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Impact of Medicare DRGs Reform on the Economic Operation of Public Healthcare Organizations

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Abstract: The reform of DRGs in health insurance, as a major innovation in the current health insurance payment system, aims to optimize the allocation of resources, control the growth of medical costs and improve the quality of medical services. By introducing Disease Diagnosis Related Groups (DRGs) as the payment standard for medical services, the reform encourages medical institutions to improve efficiency and reduce unnecessary medical services, thus realizing reasonable control of medical costs. The core concept of the Medicare DRGs reform is to motivate healthcare providers to focus on service efficiency and quality through a fixed payment system. This reform not only changes the traditional fee-for-service model, but also encourages hospitals to improve the overall efficiency of medical services. In China, the implementation of this reform has shown that public healthcare organizations need to adapt to the new payment method and adjust their internal management and service model to meet the challenges and opportunities from the reform. The purpose of this paper is to explore the impact of the health insurance DRGs reform on the economic operation of public healthcare organizations, including the revenue structure, cost control, service quality, and management model.

1. Introduction

The health insurance DRGs reform has not only changed the income structure and level of public medical institutions, but also put forward new requirements for their cost control, service quality and management mode. The essence of the reform lies in promoting the structural reform of the supply side of medical services through economic incentives, which in turn affects the overall efficiency and quality of medical services. In this context, it is of great significance to understand the fundamentals of the DRGs reform, its implementation, and its specific impact on the economic operation of public healthcare organizations, in order to promote the adaptation of healthcare organizations to the new payment system, to improve the level of service, and to achieve sustainable development.

2. Fundamentals and Implementation of the Medicare DRGs Reform

2.1. Concepts and Characteristics of Medicare DRGs Reform

The reform of Medical Insurance Diagnosis Related Groups (DRGs) as an innovative healthcare

payment method has gradually unfolded globally in recent years. Its aim is to optimize the allocation of medical resources, enhance the quality of healthcare services, and control the growth of medical expenses. Against this backdrop of reform, public healthcare institutions, as the primary providers of medical services, have been profoundly influenced in their economic operations and efficiency. The core idea of the Medical Insurance DRGs reform is to classify cases based on patients' diagnoses, surgeries, complications, or comorbidities, and allocate them into pre-defined groups with similar consumption of medical resources. Healthcare institutions charge a fixed fee for each group of cases, rather than the traditional fee-for-service model. This approach incentivizes healthcare institutions to improve operational efficiency, avoid unnecessary medical services, and promote cost control. In theory, the implementation of DRGs payment model helps alleviate the phenomenon of "volume-based reimbursement," where healthcare institutions increase their revenue by increasing the quantity of services rather than improving their quality. By adopting a fixed payment approach, the reform encourages healthcare institutions to optimize service processes, enhance service quality, and control unnecessary medical examinations and treatments, thereby mitigating to some extent the problem of unreasonable growth in medical expenses. Implementing DRGs reform poses significant challenges for public healthcare institutions. Firstly, there is a need to establish a more refined cost accounting system to ensure the rationality and fairness of expenses. This requires healthcare institutions to accurately calculate the costs of various cases, which not only involves financial management reform but also requires precise recording and analysis of medical data. Secondly, to adapt to the fixed payment model, healthcare institutions need to optimize internal management, improve diagnosis and treatment efficiency, and reduce resource waste. However, DRGs reform is also contentious. Critics point out that the fixed payment model may lead to "over-saving," whereby healthcare institutions may reduce necessary medical services to control costs, thus affecting medical quality. Furthermore, the successful implementation of DRGs models highly depends on accurate, comprehensive data, and advanced analytical tools, which pose a significant challenge for many healthcare institutions. Observing domestic and international implementation cases, the effectiveness of DRGs reform is not immediate. Effective implementation requires coordination and cooperation from various parties such as the government, healthcare institutions, and insurance companies. During the advancement process, continuous optimization of the DRGs classification system, considering factors such as regional differences, disease characteristics, and the quality of healthcare services, is crucial to ensuring the fairness and effectiveness of the reform [1].

