

The Rationality of Consequences and Expectations from Applying External Auditing Mechanisms in Algerian Public Health Institutions

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Received: 11/02/2026; Accepted: 11/03/2026; Publishing: 01/06/2026

Summary: Purpose: The auditing of public health institutions has become a prominent topic in recent years across the world. This study focuses on evaluating the effectiveness of external auditing practices within Algerian public health institutions, exploring its role as a contemporary mechanism designed to enhance the quality/performance of the public health sector. **Methodology/Approach:** The data was gathered through interviews conducted with employees from several public health institutions (managers; doctors; auditors; and others), complemented by an analysis of documents from these organizations when available. **Findings:** the study showed several key results, including potential resistance to external auditing, A lack of awareness among healthcare staff about the significance of external auditing. The study emphasizes the importance of proactively tackling these issues through clear the commitment of policymakers, adequate resource allocation, capacity-building programs, and the adoption of modern audit technologies. If managed effectively, external audits could drive greater accountability and improve the quality of services in Algerian public health institutions, making them a key contributor to achieving national health objectives beyond 2030.

Keywords: Public Health Institutions; External Auditing, Performance; Health Quality; Algeria.

JEL Classification Codes: H51, H83, I18, M42, M48.

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I- Introduction:

Health services have long been regarded as a fundamental human right (WHO, 2017). In line with this principle, traditional public management approaches as estimated budgeting and cash accounting were implemented to oversee these institutions. However, the limitations of these mechanisms—evidenced by the declining quality of healthcare services and insufficient oversight or accurate cost assessments—prompted the exploration of alternative management models. Based on that, new concepts such as risk management, internal auditing, control systems, governance practices and accrual accounting were introduced. These approaches are designed to uphold the principles of inclusiveness, equal access to medical treatment, solidarity, and the uninterrupted provision of public healthcare services (See (Mensah, 2013, p 291); (WEEKS, 2012, p 382)).

With the growing complexities of public health operations and the rising demand for transparency and accountability, audits used as tools to verify proper fund allocation and usage, operational efficiency and evaluation of service quality. This evolution was propelled by the pressing need to tackle systemic inefficiencies and strengthen the overall accountability of public health institutions. Subsequent legislative milestones introduced stricter regulations and mandated regular audits as part of governance practices (TING, 2017, p 41). These laws often required public health companies to adhere to standardized auditing procedures, fostering greater consistency and reliability in performance evaluations.

In Algeria case, the government has demonstrated significant commitment to enhancing public auditing practices, driven by the growth of the public sector and its widening economic responsibilities (Algeria is currently ranked 81th internationally and 5th in Africa on the 2025 Health Care Index (NUMBEO, 2026)). To this end, Law N° 11-18 of 2018 was enacted to oversee public and private health institutions. Through this legislation, the government aims to advance Algeria's health policy objectives well beyond 2030. Implementing external audit mechanisms to accomplish the objectives of national health strategies presents a challenging yet highly promising initiative. Since 2018, at least, algerian public health facilities have been obligated to have their financial accounts audited by one or more statutory auditors. In this context, this study aims to address the following key question:-

What are the significant Consequences and Expectations that can Algerian public health institutions gain from the application of external audit mechanisms to achieve the goals of the National Health Strategy?

To answer this question, the study adopts the following main research hypothesis:-

The effectiveness of introducing external audit mechanisms in Algerian public health institutions largely depends on their ability to adapt these practices, as well as the influence of institutional, social factors and the goals of the National Health Strategy.

I.1. Importance and objectives of the study

The importance of this study may be explained in next folds. (1) This study provides a framework for conceptualizing external audits in public health institutions. Understanding these effects in developing countries like Algeria would be highly beneficial; (2) The study examines the role of external auditing in boosting performance and competitiveness within the public health sector. It highlights how auditing can improve governance, risks management, cater to stakeholders' needs in public healthcare institutions, and align with government health strategies. (3) This study serves as a practical guide for auditing public health companies and tries to offer valuable results and recommendations to enhance the quality of public health services in Algeria in the future.

