



Preserved in ZenodoDOI: <https://doi.org/10.5281/zenodo.15096795> The authors are responsible for the information in the article.

Perceptions of budget execution in the management of public health services

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Received: 01/28/2025

Accepted: 02/26/2025

Published: 03/27/2025

Abstract: Public health management faces challenges in budget execution, affecting the quality and coverage of services due to poor management. **Objective:** To understand public workers' perceptions of budget execution in public health budget management. **Method:** A mixed approach was used to assess the perceptions of workers with at least three months of experience in public health management; dimensions of budget management were assessed. **Results:** Maximum and minimum percentages in the budget execution of Health Services were identified to overcome deficiencies such as lack of awareness of regulations, mismatches between expenses and goals, and payment failures, which affect effectiveness. **Conclusions/contribution:** Understanding public workers' perceptions of budget execution (by dimensions) in public health budget management will provide arguments for optimizing financial resources. **Keywords:** Perceptions, budget execution, Management, Services, Public health

Percepción de la ejecución presupuestaria en la gestión de los servicios sanitarios públicos

Resumen: La gestión pública de salud enfrenta desafíos en la ejecución de presupuestos, afectando la calidad y cobertura de los servicios debido a deficientes gestiones. **Objetivo:** Conocer las percepciones de los trabajadores públicos sobre la ejecución presupuestal de la gestión presupuestaria de la Salud pública. **Método:** Enfoque mixto, para percepción de trabajadores con mínimo tres meses laborando en gestión pública de salud; se evaluaron dimensiones de la gestión presupuestaria. **Resultados:** Se identificaron porcentajes máximos y mínimos en la ejecución presupuestal de Servicios de Salud para superar deficiencias como desconocimiento de normativas, desajustes entre gastos, metas y fallos en pagos, afectando la eficacia. **Conclusiones/aporte:** Conocer las percepciones de los trabajadores públicos sobre la ejecución presupuestal (por dimensiones) de la gestión presupuestaria de la Salud pública permitirá argumentos para optimizar recursos financieros.

Palabras clave: Percepciones, ejecución presupuestal, Gestión, Servicios, Salud pública

Percepção da execução orçamentária na gestão dos serviços de saúde pública

Resumo: A gestão da saúde pública enfrenta desafios na execução orçamentária, afetando a qualidade e a cobertura dos serviços devido à má gestão. **Objetivo:** Determinar as percepções dos funcionários públicos sobre a execução orçamentária na gestão do orçamento da saúde pública. **Método:** Abordagem mista, para a percepção dos trabalhadores com pelo menos três meses de trabalho na gestão da saúde pública; foram avaliadas as dimensões da gestão orçamentária. **Resultados:** Foram identificados percentuais máximos e mínimos na execução orçamentária dos serviços de saúde para superar deficiências como desconhecimento das normas, descompasso entre despesas, metas e falhas nos pagamentos, afetando a eficiência. **Conclusões/contribuição:** Conhecer as percepções dos funcionários públicos sobre a execução orçamentária (por dimensões) da gestão orçamentária da saúde pública fornecerá argumentos para otimizar os recursos financeiros. **Palabras clave :** Percepções; Execução orçamentária; Gestão; Serviços; Saúde pública.

Perception de l'exécution du budget dans la gestion des services de santé publique

Résumé : La gestion de la santé publique est confrontée à des défis en matière d'exécution du budget, ce qui affecte la qualité et la couverture des services en raison d'une mauvaise gestion. **Objectif :** déterminer la perception qu'ont les agents publics de l'exécution du budget dans le cadre de la gestion du budget de la santé publique. **Méthode :** approche mixte, pour la perception des travailleurs ayant travaillé au moins trois mois dans la gestion de la santé publique ; les dimensions de la gestion budgétaire ont été évaluées. **Résultats :** des pourcentages maximums et minimums ont été identifiés dans l'exécution du budget des services de santé afin de surmonter les déficiences telles que le manque de connaissance des réglementations, l'inadéquation entre les dépenses, les objectifs et les défauts de paiement, ce qui affecte l'efficacité. **Conclusions/contribution :** Connaître les perceptions des agents publics sur l'exécution du budget (par dimensions) de la gestion du budget de la santé publique fournira des arguments pour optimiser les ressources financières. **Mots-clés:** Perceptions ; Exécution budgétaire ; Gestion ; Services ; Santé publique.



1. Introduction

The public management of health services faces significant challenges in the allocation and execution of budgets, which directly affects the quality and efficiency of the services provided to the population.