2.2. Implementation of Medicare DRGs Reform in China

Before delving into the ramifications of the reform on the economic operations of public medical institutions, it is imperative to comprehend the fundamental concept of Diagnosis Related Groups (DRGs) reform and its implementation in China. DRGs constitute a method of reimbursing healthcare services, categorizing patients by case types to serve as the basis for remunerating medical services, with the aim of cost containment and enhancement of healthcare service quality. In China, the DRGs reform stands as a pivotal component of recent healthcare insurance system reforms, striving to facilitate the rational allocation and utilization of medical resources, alleviate patients' financial burdens, and elevate the level of healthcare coverage. The implementation of DRGs reform in Chinese healthcare insurance is a systematic endeavor propelled at the national level. Since its initiation, pilot programs have been carried out in numerous provinces, yielding tangible outcomes. Taking a specific pilot province as an example, the implementation of DRGs reform has effectively curbed the rapid escalation of medical expenses while augmenting the quality and efficiency of healthcare services. Specifically, the DRGs reform has prompted public medical

institutions to optimize their service structures, reducing unnecessary medical examinations and treatments. Consequently, the revenue structure of medical institutions has undergone transformation, leaning more towards the capacity to provide high-quality medical services. For instance, a certain public tertiary hospital has implemented categorized management for cardiac surgeries post-DRGs reform. Based on the complexity of surgeries and patients' conditions, surgeries are classified into different groups, each with distinct payment standards. This approach incentivizes physicians to select the most appropriate treatment plans according to patients' actual conditions, averting over-treatment. Simultaneously, it fosters the optimization of internal hospital management, thereby enhancing the efficiency of healthcare services. Over the course of a year, the overall medical expenses in the cardiology department of the hospital have decreased compared to pre-reform levels, while patient satisfaction has notably increased. Successful cases of DRGs reform underscore its efficacy in breaking away from traditional volume-based payment systems towards a new paradigm oriented towards service quality and effectiveness. This not only facilitates the rational allocation of medical resources but also motivates medical institutions and personnel to enhance service quality and reduce ineffective and excessive medical practices. However, the implementation of DRGs reform also encounters challenges. For instance, ensuring broad acceptance of reform measures among medical institutions and personnel, as well as further refining the evaluation and payment mechanisms related to DRGs, are issues requiring in-depth exploration and resolution. Through an analysis of the implementation and impact of DRGs reform in Chinese healthcare insurance, it becomes apparent that this reform holds significant implications for optimizing the economic operations of public medical institutions and enhancing the quality of healthcare services. Despite facing challenges, with the continuous deepening and refinement of the reform, there is reason to believe that DRGs reform will play an increasingly crucial role in the reform of China's healthcare insurance system.

3. Impact of Medicare DRGs Reform on the Revenue of Public Healthcare Organizations

The reform of medical insurance DRGs stands as a pivotal measure in the current healthcare landscape, aiming to revamp the payment system through Diagnosis-Related Groups (DRGs), thereby propelling public medical institutions towards heightened quality and efficiency of healthcare services while prudently managing healthcare expenditures. This reform significantly impacts the economic operation of public medical institutions, particularly in aspects such as revenue structure, income levels, and strategic responses.

(1) The Impact of Medical Insurance DRGs Reform on the Revenue Structure of Public Medical Institutions

The implementation of DRGs payment methodology has led to a marked shift in the revenue structure of public medical institutions. Previously, revenue for healthcare facilities relied predominantly on increased service volumes and supplemental income from pharmaceuticals and medical services. However, the DRGs reform incentivizes medical institutions to prioritize enhancing service quality and efficiency through fixed payment standards, thereby reducing unnecessary medical services and examinations, consequently altering the erstwhile volume-driven operational paradigm. Presently, the revenue structure of public medical institutions is progressively tilting towards service quality and efficacy, prompting these institutions to optimize resource allocation while ensuring medical quality, thereby enhancing the overall efficiency of healthcare services.

