to optimize service efficiency to ensure the rational distribution and efficient utilization of medical resources.

The optimization of service efficiency is not only related to the rational allocation of medical resources, but also directly affects the patient's medical experience and medical quality [1]. Under the background of increasingly tight medical resources, it is particularly urgent to improve the service efficiency of NHS. By optimizing service process and improving management strategy, medical pressure can be effectively relieved, patient satisfaction can be improved, and then the sustainable development of medical system can be realized.

The purpose of this paper is to discuss the optimization of the service efficiency of NHS system in Britain and put forward the corresponding public management strategies. This paper attempts to

reveal the present situation and existing problems of the service efficiency of NHS system, and from the perspective of public management, discusses the effective ways to improve the service efficiency.

2. OVERVIEW OF NHS SYSTEM

NHS is a major public health care system established by the British government, aiming at providing free or low-cost medical services to all British residents. Since its establishment, NHS has become one of the recognized health care models in the world, which reflects Britain's emphasis on citizens' health rights [2]. The origin of NHS can be traced back to 1948, when the British government decided to establish this comprehensive public medical system in order to ensure that all citizens could get basic medical services. After years of development and reform, NHS has formed such a huge and complex system, covering hospitals, clinics, medicines, doctors and nurses.

The organizational structure of NHS is mainly divided into several levels: at the national level, there is a special health department responsible for formulating and implementing medical policies; At the local level, there are various medical institutions, such as general hospitals and community clinics, which are responsible for providing specific medical services. In addition, NHS has set up a series of management institutions to ensure the quality and efficiency of medical services. In the management system, NHS pays attention to the integration and coordination of medical services and strives to provide patients with all-round services from prevention to treatment. At the same time, in order to cope with the growing medical needs, NHS has been constantly carrying out internal reforms and innovations to improve service efficiency and quality [3-4].

NHS plays an important role in British medical security system. It not only provides basic medical security for British residents, but also is an important part of the national social security system. Through the NHS, the British government can manage medical resources more effectively and ensure the fairness and accessibility of medical services. NHS system, with its comprehensive service scope, perfect organizational structure and efficient management system, plays an important role in the field of health care in Britain and even the whole world. However, with the growth of medical demand and the shortage of medical resources, how to further optimize the service efficiency of NHS is still a subject worthy of in-depth study.

3. ANALYSIS ON THE PRESENT SITUATION AND PROBLEMS OF NHS SYSTEM SERVICE EFFICIENCY

3.1. Current Service Efficiency of NHS System

As the main medical service provider in Britain, NHS system's service efficiency is affected by many factors (Table 1). In the winter when the demand for medical services is very high, hospitals often open more general beds and emergency beds. However, opening up extra beds is costly and difficult. At the same time, the NHS is in a labor crisis, although the hospital has been trying to equip the existing beds with medical staff. In addition, the space for new beds in existing buildings is very limited [5].

The number of hospital beds in England has been reduced by half in the past 30 years. Although the number of hospital beds has also decreased in other countries. However, the number of beds in Britain is already very low, with 2.6 beds per thousand people; France has 6.1 beds per thousand people, while Germany has 8.1 beds per thousand people. The small number of beds indicates that the patients are well cared for, treated and can go home more quickly, thus indicating that medical resources have been effectively utilized. However, the shortage of beds will lead to an increase in the occupancy rate of beds and increase the waiting time of patients [6-7].

Table 1. Service efficiency status

index	describe
waiting time	In the winter when the demand for medical services is great, hospitals will open more beds, but it is costly and difficult to open additional beds, and the existing building space is limited.
Hospital bed	In the past 30 years, the number of hospital beds in England has been reduced by half, which has led to an increase in the occupancy rate of hospital beds and increased the waiting time of patients.
Staffing	The NHS employs more than 1 million full-time employees, but there is still a shortage of nursing staff.