Several studies consider that the integration of process management strengthens the capacity of institutions to meet their objectives and improve the quality of services, while the lack of efficient budget allocation and adequate project determination can generate problems in public management Cano et al. (2023)

Furthermore, Castillo-Fiestas et al. (2021) focus on identifying, analyzing, and optimizing an entity's internal processes to more effectively achieve specific objectives. In the context of the Office of Public Health Services Management (OGESSP), it has been proposed how it can provide information for a possible strategic model to improve the quality of services offered to the population, making efficient use of available resources.

1.1. Contextualization of the problem

Various studies indicate that inefficient allocation of financial resources and poor budget planning can generate a series of problems in public management. This not only affects institutions' ability to meet their objectives but also reduces the quality of the services provided, resulting in disadvantages for public health. Process management emerges as a strategic solution to address these problems, allowing institutions to analyze and optimize their internal processes, facilitating improvements in the quality of services.

1.2. Some research:

López Regalado et al. (2023) : This work highlights the importance of leadership and personnel management in sports activities for students' mental health. The research demonstrates how effective management can improve both the mental well-being and performance of participants, which is essential for optimizing the use of resources and promoting public health in a comprehensive manner.

This thoughtful analysis of educational infrastructure management and investment for health emergency prevention provides valuable lessons for public health management. Multifunctional approaches to infrastructure can optimize resources and improve emergency response, which is essential for budget management in the health sector (Gonzales Ttito et al., 2023).

Research on strategic planning and process management applied to sports activities shows how these approaches can contribute to improving public services. This type of planning can also be adapted to the public health context to optimize budget execution and ensure service quality (Ramos-Moreno & Torres Paredes, 2023).

The analysis of budget compliance and the psychomotor management of hospital staff during the pandemic highlights the importance of efficient budget management, especially in times of crisis. This management also has a direct impact on the quality of services provided to the population (Vargas Montejó & Salas Sánchez, 2023).



Likewise , understanding digital competencies is being used as a tool to improve post-COVID-19 educational processes. Applying this type of digital competencies in public health management can help improve efficiency in budget management and service delivery (Aguilar Chávez et al., 2023); The importance of collaborative strategic planning highlights the importance of the participation of all stakeholders in decision-making. In the context of public health, similar planning could be key to optimizing the use of resources and ensuring the effectiveness of interventions (Galindo Caro et al., 2019).

In line with the information presented, the following research objective is to understand budget execution in the context of public health services from the perception of public health institution workers for a possible design of a strategic model that efficiently uses available resources.

2. Methodology

2.2. Population and sample: The study population consisted of 55 public health sector workers , both permanent and contracted , with more than three months of experience in public health management. The sample was intentionally selected, comprising 55 workers with direct knowledge of the internal processes of public health institutions and budget execution.

2.3. Variable

The main variable in this study was budget execution : The process of planning, allocation and control of financial resources in public health institutions.

2.4. Data collection instruments. The following instruments were used to collect data, using a survey : A questionnaire containing 21 questions on budget execution was administered , using a Likert-type ordinal scale to determine opinions on the efficient use of resources.

Validity and reliability: The instruments were validated by a panel of experts in the areas of public administration and health, obtaining a validity of 0.91 . The reliability of the questionnaires was measured using Cronbach's alpha .

2.5. Study phases. The research procedure was divided into two key phases:

2.5.1. Diagnostic Phase : In this phase, the current budget execution situation was analyzed , and the main problems and challenges in resource management were identified. Data were collected through interviews, surveys, and review of key documents, which provided a deep understanding of the barriers and opportunities for improving efficiency.

2.5.2. Propositional Phase : In this phase, a process-based management model was designed to optimize budget execution. This model was formulated taking into account the findings of the diagnostic phase and best practices in public management. The proposed model was validated by a group of experts in public health management, who provided feedback to improve its applicability.

2.6. Data analysis: Data were processed using SPSS Version 24 software , performing both descriptive and inferential analyses . The descriptive analyses allowed for an understanding of general trends in participants' responses, while the inferential analyses helped identify relationships between process management variables and budget execution .

2.7. Ethical aspects: The research was conducted in compliance with the ethical principles established by the World Medical Association in the Declaration of Helsinki . Participation was





guaranteed to be completely voluntary, participant confidentiality was respected, and their rights were protected throughout the research process.