(2) The Impact of Medical Insurance DRGs Reform on the Revenue Levels of Public Medical Institutions

The reform of Medical Insurance Diagnosis Related Groups (DRGs) has garnered widespread

attention globally since its implementation. Particularly for public healthcare institutions, this reform has significantly impacted their economic operations, notably in terms of revenue levels. The aim of DRGs reform is to replace the traditional fee-for-service model with a fixed payment system, directly affecting the revenue composition of healthcare institutions.

Specifically, DRGs reform has incentivized public healthcare institutions to focus more on cost control and service efficiency. Under the traditional model, the quantity of medical services often served as a direct driver of revenue growth. However, under the DRGs system, as the income for treating specific diseases is fixed for healthcare institutions, they are encouraged to minimize unnecessary medical services while ensuring medical quality, thereby controlling costs.

Taking a public hospital as an example, a comparison of income before and after the implementation of DRGs reform reveals some significant changes. Prior to the reform, the hospital relied on high-frequency diagnostic and therapeutic activities to increase revenue. However, post-reform, it became necessary to ensure revenue by improving treatment efficiency and patient satisfaction. This is evidenced by the hospital's optimization of internal management, emphasis on the rational allocation of medical resources, and reduction of ineffective and duplicate diagnostic and therapeutic services. A comparison of public hospitals before and after the reform is shown in Table 1.

Table 1: Comparison before and after public hospital reforms

Comparative items before and after reform	Before Reform	Post-reform
Revenue Composition	Per-service billing revenues dominate	Fixed-payment revenues dominate
Cost Control	Relatively lenient	Strictly controlled
Medical Service Efficiency	Secondary consideration	Important considerations
Patient satisfaction	Not a primary indicator	Becoming a key metric

The transformation, despite its myriad challenges such as potential initial revenue fluctuations, necessitates hospitals to recalibrate their service protocols and managerial methodologies. Nevertheless, in the long term, the DRGs reform facilitates the progression of public healthcare institutions towards a more efficient and qualitatively superior service paradigm. By adeptly managing costs and enhancing service efficacy, not only can stability or even augmentation of revenue be achieved, but also an elevation in patient satisfaction can be attained, thereby positioning them advantageously amidst a broader context of healthcare insurance reforms.

In summary, the healthcare insurance DRGs reform has deeply impacted the revenue landscape of public healthcare institutions. Through concrete examples and data analysis, it is evident that the reform propels healthcare service providers towards a more economically efficient and quality-oriented trajectory. Despite encountering challenges, the long-term perspective underscores the beneficial nature of this transition for healthcare institutions themselves, patients, and the entire healthcare system.[2]

(3) Strategies Employed by Public Medical Institutions to Address the Impact of Medical Insurance DRGs Reform on Revenue

Faced with the challenges brought about by DRGs reform, public medical institutions have adopted various strategies to cope. Firstly, they intensify investments in medical quality and service efficiency by introducing advanced medical technologies and optimizing internal management to enhance diagnostic and therapeutic efficiency, aligning with outcome-based payment models. Secondly, they enhance meticulous management throughout the entire medical service process, from admission assessments to discharge planning, aiming for precision and efficiency at every juncture to reduce unnecessary expenditures. Lastly, they actively explore diversified services, such

as developing distinctive medical services, increasing health management, and chronic disease management, to diversify income sources and alleviate reliance on traditional medical services.

Through an in-depth analysis of the medical insurance DRGs reform, it becomes evident that while this transformation poses significant challenges to public medical institutions, it also presents opportunities for optimizing management and enhancing service quality. By proactively adapting to reform requirements, medical institutions can not only stabilize or improve revenue levels but, more importantly, promote the enhancement of medical service quality, delivering more efficient and superior healthcare services to patients. In this process, the transformation and upgrading of public medical institutions undoubtedly contribute positively to the sustainable development of the entire healthcare system [3].