Personnel is the core factor of medical and other technical service industries, and personnel expenditure is the largest expenditure of NHS. The NHS in Britain employs more than 1 million full-time employees (excluding those working for general practitioners). In the past seven years, the number of full-time employees has increased by about 0.5% on average every year. Since 2010, almost all categories of employees have increased. The number of full-time nursing staff increased from 281,064 in 2010 to 286,020 in 2017, an increase of 1.8%. This can be understood as the NHS's response to various reports on the quality of patient care. Despite the increase, there is still a considerable shortage of nursing staff in NHS [8].

3.2. Internal and External Factors Affecting the Service Efficiency of NHS System

There are many factors that affect the service efficiency of NHS system, including the internal resource allocation, management system and personnel status, as well as the external policy environment, socio-economic situation and technological progress. In order to improve service efficiency, NHS needs to comprehensively consider these factors and formulate a comprehensive improvement strategy (Figure 1).

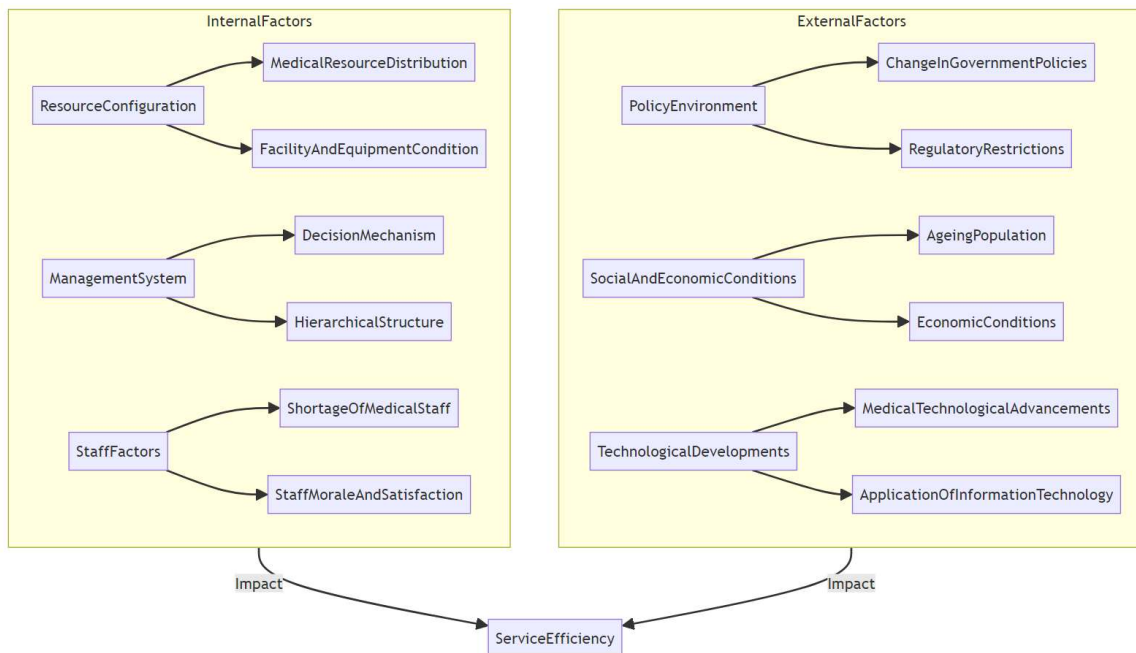


Figure 1. Internal and external factors affecting the service efficiency of NHS system

The distribution of medical resources within the NHS system is uneven. Some areas may have more medical facilities and professionals, while others lack resources. This imbalance leads to the shortage of medical services in some areas, which affects the service efficiency. The aging, lack of updating and poor maintenance of medical equipment may affect the speed and accuracy of diagnosis and treatment, thus reducing service efficiency. The decision-making process of NHS may be influenced by many factors, such as politics, economy and so on, which leads to the lag of decision-making or does not meet the actual needs, thus affecting the service efficiency. Complex hierarchical structure and bureaucracy may lead to poor information transmission, slow decision-making, and reduce the overall response speed and service efficiency. The shortage of doctors and nurses will directly slow down the service speed and prolong the waiting time of patients. The job satisfaction and morale of medical staff directly affect their work efficiency and patient care quality. If employees feel stressed or disrespected, the quality of service may decrease.