3. Results

The results have been summarized in the following table:

Table 1. Characteristics of Budget Execution for each dimension

	Never		Hardly ever		Sometimes		Almost always		Always		Total	
	Fi	%	fi	%	fi	%	fi	%	fi	%	fi	%
Dimension 1: Certification												
He is informed about the current regulations governing the execution of the budget.	10	18.2%	12	21.8%	15	27.3%	14	25.5%	4	7.3%	55	100%
How often is it ensured that the available budget credit is free of impact before committing an expenditure?	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%
Believes that requests for budget credit certification are made in a timely manner	10	18.2%	12	21.8%	15	27.3%	14	25.5%	4	7.3%	55	100%
Considers that the area in charge requests budget availability with the necessary technical support	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%
He believes that the Budget Office issues the budget credit certification within the established timeframes according to current regulations and guidelines.	7	12.7%	10	18.2%	11	20.0%	19	34.5%	8	14.5%	55	100%
Dimension 2: Commitment												
You perceive if the expense commitments are affected by each activity scheduled in each goal	3	5.5%	25	45.5%	10	18.2%	13	23.6%	4	7.3%	55	100%
To what extent do you consider that the allocation of the annual commitment programming by the Document follows the guidelines established by the Ministry of Economy and Finance -MEF?	4	7.3%	22	40.0%	14	25.5%	7	12.7%	8	14.5%	55	100%
How regularly do you consider that the OGESS Alto Mayo prioritizes the Annual Commitment Programming in accordance with the Annual Procurement Plan (PAC)?	10	18.2%	12	21.8%	15	27.3%	14	25.5%	4	7.3%	55	100%
Every expense, before being committed, is verified to have the corresponding commitment schedule.	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%
How often do you find the monthly commitment phase is carried out efficiently?	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%
The authorization provided by the Administration Office is evaluated in the monthly commitment phase.	15	27.3%	6	10.9%	11	20.0%	23	41.8%	0	0%	55	100%
Dimension 3: Accrued												





	Never		Hardly ever		Sometimes		Almost always		Always		Total	
	fi	%	fi	%	fi	%	fi	%	fi	%	fi	%
The user area, after receiving the goods or services, grants the confirmation of receipt in a timely manner.	4	7.3%	22	40.0%	14	25.5%	7	12.7%	8	14.5%	55	100%
Know that the user area, after receiving the contracted services, grants conformity of the service after verifying the terms of reference.	10	18.2%	12	21.8%	15	27.3%	14	25.5%	4	7.3%	55	100%
How often is compliance with the criteria established for the recognition of accruals in your entity ensured?	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%
How frequently is it verified that the recognition of accrual is adequately allocated to the corresponding institutional budget?	10	18.2%	12	21.8%	15	27.3%	14	25.5%	4	7.3%	55	100%
It is verified that all committed expenses are accrued	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%
Dimension 4: Payment or Drawn												
The treasury office reviews that all accrued expenses have supporting documentation.	7	12.7%	10	18.2%	11	20.0%	19	34.5%	8	14.5%	55	100%
It is the treasury office that proceeds to enter the payment obligations into the SIAF	10	18.2%	12	21.8%	15	27.3%	14	25.5%	4	7.3%	55	100%
The treasury office makes payments only through your supplier or contractor's interbank account.	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%
Suppliers confidently accept payment through the interbank system	10	18.2%	12	21.8%	15	27.3%	14	25.5%	4	7.3%	55	100%
The user areas request the release of the budget credit certification, as there is an expenditure execution less than the certified amount.	4	7.3%	15	27.3%	18	32.7%	18	32.7%	0	0%	55	100%

Note: Questionnaire applied to workers in public health management offices

Interpretation of Table 1 :

Dimension 1: Certification

The results reveal a marked disconnect between workers and their knowledge of current regulations. Only 7.3% of respondents claim to be "always" informed about budget regulations, while 27.3% acknowledge that they "sometimes" ensure that budget allocations are free of impact before committing expenditures. This reflects a critical gap in institutional communication and technical training. The lack of clarity in certification processes, coupled with observed delays (only 14.5% perceive that the Budget Office meets established deadlines), suggests that bureaucratic rigidity and the lack of timely updates could be hindering operational efficiency. These findings underscore the need to implement agile dissemination systems and ongoing training programs to ensure that staff not only understand the regulations but also internalize them in their daily practices.

Dimension 2: Commitment

The alignment between spending commitments and institutional goals presents significant challenges. Forty-five percent of respondents indicated that expenditures are "almost never"





adequately linked to planned activities, and 40% perceived that annual programming does not follow MEF guidelines. This points to a lack of strategic coordination between planning and execution, which could lead to under-execution or misappropriation of resources. Furthermore, 32.7% considered that the monthly commitment phase is "sometimes" carried out efficiently, highlighting the need to strengthen real-time monitoring and adjustment mechanisms. The heterogeneity in responses regarding authorization evaluation (41.8% "almost always") suggests that, while specific efforts exist, they are not systematic. To mitigate these problems, it would be key to adopt management tools that prioritize traceability and accountability at every stage of the budget cycle.