4. Impact of Medicare DRGs Reform on Costs of Public Healthcare Organizations

The reform of healthcare Diagnosis Related Groups (DRGs), as a measure to propel the economic operations of public medical institutions towards greater efficiency and rationality, bears considerable significance regarding its impact on cost structure and cost control. At its core, the reform incentivizes healthcare service providers to enhance service efficiency and reduce unnecessary medical consumption through fixed payment standards, thereby influencing the cost structure and cost control capability of public medical institutions. In terms of cost structure, DRGs reform prompts public medical institutions to reevaluate the composition of their expenditures. Previously, there may have been a greater emphasis on increasing service volume to obtain more medical insurance reimbursements; however, the focus now shifts towards service quality and efficiency. This transition may entail short-term cost pressures for medical institutions, as enhancing service efficiency often requires investment in advanced medical technologies and the training of proficient medical staff. Nevertheless, in the long run, this contributes to the formation of a more rational cost structure by diminishing instances of overtreatment and ineffective treatments, thus facilitating more efficient resource utilization. The challenge of cost control lies in public medical institutions' necessity to find methods to reduce unnecessary medical expenditures while ensuring the quality of healthcare services. DRGs reform necessitates cost accounting for each diagnosis, implying the need for hospitals to possess a more sophisticated cost management and control system. Furthermore, the reform may also provoke dissatisfaction among medical staff, as changes in payment patterns directly affect their income and working methods. Medical institutions need to reasonably allocate resources while ensuring medical quality, presenting a significant challenge for many institutions accustomed to fee-for-service models. Faced with the impacts brought by healthcare DRGs reform, effectively controlling costs becomes the foremost task for public medical institutions. Primarily, institutions can enhance efficiency by adopting advanced medical technologies and optimizing treatment processes to reduce unnecessary medical procedures and examinations, thereby lowering costs. Secondly, strengthening the training of medical personnel and improving their awareness and adaptability to the reform are crucial for ensuring the quality of healthcare services. Additionally, establishing a detailed cost management system to meticulously account for and monitor various costs aids medical institutions in better expenditure control. Ultimately, public medical institutions need to establish a patient-centered service model to attract more patients by enhancing service quality, thus achieving a virtuous development amid the reform. Healthcare DRGs reform poses both challenges and opportunities for public medical institutions. Through effective cost control measures, institutions can not only address the impacts of the reform but also promote sustainable development by improving the efficiency and quality of medical services. As the reform progresses, it is anticipated that public medical institutions will gradually adapt to this new payment model, operating in a healthier and

more rational manner.

5. Impact of Medicare DRGs Reform on Service Quality of Public Healthcare Organizations

The reform of medical insurance Diagnosis Related Groups (DRGs), as a significant policy adjustment in the medical field in recent years, aims to incentivize medical institutions to enhance the efficiency of medical services and promote the rational allocation of medical resources through the payment method based on "Diagnosis Related Groups" (DRGs). This reform has profound implications for public medical institutions, particularly in terms of service models and the quality of medical services. In terms of service models, the medical insurance DRGs reform prompts public medical institutions to transition from the previous "quantity over quality" service model to a new model that emphasizes service efficiency and quality. Medical institutions are beginning to optimize internal management, emphasizing disease management and cost control, which plays a positive role in promoting refined management of medical services. However, this transition also brings challenges, such as how to improve efficiency while ensuring the quality of medical services, which becomes a key issue that public medical institutions need to address. Faced with the medical insurance DRGs reform, the challenges encountered by public medical institutions in terms of the quality of medical services are particularly prominent. The reform encourages institutions to reduce unnecessary medical services and focus on improving service quality. This requires doctors to pay more attention to precision and effectiveness in diagnosis and treatment, while also raising higher demands on the diagnostic and treatment equipment and technological levels of medical institutions. On the other hand, under the DRGs payment model, excessive treatment and unnecessary medical services will not receive corresponding compensation, undoubtedly increasing the pressure on the economic operation of medical institutions, which may in turn affect the overall quality of medical services. To cope with the medical insurance DRGs reform and enhance service quality, public medical institutions need to take multiple measures. Firstly, strengthening internal management, optimizing service processes, and ensuring that every medical service can be efficiently completed with guaranteed quality. Secondly, enhancing the professional skills and service awareness of medical personnel through regular training and education, enabling them to adapt to the new service model. In addition, increasing investment in advanced medical technology and equipment to improve the level of diagnosis and treatment is an important aspect of enhancing service quality and adapting to the medical insurance DRGs reform. Through these measures, not only can the service quality of public medical institutions be improved, but their competitiveness in the fierce medical market can also be enhanced. The medical insurance DRGs reform is a long-term and complex process aimed at promoting public medical institutions to achieve more efficient and equitable medical services. Through the above discussion, it can be seen that although this reform brings many challenges to public medical institutions, it also provides opportunities for transformation and upgrading. Only by continuously adapting to the reform and enhancing their own capabilities can public medical institutions develop steadily in the new medical environment and better serve the public's health needs.