The government's investment policy, price policy and adjustment of medical reform plan will directly affect the operation and service efficiency of NHS. Although strict medical regulations and patient rights protection regulations protect the interests of patients, they may also increase the complexity and time cost of medical services. With the aging of the population and the increase of patients with chronic diseases, the demand for medical services has also increased, which has brought great pressure to NHS. The economic recession may lead to the government's reduction of investment in medical services, which will further affect the renewal and expansion of medical resources and reduce service efficiency. The introduction of new technology can improve the efficiency of diagnosis and treatment, but it also requires corresponding training and adaptation period, which may affect the service efficiency in the short term. The improvement of informatization level is helpful to improve the efficiency of medical service process, such as electronic medical record and telemedicine, but if it is improperly applied or the system is unstable, it may also cause service delay.

3.3. Problems Existing in the Service Efficiency of NHS System and Their Causes

The problems faced by NHS system in service efficiency mainly include the following aspects:

(1) Fund shortage

Although the medical expenditure in Britain exceeded 140 billion pounds in 2017, more than 10 times that of 60 years ago, it is still not enough. The NHS is facing heavy financial pressure, and there is no sign of relief. This is mainly because the growth rate of funds has obviously slowed down: from 2010/11 to 2014/15, the medical and health expenditure actually increased at an average annual rate of 1.2%, and it is expected that the growth rate of this parliament will remain at a similar level, which is much lower than the historical annual growth rate of 3.7% [9]. The current growth rate of funds is not enough to meet the growth of medical service demand.

(2) Shortage of personnel

Brexit will affect doctors from EU countries, accounting for about 11% of the doctors. According to a survey, 60% of people will consider leaving the UK after Brexit because they are worried about whether they and their families can continue to live in the UK. In 2016, the number of citizens of EU member States who left the UK reached a record high (17,197 EU staff, including doctors and nurses working in the NHS).

(3) Backward level of informatization

British medical informatization lags far behind the United States, and is almost at the initial level of the development of American medical information system. NHS consists of dozens of "medical trust systems", and each "medical trust system" consists of one or more hospitals. In England, there are 191 independent committees to supervise the diagnosis and treatment services of medical institutions. The medical payment modes and key projects in different regions of Britain depend on the local economic development level, which leads to great differences in medical services and digitalization

levels in different regions (sometimes even in different regions of the same city). One-third of hospitals in Britain have developed digital technology facilities, and their advanced level can almost rival the level of medical informatization in the United States [10]. But the worst third of hospitals still rely on clumsy and outdated computers and even use paper medical records.

The NHS system faces multiple challenges in terms of service efficiency, such as insufficient funds, shortage of personnel and backward information level. The existence of these problems has seriously affected the service efficiency of NHS system, resulting in long waiting time for patients and shortage of hospital beds. Therefore, the British government needs to take effective measures to increase medical investment, improve personnel allocation, and speed up the construction of medical information, so as to improve the service efficiency of the NHS system and meet the medical needs of the people.

4. APPLICATION OF PUBLIC MANAGEMENT STRATEGY IN OPTIMIZING THE SERVICE EFFICIENCY OF NHS SYSTEM

4.1. The Important Role of Public Management Strategy in Improving the Service Efficiency of NHS System

Public management strategy plays a vital role in improving the service efficiency of NHS system. Reasonable public management strategies can effectively optimize the allocation of medical resources, improve service processes, and enhance the overall quality and efficiency of medical services. Public management strategy plays an important role in improving the service efficiency of NHS system. By optimizing the allocation of resources, promoting the reform of management system, improving the efficiency of medical staff and promoting the interaction with the external environment, public management strategy provides a strong guarantee for the efficient operation of NHS system.

