Budget Allocation and Management of Hospitals in Qingdao: Basis for Strategic Plan

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Abstract. The level of hospital budget management in China is uneven, and there are many problems in the process of budget management, such as unscientific budget preparation, uncontrolled budget implementation, and no performance evaluation of budget completion. This study examined the current state of hospital budget management in China, which highlights significant challenges such as unscientific budget preparation, inadequate control during implementation, and the absence of performance evaluation. These issues are compounded by communication gaps between departments, unclear responsibilities, and overall inefficiency in information integration, resulting in suboptimal budget management outcomes across the board. To shed light on this situation, the researcher conducted a qualitative study focusing on five public hospitals in Qingdao province, China, using in-depth interviews with financial directors to gather data. The findings revealed a mixed landscape where hospitals were aware of budget allocation and management practices but faced common challenges. Consequently, the study proposes a strategic action plan aimed at improving budget allocation and management practices in these hospitals. This plan emphasizes the need for streamlined processes, improved communication and coordination, clearer responsibilities, enhanced information integration, and performance evaluation mechanisms to optimize budget management outcomes and ensure efficient resource allocation to meet hospitals' growth and development objectives.

Keywords: budget allocation; management; operating expenses; public hospital; strategic plan

1. Introduction

Public hospitals in China face significant challenges in managing their budgets effectively due to reliance on their own operations for income, limited government funding, and operational contradictions. As the mainstay of the medical service system, there is a must to balance social welfare and economic

sustainability while allocating resources rationally, improving capital efficiency, strengthening management practices, and achieving strategic goals. Budget management, as a multifunctional tool, plays a crucial role in organizational planning, development control, incentive assessment, and evaluation (Ding, 2018). It has become increasingly vital for public hospitals to navigate the complexities of modern healthcare management and enhance their financial performance. Despite the dominant position of public hospitals in China's medical landscape, there is a pressing need for refined budget management practices to address inefficiencies, ensure optimal resource utilization, and support sustainable development in the healthcare sector (Cooper, 1998).

The study focused on analyzing and evaluating the budget allocation and management challenges faced by public hospitals in Qingdao province, China. The deepening medical reform, coupled with policy changes and evolving healthcare demands, has intensified the need for hospitals to adopt comprehensive budget management strategies. By identifying specific issues such as unscientific budget preparation, inadequate implementation control, and a lack of performance evaluation, the study aims to propose a strategic plan tailored to enhance budget allocation practices and promote efficient management in public hospitals. This research is motivated by the urgency to address the discrepancies in hospital budget management and establish a robust system that aligns with national policies, supports hospital development, and ultimately enhances the quality of medical services for the population.

2. Methodology

This study employed a descriptive research method, which aims to describe the characteristics of the population or phenomenon under study without delving into the reasons behind those characteristics. It employed a quantitative approach to gather quantifiable data for statistical analysis of the population sample, focusing on collecting and describing demographic information (Feng, 2020).

2.1. Sampling Procedure

The study employed purposive sampling techniques to select financial directors from five leading public hospitals in Qingdao province based on specific criteria, such as advanced medical technology and sound financial systems.

2.2. Respondents

The study focused on analyzing budget allocation and management in well-known public hospitals in Qingdao, including the Affiliated Hospitals of Qingdao University, Qingdao Municipal Hospital, Qingdao Central Hospitals, Qilu Hospital of Shandong University, and Qingdao Women and Children Hospital. By investigating factors influencing budget allocation, the study aimed to explore the current state of budget management in these hospitals and propose a strategic plan for improvement.

Table 1 Distribution of Respondents

Name of Hospitals	Respondents (Finance Director)
Affiliated Hospital of Qingdao University	1
Qingdao Municipal Hospital	1
Qingdao Central Hospital	1
Qilu Hospital of Shandong University	1
Qingdao Women and Children Hospital	1
TOTAL	5

2.2.1 Research Site

The study was conducted at Qingdao, a city known for its cleanliness and beauty, with a population of around 10.34 million, making it one of the largest cities in Shandong Province. Among the top public hospitals investigated were Qingdao University Affiliated Hospital, Qingdao Municipal Hospital, Qingdao Central Hospital, Qilu Hospital of Shandong University, and Qingdao Women and Children Hospital.