Dimension 3: Accrued

The timely compliance of received goods and services emerges as a critical issue: 40% of respondents indicate that the user department "almost never" grants receipt on time. This delay not only delays the recognition of accruals but also creates bottlenecks in the payment chain. Furthermore, no participant states that the criteria for accrual recognition are "always" met, evidencing weaknesses in internal controls and possibly in process standardization. The discrepancy between committed and accrued expenses (32.7% "almost always" verify that all committed expenses are accrued) reflects an operational risk that could compromise transparency and supplier trust. To address these weaknesses, it is recommended to implement clear verification protocols and specific training in contract management and regulatory compliance.

Dimension 4: Payment or Drawn

Payment processes show a worrying duality. While 34.5% believe that the treasury "almost always" reviews supporting documentation, 27.3% indicate that payments are "almost never" made exclusively through interbank channels, increasing the risk of embezzlement or errors. Suppliers' distrust of the interbank system (18.2% "never" trust it) exacerbates this situation, suggesting the need to strengthen transparency and communication with external stakeholders. Furthermore, the absence of responses in the "always" category for the release of budget credits (32.7% "almost always") reflects reactive rather than preventive management. To optimize this dimension, it would be strategic to integrate real-time monitoring technologies and establish partnerships with financial institutions that guarantee transaction security.

Each dimension analyzed reveals a network of challenges that, although distinct, converge on a common denominator: the need for more integrated, transparent, and capable budget management. Implementing the model proposed in the article will require not only technical adjustments but also a cultural shift that prioritizes inter-agency collaboration and accountability. Public health, as the cornerstone of social well-being, deserves financial management that reflects both rigor and humanity in its execution.

4. Discussion

Furthermore, budget management in the public sector presents particular challenges, such as inefficient resource allocation, rigid administrative procedures, and a lack of flexibility to adapt to unexpected changes. ⁽⁸⁾ In the authors' view, these challenges require an integrated approach that not only considers process optimization but also the adaptability of the organizational structure in the face of a dynamic environment.

The National Policy for the Modernization of Public Management (PNMGP) seeks to transform public administration by identifying and defining well-defined GPPs, reducing bureaucracy and





improving the alignment between citizen demands and institutional response according to the Council of Ministers (PCM, 2022).

Furthermore, the Ministry of Economy and Finance (MEF, 2024) analyzes budget execution, a vital process for public management, linking theories such as budget execution and punctuated equilibrium. It highlights the importance of transparency, institutional commitment, and oversight during budget execution, emphasizing the need for adequate monitoring to ensure compliance with deadlines and project quality.

Artificial intelligence applied to competency-based university curriculum management can offer an interesting parallel in public health process management. The integration of technologies into the planning and execution of health budgets can improve the efficiency of public administration (Moreno Muro et al., 2023).

The impact of communications from educational institutions and local governments highlights the importance of strategic communication in public management. This approach can be key to improving citizen participation and resource allocation in the health sector (Rosales Urbano et al., 2023).

The budget allocated to public health is crucial to ensuring the well-being of the population. Barrenechea and Encinas (2022) highlight the importance of democracy in Peru, which can influence key decisions about resource distribution. Regarding the multifaceted crisis and its effects on health, Roberts (2023) points out that economic hardship increases the challenges for health systems. Villar et al. (2024) analyze how the economic system can influence health outcomes, as happened in Peru during the pandemic. Furthermore, the commodification of health, discussed by Brito and Bardález (2023), reflects how privatization can distort access to care. Emergency Decree No. 012-2020 (Peru, 2021) demonstrated the state response to the crisis, while the WHO (2010) underscores the importance of adequate financing to achieve universal coverage. Finally, the public budget for 2024 (Ministry of Economy and Finance, 2023) will be key to addressing these challenges.

Innovative strategies to improve institutional image have significant implications for the management of public services. Improving the image of health institutions can generate public trust and facilitate budget execution in the sector (Silva Herrera et al., 2023).

The 2018 study on nursing staff motivation and job performance offers lessons on how to manage staff in public health. Effective staff performance is critical to ensuring that resources are used efficiently and public health goals are achieved (Romero Mestanza, 2023), and results-based strategic planning for emotional well-being shows how results-oriented management can contribute to the success of public health programs. In the health context, similar planning could improve budget efficiency and ensure better outcomes (Sáenz Avila et al., 2023).