I.2. Study Contents

Based on the above, the study is divided into:-

- 2- Literature and Theoretical Background;
- 3- Study methodology and tools;
- 4- Research Results and Hypothesis Discusing.

II– Literature and Theoretical Background:

II.1. Public Heath institutions

C. A. Winslow defines Public health as ‘‘the science and the art of preventing disease, prolonging life, and organized community efforts for (a) sanitation of the environment, (b) control of communicable infections, (c) education of individuals in personal hygiene, (d) organization of

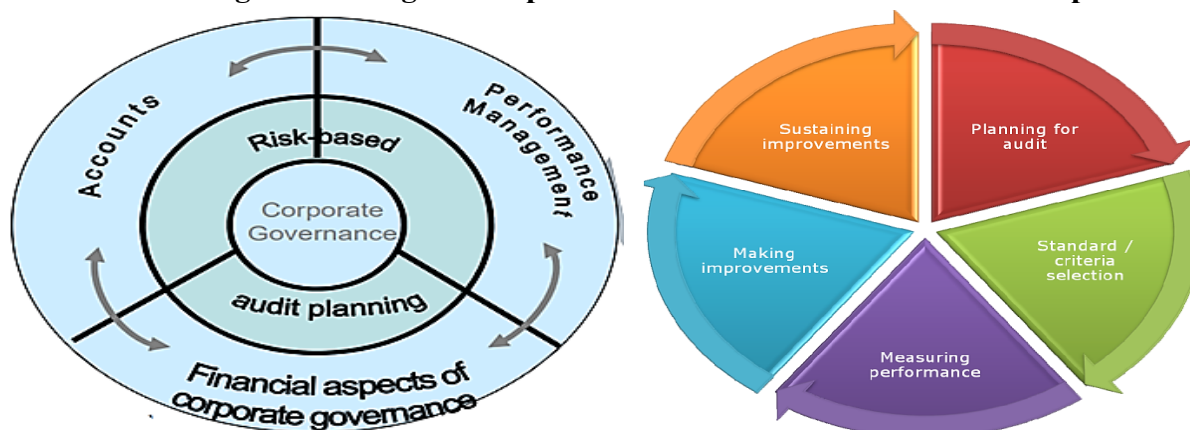
medical and nursing services for early diagnosis and preventive treatment of disease, and (e) the development of social machinery to ensure everyone a standard of living adequate for the maintenance of health” (FU, 2011, p 241). Another definition specifies that Public healthcare organizations are collected resources (clinic stuff; management skills; organization’s culture; technologies; machinery; money; reputation; intellectual property and trademarks) designed to accomplish specific goals or objectives in the field of health (MIZORAM, 2021, p 19). According to Article 297 of Algerian Law N° 18-11 concerning health specifies that the Public Health Institution operates as a public entity with specialized management and a focus on health. It holds legal personality and financial autonomy. Its primary responsibilities include ensuring, enhancing, and promoting all health-related activities. Additionally, it is authorized to engage in training and research initiatives within the health sector (Ministry, 2018, p 29).

II.2. The public healthcare auditing

According to MIRAJ (2022), The concept of “healthcare audit” refers to a meaning of “an official inspection of an healthcare or Medical organization’s accounts, typically by an independent body, and it aims to improve both the quality and the effectiveness of healthcare services through assessing and evaluating the hospital's overarching strategy while tracking its performance with high-quality standards”. (MIRAJ, 2022, p 2669). Also, The medical audit is a regular multidisciplinary activity involving all participants (stakeholders) of health care, that including governments, doctors, managers, patients, and others. It entails a systematic review of their practices for the amelioration of the healthcare system and improving the quality ultimately (Kenfack, 2021, p 139). From the Institute of Internal Auditors (IIA) view, Internal Healthcare audit is an independent, objective assurance activity designed to add value and improve an organisation's operations. It helps Healthcare organisations accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (Auditors, 2017). Within this framework, Healthcare Audit Standards are divided into attribute standards and performance standards. Attribute standards focus on the qualities of healthcare organizations and the auditors conducting assurance audit activities. On the other hand, performance standards define the precise scope of internal healthcare audit tasks and establish quality criteria to assess the effectiveness of these services.