3. Results and Discussion

3.1. Profile of Public Hospitals in Qingdao, China

The public hospitals in Qingdao province have a rich history, with many of them being established for over a century, showcasing their extensive experience in providing comprehensive healthcare services. The majority of these hospitals are classified as grade III level institutions, indicating their substantial size and capacity to serve the community effectively. They offer a wide range of specialized services supported by advanced technology, ensuring the completeness and quality of medical care for the population. Given their large

scale, these hospitals employ a significant number of personnel to meet the demands of their operations and provide care to a vast number of patients. The hospitals also boast substantial capacities, with a considerable number of beds available to accommodate the healthcare needs of the surrounding population. Moreover, these hospitals are well–equipped with modern facilities, laboratories, and equipment, enabling them to operate efficiently and fulfill various medical requirements. Budget allocation within these hospitals covers personnel services, maintenance, and other operating expenses, although they also rely on government subsidies to support their operational costs, albeit to varying extents.

3.2 Budget Allocation and Management of Public Hospitals

3.2.1 Processes

The data regarding the processes of budget allocation and management in public hospitals show a strong agreement among respondents, with an average weighted mean of 3.52, indicating that these processes are well-managed according to the minimum standard. The administration outlines budgets comprehensively, ensures timely payments and income generation, conducts thorough resource reviews, assesses purchase orders against allocations, and promotes accountability, all with strong agreement from respondents (Ge, 2019).

3.2.2 Structure

The respondents highlighted that while there are structured processes overseen by the finance director, ultimate decision-making on budget allocation involves multiple stakeholders, sometimes resulting in challenges aligning budgets with actual needs. Despite these challenges, respondents indicated that these issues are manageable within the existing framework.

3.2.3 Policies or Guidelines

The data shows a strong agreement among respondents regarding various aspects of budget policies and guidelines, with weighted means ranging from 3.4 to 4.0, indicating strict adherence and implementation. These policies cover critical areas such as annual budget preparation, consideration of revenue and expenditure together, pooling of resources for common use, policy accuracy and consistency, and auditing procedures for budget spending. Respondents emphasized the importance of implementing and revising policies as needed to

ensure effective budget allocation and management and to address evolving financial challenges.

3.3.4 Outputs

The study revealed a strong agreement among respondents regarding the policies and guidelines for budget allocation and management, with an average weighted mean of 3.56. Specific aspects such as performance budgeting reflecting both input and expected output, achieving financial goals, aligning income and expense information with business operating plans, and breaking down expenditures into departmental limits received strong agreement from the respondents.

3.3 Challenges on Budget Allocation ang Management of Public Hospitals

3.3.1 Finance and Budget Plan

Table 2 Finance or Budget Plan

No	Indicator/s	Weighted	Verbal
		Mean	Interpretation
1	Hospital management lack of attention into strategic budget work	2.2	Disagree
2	The budget management system of the hospital lack of support in the overall budget management	2.8	Agree
3	There is a deviation between the setting of the hospital's budget target and the actual operation of the hospital	2.8	Agree
4	The hospital budgeting method is inefficient	3.0	Agree
5	The overall budget management of the hospital has week connection on strategic orientation of the enterprise	2.0	Disagree
	Average Weighted Mean	2.56	Agree

Legend: 3.26 to 4.00-Strongly Agree; 2.51 to 3.25-Agree; 1.76 to 2.50-Disagree; 1.00 to 1.75-Strongly Disagree

The respondents rated low on strategic budget work and overall budget management being connected to the hospital's strategic orientation. They also expressed agreement with issues related to the efficiency of the budget management system and deviations between budget targets and actual operations. These findings highlight the critical need for hospital management to prioritize strategic financial planning and address challenges in budget management to ensure effective resource allocation and operational alignment (Fan, 2017).