Public management strategy is helpful to realize the balanced allocation of medical resources. In view of the uneven distribution of medical resources in NHS system, public management strategy can ensure the reasonable layout of medical facilities in various regions by formulating regional medical resource planning, thus reducing the inconvenience of patients due to regional differences. This balanced configuration not only helps to shorten the waiting time of patients, but also improves the utilization efficiency of medical resources. By introducing modern management concepts and methods, such as process reengineering and performance appraisal, public management strategy can make NHS system respond to patients' needs more efficiently and flexibly. The implementation of these strategies will help to simplify the cumbersome administrative procedures, improve the efficiency of decision-making, and thus accelerate the response speed of medical services. By formulating a reasonable salary system, providing career development opportunities, improving the working environment and other measures, we can stimulate the enthusiasm of medical staff and improve their work efficiency. At the same time, these strategies also help to enhance the professional identity of medical staff, and then improve patients' satisfaction with medical services. Through communication and cooperation with the government, communities, enterprises and other stakeholders, public management strategies can help the NHS system better integrate into the social environment and strive for more support and resources. This interaction not only helps to enhance the social image of the NHS system, but also lays a solid foundation for its long-term development.

4.2. Successful Cases of Public Management Strategies at Home and Abroad

In Beijing's Fangzhuang area, a new community governance model has been innovated through the promotion of Party building leadership, the mobilization of grassroots cadres, and the cooperation of the masses. From the initial "activating the 'governance terminal' of the community", to the work route of "one point driving the whole", and then to the comprehensive establishment of the "Palm

Quadrangle", Fangzhuang area has achieved the digital transformation of community governance, improving service efficiency and community participation.

The United States has made remarkable achievements in medical informatization, and most hospitals and clinics have adopted advanced electronic medical record systems, realizing the rapid sharing and processing of medical information. This not only improves the efficiency of medical services, but also reduces medical errors and improves patient satisfaction.

The NHS system can learn from the community governance model in Fangzhuang, Beijing, and improve the efficiency and coverage of primary medical services by strengthening health management and services at the community level. For example, residents' health awareness and self-management ability can be improved by establishing community health records and carrying out regular health examinations and health education activities. NHS system should accelerate the pace of medical informatization, learn from American experience, popularize electronic medical record system, and realize digitalization and networking of medical information. This will help to improve the response speed of medical services, reduce repeated examination and treatment, reduce medical costs, and also improve the patient's medical experience.

By learning and drawing lessons from successful public management strategy cases at home and abroad, NHS system can make substantial progress in optimizing service efficiency. The innovation of community governance model and the promotion of medical informatization will be the key path to improve the service efficiency of NHS system. The British government and relevant institutions should actively explore the implementation scheme suitable for their own national conditions in order to realize the efficiency, convenience and personalization of medical services.

4.3. Suggestions on Public Management Strategy

At present, the main problems faced by NHS system include insufficient funds, shortage of personnel and backward information level. These problems lead to low service efficiency, long waiting time for patients and uneven distribution of medical resources. In view of the problems existing in the NHS system, the following suggestions on public management strategies are put forward:

(1) Improve the management system

Improve service efficiency and quality, improve management system, including introducing performance evaluation mechanism and strengthening cross-departmental cooperation. Establish a performance-based incentive mechanism to regularly evaluate medical service providers and managers to motivate them to improve their work efficiency and service quality. At the same time, by breaking departmental barriers, we can promote information sharing and collaborative work among medical, financial and human resources departments, and form a joint force to improve service efficiency.

(2) Optimize the allocation of resources

Optimize the allocation of resources and take various measures to improve the efficiency and quality of medical services. First of all, we should dynamically adjust the allocation of medical personnel and beds according to the seasonal and regional changes in medical service demand to reduce the waste of resources. Secondly, improving the efficiency of human resources through training and career development plans aims at improving the professional skills and service level of medical staff and attracting and retaining outstanding talents.

