

Strategic Analysis of Medical Business Revolving Fund: Navigating Challenges and Anticipating Future Trends

醫療事業基金策略分析： 經營挑戰及預期未來趨勢

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台灣面臨高齡社會的多層面向挑戰，各類型的醫療機構包含國軍醫院均需要細緻及策略性的調整因應，在這多重複雜的交互影響因子下，國軍醫院除以軍人及軍眷為主要服務對象的策略外，逐漸調整擴大到一般民診醫療業務以肆應競爭的醫療環境。本文以軍人軍眷及民眾於107年至111年期間赴國軍醫院就診及住院人數及人日，藉以統計及全面性分析未來國軍醫院經營策略及市場趨勢。

本文進一步深入分析國防部軍醫局109年至113年期間獲得法定預算、軍事投資預算、防疫專款及預算保留等數據資料，據以分析未來國軍醫院預算籌編重點及在新冠肺炎疫情爆發階段，國軍醫院因防疫專款有效建構相關防疫設備成功維持國軍戰力，文末提出因應整體醫療

環境挑戰，應將預算投資於建構國軍醫院的先進智能醫療裝備能量，並將其量能回饋於部隊端的軍陣醫學，如強化外科前進小組的建立，如此才能增進國軍醫療的韌性藉以達成戰力保存目標。

1. Abstract

Addressing the multifaceted challenges posed by an aging society in Taiwan necessitates a nuanced and strategic response from hospital organizations. Additionally, the complex interplay of factors, including the presence of military staff and a competitive healthcare environment, has led to military hospitals in Taiwan extending their medical services to civilians. This essay critically

reviews the outcomes of strategic changes and trends, exemplified by the comprehensive analysis presented in Bar Chart 1 and Bar Chart 2, focusing on visit patients and hospitalizations in military hospitals from 2018 to 2022.

This essay delves into the strategic investment and budget allocation in military hospitals, focusing on the years 2020 to 2024. Through comprehensive bar charts, we explore the annual fiscal budget supporting military medicine, detailing the rising trends and the impact of a special appropriation budget in response to the Covid-19 pandemic. Additionally, the military investment budget for medical equipment is scrutinized, highlighting significant increases and strategic budget planning for sustained capability enhancement. This analysis emphasizes the dedication to advancing military healthcare capabilities, addressing emerging challenges, and ensuring resilience in the face of dynamic circumstances.

2. Introduction, overview of visit patients and hospitalizations in military hospitals from 2018 to 2022

Bar Chart 1 and Bar Chart 2 provide a detailed statistical overview of visit patients and hospitalizations in military hospitals from 2018 to 2022. Both indicators underscore a significant trend: the majority of patients served by military hospitals are civilians. This trend aligns with the dynamic nature of healthcare delivery and reflects the adaptability of military hospitals in responding to evolving societal needs.

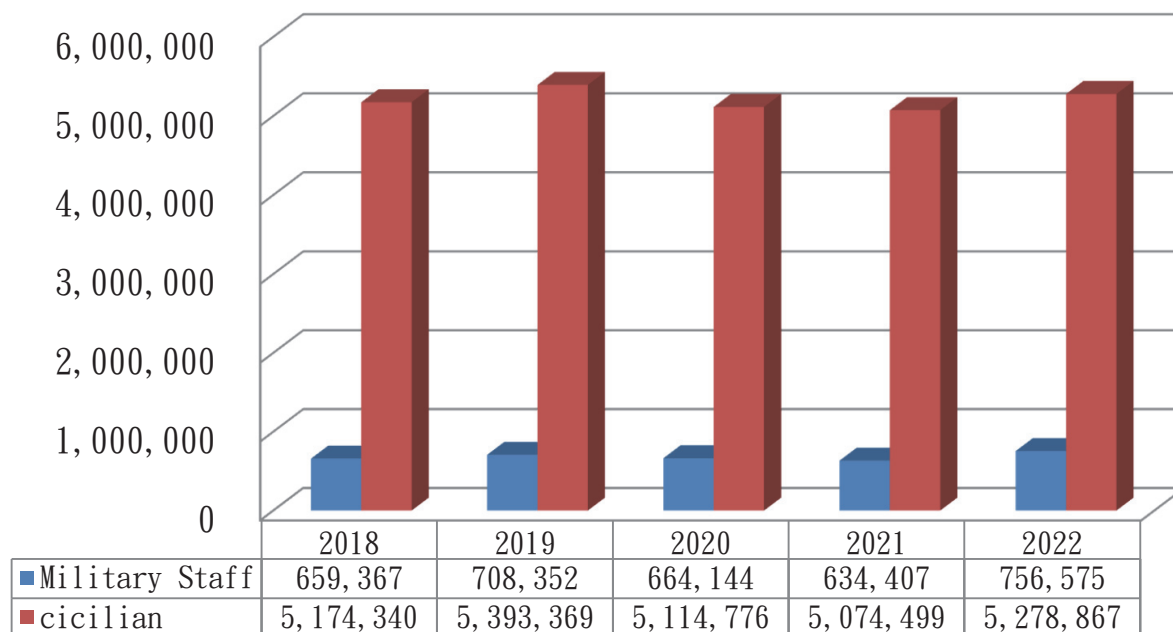
3. Materials, statistics of hospitalization and visit patients in the Military Hospitals from 2018 to 2022