3.3.2 Strategies

Table 3 Strategies

No	Indicator/s	Weighted Mean	Verbal Interpretation
1	Difficulty in developing a consolidated budget.	3.0	Agree
2	Inefficient allocation of hospital resources.	2.2	Disagree
3	Actual expenditures are usually different from budgeted expenditures, and the actual number of persons employed may be very different from the original budget projection.	2.6	Agree
4	Lack of planning means imminent problems or recurrent consequences of capital spending are not foreseen.	2.6	Agree
5	Procedures for prioritization are especially important for meeting deficit targets or spending targets. If priorities are not communicated in a top-down approach early in the budget preparation process, overspending relative to budget is a likely outcome.	2.8	Agree
	Average Weighted Mean	2.64	Agree

Legend: 3.26 to 4.00-Strongly Agree; 2.51 to 3.25-Agree; 1.76 to 2.50-Disagree; 1.00 to 1.75- Strongly Disagree

The respondents generally agreed on challenges related to developing a consolidated budget, discrepancies between actual and budgeted expenditures,

unforeseen consequences of capital spending, and the importance of prioritization procedures. However, they disagreed with the notion of inefficient allocation of hospital resources, indicating that the management efficiently handled resource allocation despite limited government support. The findings indicate areas for improvement such as enhancing budget consolidation, aligning actual expenditures with projections, and implementing prioritization procedures for effective budget management.

3.3.3 Meeting the Budget Objectives

Table 4 Meeting the Budget Objectives

No	Indicator/s	Weighted	Verbal
		Mean	Interpretation
1	The overall budget management system and working system of the hospital are not perfect	2.0	Disagree
2	The budget management and organization system of the hospital is not sound	1.8	Disagree
3	The operation process of hospital budget management is unreasonable	1.8	Disagree
4	Hospital budget operation mechanism has low flexibility	2.4	Disagree
5	The budget performance assessment index of the hospital is unreasonable	2.4	Disagree
	Average Weighted Mean	2.08	Disagree

Legend: 3.26 to 4.00–Strongly Agree; 2.51 to 3.25–Agree; 1.76 to 2.50–Disagree; 1.00 to 1.75–Strongly Disagree

The data regarding challenges in meeting budget objectives showed an average weighted mean of 2.08, indicating disagreement among respondents. Despite this, they rated the overall budget management system, organization system, operation process, and budget performance assessment index relatively positively, with weighted means ranging from 1.8 to 2.4. Respondents noted that while objectives are not always perfectly met, the management is adept at addressing gaps and minimizing burdens in budget allocation and management.

3.3.4 Achieving Growth and Development

Table 5 Achieving Growth and Development

No	Indicator/s	Weighted	Verbal
		Mean	Interpretation
1	Hospital management lacks an understanding of strategic budget management and comprehensive budget	2.6	Agree
2	Hospital management does not pay enough attention to training related to comprehensive budget management	2.6	Agree
3	Backward concept of financial budget management and lack of innovation within the hospital	2.0	Disagree
4	The hospital lacks comprehensive budget management training for relevant personnel	2.6	Agree
5	The hospital's comprehensive budget management information system cannot meet the requirements	2.2	Disagree
	Average Weighted Mean	2.4	Disagree

Legend: 3.26 to 4.00-Strongly Agree; 2.51 to 3.25-Agree; 1.76 to 2.50-Disagree; 1.00 to 1.75-Strongly Disagree

In terms of challenges related to budget allocation and management in public hospitals, the average weighted mean for achieving growth and development is 2.4, indicating disagreement among respondents. However, specific areas such as strategic budget management understanding, training attention, and personnel training received an agreement with a weighted mean of 2.6. The findings indicate a need for enhanced strategic budget management understanding and comprehensive training to drive growth and development in hospital budget systems and management practices (Ding, 2018).

3.4 Proposed Strategic Plan

The proposed strategic action plan emphasizes the importance of clear budgeting processes, departmental representation in budget concerns, and adaptable strategies for unpredictable situations. Additionally, it highlights the need for data analysis for meeting budget objectives and allocating resources for organizational growth, along with establishing clear accountability and monitoring systems for effective evaluation and control.

4. Conclusions

The study concludes that public hospitals in China receive government support and offer specialized services, including disease diagnosis and treatment, along with well-maintained facilities. However, in terms of budget allocation and management, challenges persist due to unforeseen circumstances that can lead to budgetary issues despite established standards. These challenges encompass various aspects such as finance planning, strategic implementation, meeting objectives, and achieving growth and development, indicating the need for ongoing improvement and adaptability within hospital management practices.

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