6. Impact of Medicare DRGs Reform on the Management Model of Public Healthcare Organizations

The healthcare DRGs reform represents a significant endeavor aimed at enhancing the efficiency and quality of medical services. For public healthcare institutions, it transcends mere financial restructuring, presenting an opportunity for comprehensive optimization in management systems and efficiency. Through the DRGs payment mechanism, the remuneration standards for medical services are no longer solely based on quantity but more so on the quality and effectiveness of

services, thus catalyzing profound adjustments in the management frameworks of public healthcare institutions. The adaptation of hospital structures and processes is paramount to meet the requirements of DRGs reform. Hospitals must prioritize case management to refine the precision of case grouping and service provision. This transformation compels hospital management to reassess and reallocate internal resources, ensuring that each medical service is not only medically effective but also cost-efficient. Consequently, functional departments such as medical records management, cost accounting, and service quality assessment undergo substantial enhancement, thereby optimizing internal collaboration mechanisms. This adjustment in management systems further influences the operational efficiency of hospitals. Under the impetus of DRGs reform, public healthcare institutions are increasingly embracing data and outcome-driven management decisions, leveraging modern information technologies such as big data and artificial intelligence to analyze and forecast service costs, streamline service processes, and enhance service quality. Healthcare institutions can respond to patient needs more promptly, reduce unnecessary medical services, and avert resource wastage. The enhancement of management efficiency not only translates into financial savings but more significantly elevates patient satisfaction and the overall level of medical services. To further adapt to the healthcare DRGs reform, public healthcare institutions need to innovate in their management models. Among these innovations, the adoption of a patient-centered service model emerges as a trend. This model emphasizes interdisciplinary collaboration, offering more personalized and efficient medical services through the integration of resources and knowledge from various specialties. Additionally, bolstering quality management and risk control is paramount. Healthcare institutions need to establish more robust quality assessment and feedback mechanisms to ensure continuous improvement in service quality while mitigating medical risks. Through these improvements in management models, public healthcare institutions can not only better align with the requirements of DRGs reform but also maintain a leading position in an increasingly competitive healthcare market. In summary, the healthcare DRGs reform presents unprecedented challenges and opportunities for public healthcare institutions. By adjusting management systems, enhancing management efficiency, and innovating management models, healthcare institutions can not only better adapt to the reform requirements but also enhance their competitiveness while improving service quality. These efforts converge towards a common goal: ensuring the public's access to high-quality medical services while achieving efficient utilization of healthcare resources and sustainable management of health insurance funds.

7. Conclusion

The health insurance DRGs reform is a complex and far-reaching reform, and its impact on the economic operation of public medical institutions is multifaceted. From the adjustment of revenue and cost structure to the optimization of service quality and management mode, every step is full of challenges. Public medical institutions need to deeply understand the connotation of the DRGs reform, actively adapt to the requirements of the reform, and respond to the impact of the reform with positive attitudes and effective strategies by improving service efficiency, controlling unreasonable costs, and optimizing management models. At the same time, the support and guidance of relevant government departments are also needed to ensure the smooth implementation of the reform, and ultimately realize the improvement of medical service quality and the improvement of the medical security system.

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