Analyzing Bar Chart 1 reveals a noteworthy surge in civilian visit patients in military hospitals, nearly eight times more than military staff from 2018 to 2022. Despite the stability in service numbers between military staff and civilians over the past five years, a substantial increase occurred in 2022, reaching approximately 756 thousand for military staff. Concurrently, civilian numbers continue to rise, albeit at a slightly reduced rate, now standing at 7 times compared to the preceding years. This surge is in part attributed to the effects of the Covid-19 outbreak, impacting both military staff and civilian populations.

Examining Bar Chart 2, the trend in hospitalizations in military hospitals from civilians is revealed to be between eight and eleven times higher than military staff from 2018 to 2022. Notably, both military staff and civilian hospitalization numbers have decreased over the past five years. The year 2021 witnessed a dramatic plummet, with military staff hospitalizations decreasing by 21 thousand, and civilian hospitalizations dropping by eight hundred thousand. This decline suggests a gradual reduction in hospitalizations in military hospitals, possibly influenced by advancements in medical technology and the growing prevalence of outpatient surgery. The trend points towards an increasing reliance on advanced medical equipment and skills, reducing the necessity for prolonged hospital stays.

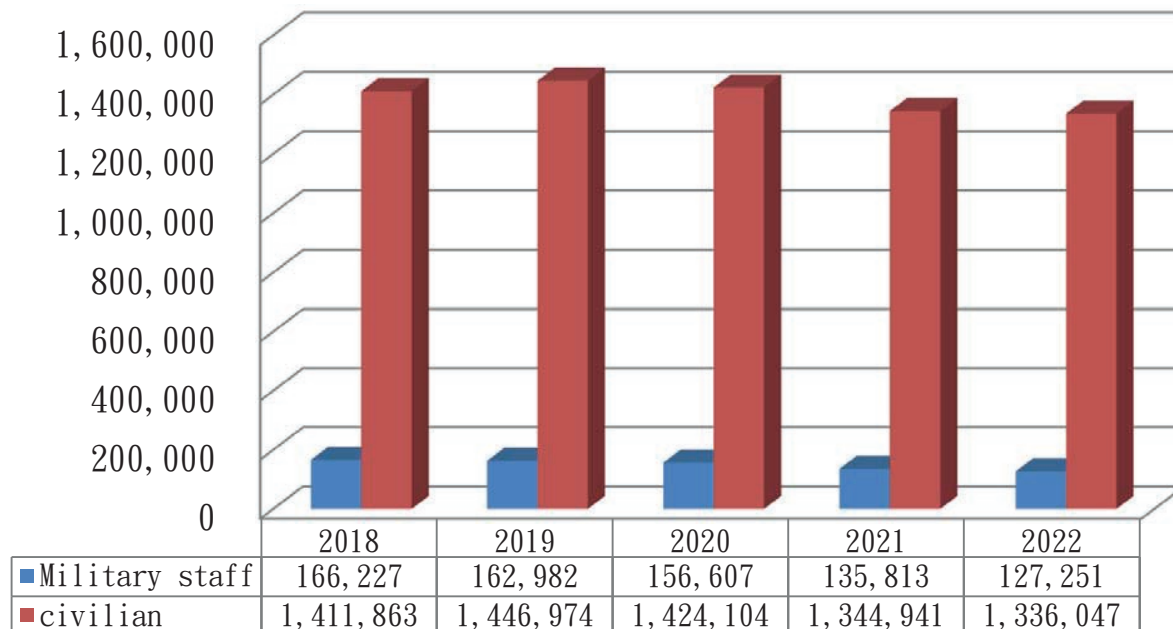
Bar Chart 1, Visit Patients in the Military Hospitals from 2018 to 2022