According to L. Hut-Mossel et al (2021), there are several types of audits that can be divided into: (1) external audits, used to gain insight into a hospital’s compliance with external criteria; (2) internal audits, often in preparation for an external audit; and (3) clinical audits, carried out as a local initiative by healthcare professionals. Although there are many differences between them in the scope and approaches used, they all share the objective of improving the quality of hospital care. The variety in the levels of audits, together with the heterogeneity of their contexts, suggests that it is unlikely that audits work in the same way in every setting (public/private hospitals; for profit/No-profit hospitals; big/small hospitals). Given this situation, a detailed understanding of the contextual factors and the causal mechanisms that influence the effectiveness of audits is necessary if one is to improve the design and optimisation of the audit process (Hut-Mossel L, 2021, p 02). In general, the audit process for public health companies generally consists of the following stages:-

Figure 01: Stages of responsibilities of Audit Public health companies



Sources: see (Battu, 2025, p 651); (Safety, 2017, p 11).

II.3. The Objectives of Audit in public healthcare organizations

The varying starting points and prior definitions concerning the public health sector's capacity to carry out legal audits could present challenges in replicating certain benefits seen in the private health sector. In fact, this subject provides ample scope for academic discussion. Carhill and Kincaid (1989) and Coupland (1993) consider that there are significant differences between the internal audit from the public sector and the one from the private sector in terms of the orientation framework where it operates and the area of its activities. In nowadays, the reforms of the public sector have diminished the differences between the two sectors, especially in respect of governance, risks management, financial accounting and accrual accounting (see (Olena Antoniuk, 2021, p 378)). However, auditing —be it internal or external— can serve multiple purposes across various levels as following:-

1. Purpose of the Healthcare Audit Standards: the objectives of the Healthcare Audit Standards are to (see (Ministry of health, 2012, p 08)):-

- Establish a framework for providing healthcare audit services in order to improve patient care and safety;
- Set basic principles for carrying out healthcare audit activities and the evaluation of healthcare performance;

2. Managing public health institutions:-

To ensure that public healthcare facilities are properly managed and effectively operational;

- Prices of medical services charged by public healthcare facilities are adequately monitored; and
- Coordination and reporting mechanisms for regulation of public healthcare facilities are adequately functioning (see (Putro, 2022, p 66)).

3. Financial reporting: auditing plays a vital role in contributing to assess whether the financial statements of the audited healthcare entity provide an accurate representation of its financial position and transactional outcomes, adhering to IFRS or GAAP, IPSAS, or national standards. And to determine if the entity complies with laws and regulations that could substantially impact its financial statements (Eugeniu Iurlea, 2011, p 1511).

4. Evaluating the economic efficiency: the audit should be positioned as a strategic partner for management to find solutions in increasing the effectiveness, efficiency, optimization, risks management, control and administrative process of the healthcare organization (see (Kaziba Abdul Mpaata, 2017, p 1069); (L.A. Maisigova, 2021; p 173)). Audits must serve as powerful tools for gaining a deeper understanding and evaluating performance by reviewing how effectively and economically the healthcare entity utilizes its resources (personnel, securing assets, information systems), and also encouraging compliance with management policies in the term of good practices business (Septo Pawelas Arso, 2022, p 66).