(3) Strengthen information construction

Strengthen information construction, promote electronic medical record system and use big data and artificial intelligence technology. By popularizing the unified electronic medical record system nationwide, the rapid sharing and efficient processing of medical information can be realized, thus improving the continuity and cooperation of medical services. At the same time, collecting and

analyzing medical big data and using artificial intelligence technology to assist diagnosis and treatment decision can significantly improve the accuracy and efficiency of medical services.

By implementing the above public management strategy, NHS system is expected to achieve significant improvement in service efficiency. Improving management system, optimizing resource allocation and strengthening information construction are the key measures to solve the current problems. The British government and relevant institutions should formulate detailed implementation plans to ensure that these strategies are effectively implemented, so as to improve the overall service level and patient satisfaction of the NHS system.

5. CONCLUSION

By improving management system, optimizing resource allocation and strengthening information construction, the service efficiency of NHS system can be effectively improved. Introducing performance evaluation mechanism and strengthening cross-departmental cooperation will help improve the work efficiency and service quality of medical service providers and managers; Dynamically adjust the allocation of medical staff and beds according to the seasonal and regional changes in medical service demand, and improve the efficiency of human resources through training and career development plans, aiming at improving the professional skills and service level of medical staff and attracting and retaining outstanding talents; At the same time, the promotion of electronic medical record system and the use of big data and artificial intelligence technology can realize the rapid sharing and efficient processing of medical information, thus improving the continuity and cooperation of medical services. The implementation of these strategies will help to simplify cumbersome administrative procedures, improve decision-making efficiency, speed up the response speed of medical services, and ultimately improve the overall service level and patient satisfaction of NHS system.

REFERENCES

- [1] Bossert, T. J. , & Leisewitz, T . (2016). Innovation and change in the chilean health system. *New England Journal of Medicine*, 374(1), 1-5.
- [2] Fallaize, R. , Macready, A. L. , Butler, L. T. , Ellis, J. A. , Berezowska, A. , & Fischer, A. R. H. , et al. (2015). The perceived impact of the national health service on personalised nutrition service delivery among the uk public. *The British journal of nutrition*, 113(8), 1271-1279.
- [3] Hayat, S . (2022). Evaluation of routinely collected records for dementia outcomes in united kingdom: a prospective cohort study. *BMJ Open*, 12(6), 61-81.
- [4] Seaton, A . (2020). The gospel of wealth and the national health: the rockefeller foundation and social medicine in britain's nhs, 1945–60. *Bulletin of the History of Medicine*, 94(1), 91-124.
- [5] Ong, K. J. , Hoek, A. J. V. , Harris, R. J. , Figueroa, J. , Waters, L. , & Chau, C. , et al. (2019). Hiv care cost in england: a cross-sectional analysis of antiretroviral treatment and the impact of generic introduction. *HIV medicine*, 20(6), 377-391.
- [6] Jaques, R . (2015). Lessons learnt from engaging with the political system. *British Journal of Sports Medicine*, 49(4), 209.
- [7] Emmerich, & Nathan. (2015). Calling time on the cancer drugs fund funding the nhs in the age of austerity. *British Journal of Hospital Medicine*, 76(4), 186-187.
- [8] Greenwood, J. P . (2019). The british cardiovascular society annual conference manchester, 3–5 june 2019: the vice president's message. *Heart (British Cardiac Society)*, 105(11), 807-808.
- [9] Yeliz, P. , Alan, T. , Sarah, T. , Ingvild, K. , & Alison, H . (2018). Measure of activity performance of the hand (map-hand) questionnaire: linguistic validation, cultural adaptation and psychometric testing in people with rheumatoid arthritis in the uk. *Bmc Musculoskeletal Disorders*, 19(1), 275.
- [10] Fitzgerald, N. , Anderson, E. R. , Apea, V. , Curtis, H. , & Goodall, L . (2022). 2019 british association of sexual health and hiv national clinical audit of timelines to be seen, test results and treatment for chlamydia trachomatis. *International Journal of STD & AIDS*, 33(6), 604-607.