Unit : By Person



Bar Chart 2, Hospitalization in the Military Hospitals from 2018 to 2022

Unit : By person/day



4. Results, insight into bar chart 1 and 2

The evolving trends observed through the bar charts underscore critical insights into the field of medical treatment. Firstly, the consistent percentage distribution of patients between military staff and civilians signifies that military hospitals have maintained a stable market share. This observation is especially pertinent given the ongoing demographic shift in Taiwan towards an aging society, characterized by an increase in the median age and declining birth rates. In the face of increased demand for healthcare services, military hospitals must explore opportunities to expand their market share to prevent a potential contraction in the medical business.

Secondly, the observation that the majority of service recipients originate from the civilian population highlights the success of Taiwan's medical policy. This policy signifies a strategic shift, effectively transferring a portion of medical care from uniformed members to the civilian population in response to societal needs. This transformation aligns with the overarching goal of providing accessible and inclusive healthcare services to the broader community.

In conclusion, this analysis emphasizes the imperative for military hospitals to navigate challenges and strategically position themselves in the evolving landscape of healthcare. As Taiwan progresses towards an aging society, leveraging technological advancements and proactively responding to changing healthcare dynamics will be paramount. The success of military hospitals in

adapting to societal needs and ensuring inclusivity in medical care underscores their relevance and vital role in the broader healthcare spectrum.

5. Introduction, analysis of the total budget, allocations, military investment and expenditure encumbrances in Medical Affairs Bureau from 2020 to 2024

The establishment of military hospitals primarily serves uniform members and military dependents, with a critical mission to provide medical care for officers and soldiers wounded in warfare. To meet these diverse needs, the budget allocated to military hospitals comprises two main categories: the annual fiscal budget and the medical revolving fund. While the annual fiscal budget primarily supports military medicine, the medical revolving fund plays a crucial role in ensuring sustained medical care and operations.

The scope of military medicine is extensive, encompassing Combat Casualty Care, Deployment Health, Trauma Surgery, and Disaster Response, tailored to the unique challenges faced by military personnel. To effectively execute military medicine, the Medical Affairs Bureau of the Ministry of National Defense (MND) utilizes the annual fiscal budget, the analysis of which spans the years 2020 to 2024. Bar charts 3 and 4 depict the diverse budget allocations within the military medicine field during this period, highlighting both the military investment budget and the surplus funds retained for subsequent years.

6. Materials, statistics of the budget allocations, military investment budget and expenditure encumbrances in Medical Affairs Bureau from 2020 to 2024