5. Institutional Effects: A more integrated diagnostic methodology as Audit could enable stakeholders to work collaboratively toward understanding hospital operations, promoting best practices, and achieving cost optimization. Auditing serves as a vital medium of communication, a cultural carrier, an exchange instrument, and a symbol of professional collaboration. It plays a continuous role in rejuvenating and aligning organizational endeavors among the various stakeholders (Jean-Marie Fessler, 1988, p 09).

6. Health sector governance: Healthcare Audit is a cornerstone of good healthcare sector governance. Audits provide unbiased, objective assessments of whether the use of public resources and the delivery of services are managed responsibly and effectively to achieve the intended results. These assessments help the governments to achieve accountability and integrity, improve operations, instil confidence amongst stakeholders and assist with the creation of a safety culture in society. Healthcare audit supports the government plans by:-

- Providing valuable and reliable information to inform decision making;
- Evaluating the effectiveness of strategies employed by the health sector to manage risks;
- Identifying good practices for sharing, learning and implementation across the Healthcare system.

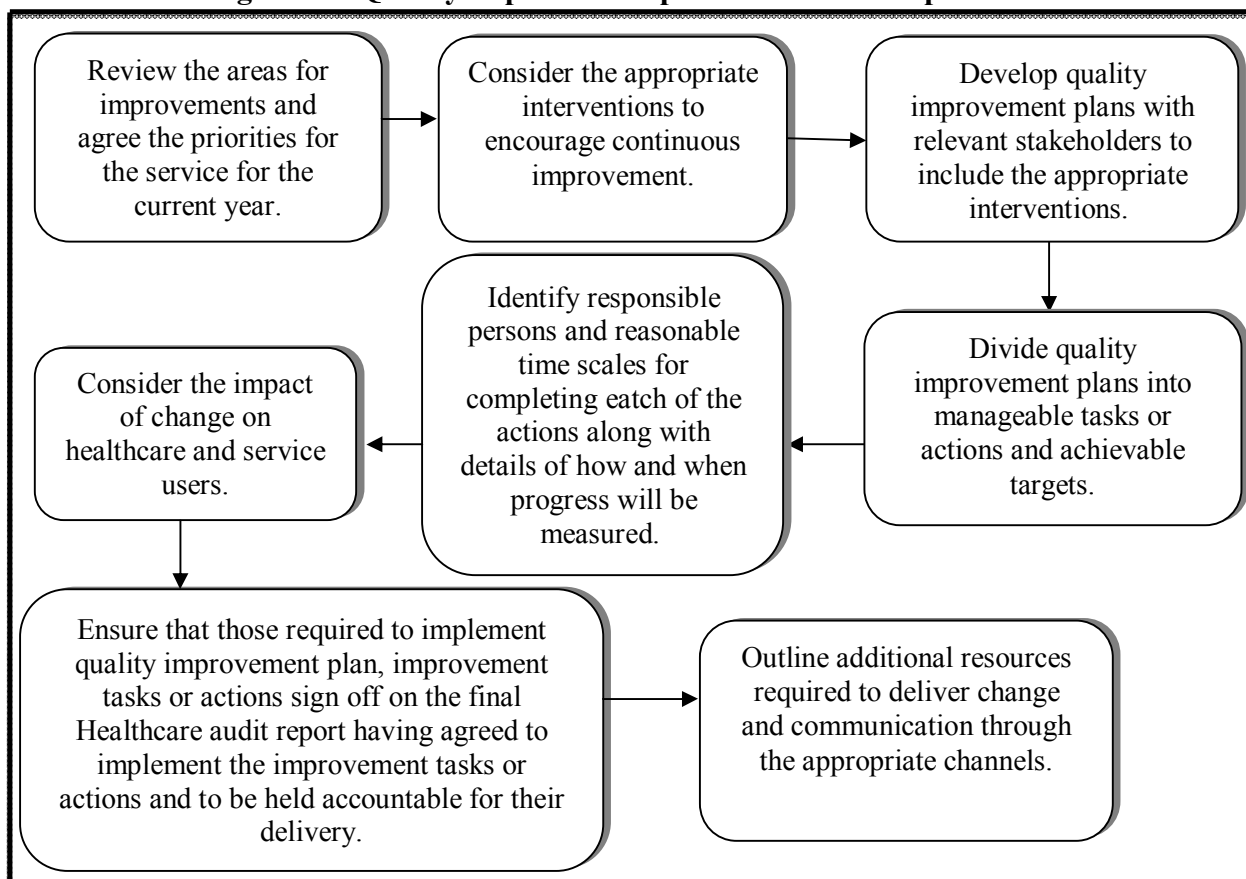
II.4. Improvement the quality of Public Hospital Audit