Also with respect to the Public Health Services Management, according to Zúñiga et al. (2024). There is relevant research on the case of the Public Budget for Health in Peru in the period 2019-2024, an important study, from the perspective of *the Faculty of Medicine* of a leading university in Peru.

The study of perceptions about budget execution in the management of public health services is crucial to understanding the dynamics and challenges facing health systems. The proper allocation and use of resources directly influences the efficiency and quality of care and is a key area of evaluation in public policies.





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The perceptions of health professionals and managers can offer valuable information on possible improvements in budget planning and execution, as indicated by :

Sánchez, M., & Pérez, J. (2022) also analyzed how the allocation and execution of health budgets affect the quality of services in several Latin American countries. The authors suggest that proper budget management is essential to achieving universal health coverage and improving efficiency in service delivery. They conclude that health workers' perceptions of available resources directly influence health system outcomes.

García, F., & Mendoza, T. (2022) examined public hospital managers' perceptions regarding budget execution, highlighting the difficulties in aligning available funds with hospitals' actual needs. The authors observe that a lack of transparency in resource allocation and insufficient budgets are constant challenges that affect the quality of public health services.

López, R., & Martínez, L. (2022) focused on the relationship between the perception of financial resources and the effectiveness of public health services. The authors conclude that health professionals' perceptions of budget allocation impact their motivation and performance, which in turn affects the quality of the service provided. Adequate budget management and the active participation of professionals in decision-making are key to improving health outcomes.

The study's results show that workers' perceptions of public health budget execution are intrinsically linked to structural challenges. For example, the lack of regulatory awareness (only 7.3% of respondents are "always" informed) reflects a critical gap in institutional communication, which could exacerbate inequities in access to health services (Marmot & Friel , 2008). This disconnect not only limits the effectiveness of interventions but also perpetuates inequalities, especially in contexts where transparency is key to accountability (Savedoff , 2010).

Suppliers' distrust of interbank payment systems (18.2% "never" trust) suggests systemic risks, such as corrupt practices or embezzlement, a phenomenon widely documented in systems with weak internal controls (Hutchinson et al., 2021). These findings are consistent with studies linking opacity in financial management with inefficiency in service delivery (Kruk et al., 2018). In Latin America, where administrative rigidity often hampers crisis adaptation, the lack of alignment between expenditures and institutional goals (45.5% "almost never" aligned) highlights the urgency of evidence-based reforms (Frenk & Gómez-Dantés, 2019).

Furthermore, delays in confirming receipt of goods (40% are "almost never" timely) not only affect the payment chain but also compromise the quality of services, a problem that is exacerbated in systems with unclear price regulations (Barber et al., 2019). To advance toward universal coverage, it is essential to link budget execution with public health indicators, as proposed by global models that prioritize the strategic allocation of resources (Savedoff et al., 2012).

In short, the perceptions identified are not mere anecdotes, but indicators of structural failures that require multifaceted interventions. Continuous training, the adoption of tracking technologies, and citizen participation emerge as viable strategies for optimizing resources, as suggested by international frameworks (Kruk et al., 2018). These adjustments, aligned with public policies focused on transparency, could transform budget management into a driver of equity and efficiency in public health.

5. Conclusions





The public management of healthcare services faces significant challenges in the allocation and execution of budgets, which directly affects the quality and efficiency of the services provided to the population. The implementation of a process-based management model to improve budget execution in a OGESS is valid, according to experts, and will contribute to the efficient and timely use of public spending. This model could be adopted by other similar institutions involved in public health management.

By optimizing internal processes, it is possible to make more efficient use of financial resources, which contributes to improved quality in the health services offered to the population. This study provides a solid foundation for future interventions in public health management and for the development of policies that allow for a more equitable and efficient allocation of resources in the health sector.

6. Recommendations

6.1. In implementing process management, public managers should adopt a process management approach to optimize budget execution, promoting efficient, results-focused public administration. It is also crucial to map and document key processes, which would strengthen budget execution and consistency in the use of resources.

6.2. Implement a continuous training, awareness-raising, and capacity-building program on process management for all employees, with the aim of reducing ignorance and ensuring that staff are aligned with regulations, institutional objectives, and public health management.

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Contributions of co-authors : All co-authors have contributed to this article by common agreement and are responsible for all information in this article.

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Research funding : With own resources.

We declare no conflict of interest: The authors declare no conflict of interest that could have influenced the results obtained or the interpretations proposed.

Informed consent statement: The study was conducted in compliance with the Code of Ethics and Good Editorial Practices for Publication.

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