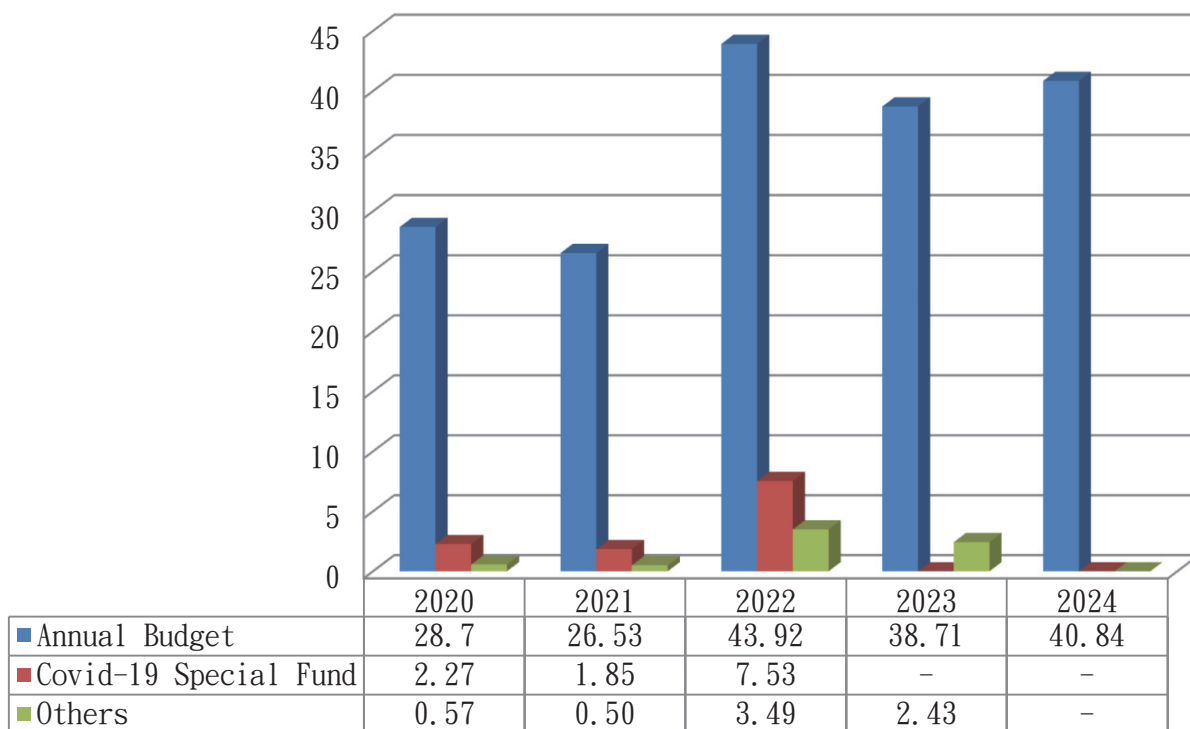
Examining Bar Chart 3, the annual fiscal budget for military medicine demonstrates a consistent year-on-year increase. The total budget accumulates to NT5.5 billion, with the fiscal budget peaking at NT4.4 billion. Notably, the outbreak of Covid-19 prompted additional support from a special appropriation budget of NT1.2 billion between 2020 and 2022. This

supplementary fund played a pivotal role in implementing effective anti-epidemic measures within the military, preserving combat forces and allowing for ongoing development.

In Bar Chart 4, the allocation of the military investment budget in the field of military medicine between 2020 and 2024 is showcased. Notably, from 2020 to 2021, an average annual investment of NT1.3 billion was directed towards military medicine equipment. Remarkably, the investment budget saw a doubling from 2022 to 2024, reaching an average of NT2.6 billion annually. The year 2022 marked a significant milestone, setting a new record high at NT2.9 billion. However, it's noteworthy that NT1 billion from the budget for