According to ISO 8402, an audit is described as a systematic and independent evaluation to assess if quality-related activities and outcomes align with established requirements, whether these requirements are implemented effectively, and whether they are capable of achieving intended objectives (ISO, 2025). Healthcare audits serve as a vital mechanism for ongoing quality

enhancement. The outcomes of these audits play a critical role in the assurance framework, providing essential insights for the SMAP within a healthcare organization. This information supports the preparation of annual financial statements and internal control reports.

Healthcare audit results may identify ‘areas for improvement’ where the required standards are not being met. All good audit projects must include a programme of change activity and post-identification of the findings from audit, to ensure necessary changes happen. All audit reports should be shared with the stakeholders, and Governance Group, Ministry for review and action. When the audit team have developed the recommendations, decisions should be made on how changes can be introduced and monitored. All audits should be accompanied by a quality improvement plan in order to achieve the required improvements in practice (see (Jean-Marie Fessler, 1988, p 09/13)).

Figure 02: Quality improvement plans in Public Hospital Audit



Sources: (Safety, 2017, p 48).

At this stage there may be justification for adjusting the desired performance levels in the light of the results obtained. A summary report of progress should be submitted through the appropriate lines of responsibility at regular intervals. The appropriate governance committee is responsible for monitoring and reporting the progress of implementation through the reporting structure. The progress of any quality improvement plan associated with an audit should be formally assessed at regular intervals and appropriate actions to be taken should be determined where progress is not being maintained. A rapid re-audit is recommended to ensure that changes have indeed improved practice and to ascertain whether further audit procedures are required in the short term. Regarding the discussion about the quality of auditing procedures, Quality improvement plans can be developed to address those areas requiring improvement. It is important that improvement tasks or actions outlined in the QIP relate to local and national priorities or targets and the service provider's own available resources.

II.5. Auditing of public health companies in Algerian laws

On the Algerian side, Under Article 302 of Health Law N° 18-11, on July 19, 2018, public health institutions must adhere to the following regulations regarding financial and accounting management:-

1. Public accounting principles apply to employee and staff expenses.
2. For other types of expenses, the financial accounting system (FAS or SCF) issued in November 2007 is to be followed.