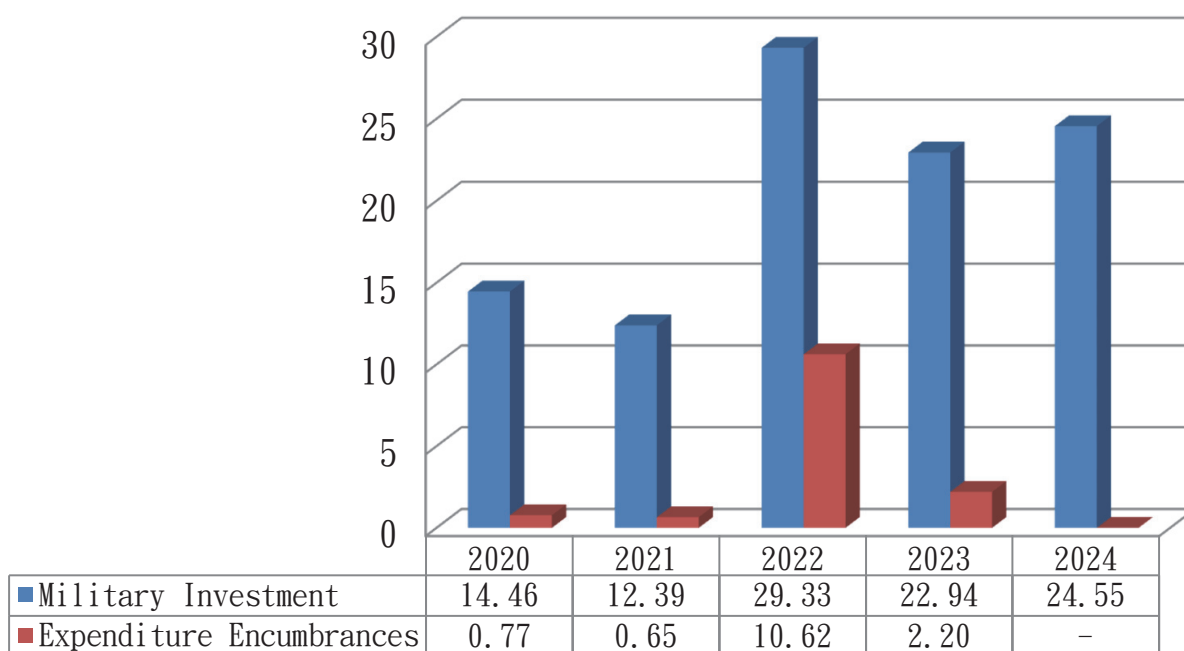
Bar Chart 3, Budget Allocation of Medical Affairs Bureau From 2020 to 2024

Unit : 100 Mill



Bar Chart 4, Investment Budget and Encumbrance from 2020 to 2024

Unit : 100 Mill



2022 is earmarked for execution in subsequent years, reflecting strategic planning for sustained capability enhancement.

7. Results, insight into bar chart 3 and 4

In conclusion, the investment in military hospitals reflects a strategic commitment to meeting the healthcare needs of uniform members and their dependents. The increasing annual fiscal budget and substantial investment in military medicine equipment underscore the dedication to advancing medical capabilities and addressing emerging challenges, including the impact of the Covid-19 pandemic. The effective utilization of special appropriation funds exemplifies agility and adaptability in responding to unforeseen

circumstances, ensuring the resilience and readiness of the military healthcare system.

8. Conclusion and suggestion

Expanding the capacity of medical care to provide services and secure a more significant market share is a paramount goal. This objective is pursued through the construction of major medical facilities, a strategic initiative undertaken by the Medical Affairs Bureau.

The first phase of this progressive program, initiated in 2018, is currently underway, featuring the construction of four major medical buildings. These facilities aim to meet the evolving healthcare needs of Taiwanese society, reflecting a commitment to enhancing and modernizing the medical care system.

As part of a forward-looking vision, the Medical Affairs Bureau is actively engaged in planning the second phase of the program. This phase is dedicated to further improving the medical care system, aligning with the dynamic requirements of a changing society. By expanding the infrastructure and capabilities, the bureau seeks not only to meet existing demands but also to position military hospitals as leaders in the healthcare landscape, capturing a more substantial market share.

Contingency planning stands out as a key focus, emphasizing the prioritization of critical missions in military medicine. In times of heightened demand, the Medical Affairs Bureau is strategically integrating resources from military hospitals into operational exercises, ensuring a swift and coordinated response to medical challenges. This approach underscores the importance of adaptability and preparedness in addressing complex medical scenarios.

Improving military medicine demands a holistic strategy that spans training, infrastructure development, research initiatives, and collaborative efforts. At the forefront of these efforts is the planning and execution of the Forward Resuscitation and Surgical Detachment (FRSD) in the battlefield. Recognizing the critical role this plays in saving lives, the bureau places a high priority on developing a comprehensive guide. This guide aims to serve as a valuable resource, assisting in the meticulous planning of forward resuscitation and surgical capabilities within a military setting.

In conclusion, the vision for the future

involves not only expanding physical infrastructure but also elevating the overall capacity and preparedness of military medicine. The ongoing construction projects, coupled with proactive contingency planning and the development of specialized capabilities, position military hospitals as vital contributors to the evolving healthcare landscape. The commitment to innovation, adaptability, and comprehensive planning ensures that military medicine remains at the forefront of medical advancements, fulfilling its mission to safeguard the health and well-being of military personnel and civilians alike.

9. References

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