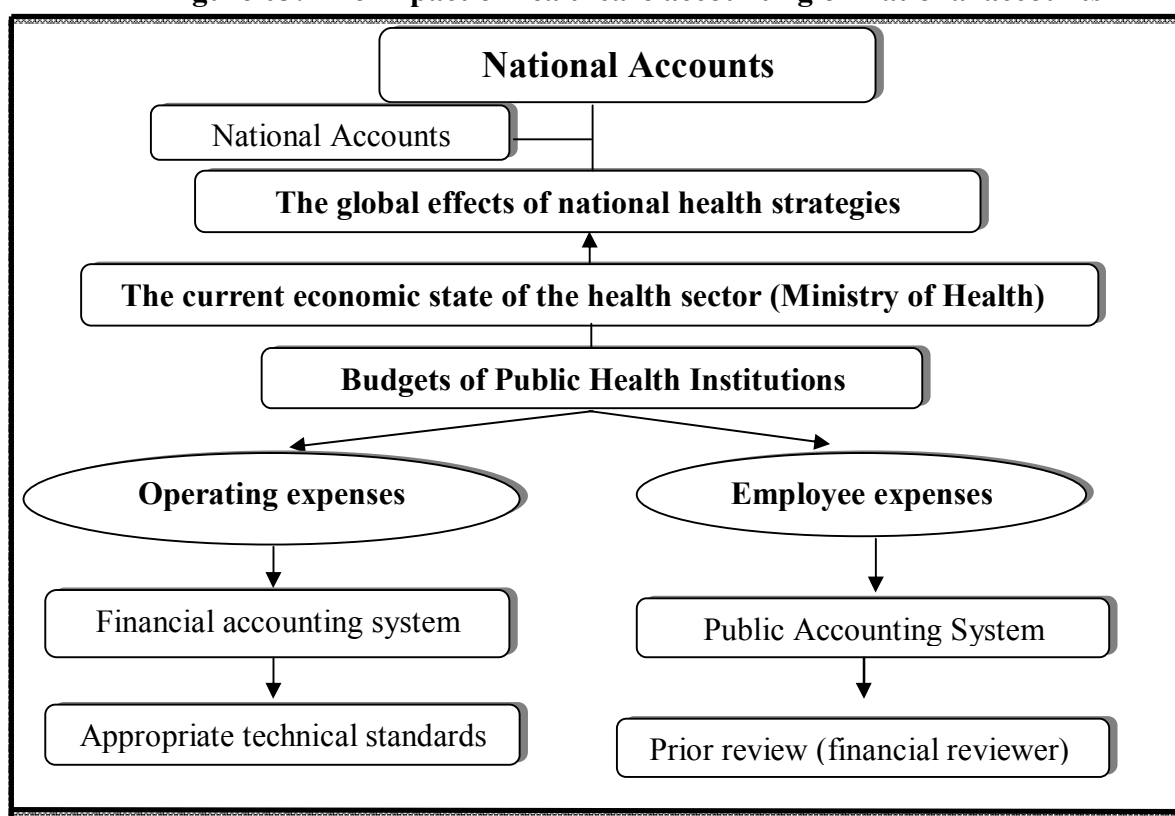
As for Public sector companies:-

1. healthcare entities must establish a complete set of internal control processes, risk assessment, control activities, reports-systems, and supervision, so as to reduce the risk of financial reporting errors or fraud;
2. possibility to apply International public sector accounting standards (IPSAS), and Regulations relevant such as tax and Labor Law.

Additionally, Article 303 of the same law states that public health institutions are subject to prior financial control for staff-related expenses and subsequent financial audits for other expenditure categories. The auditor responsible for these functions is appointed jointly by the Minister of Finance and the Minister of Health. This process aims to enhance the quality of care, ensure better cost management, improve treatment effectiveness, and strengthen health security (Ministry, 2018, p 30).

The health institution in question submits the internal evaluation report, as outlined in Article 325, to the appropriate department within the Ministry of Health. This audit is initiated upon the institution's request. Its primary aim is to gain an independent evaluation of the institution's management, service quality, and costs. This process relies on specific indicators, standards, and references linked to procedures, best clinical practices, and the performance outcomes of its various departments and activities.

Figure 03: The impact of healthcare accounting on national accounts



Source : According to (Meiryani, 2021, p 159).

II.6. Some previous studies

On the academic side, Mensah et al (2013, p 292) has highlighted recurring issues in many Rwandan hospitals such as incomplete financial records, misallocation of funds, and delays in audit processes, irregularities, inefficiencies, and a lack of adherence to audit recommendations. These challenges not only hinder service delivery but also erode public trust in the health and medical system. In the case of Greece, Drogalas et al (2019) find that each of the general principles and responsibilities, the risk assessment, the audit evidence and using the work of others are factors that affect positively audit quality in the largest health care organizations in Northern Greece. However, healthcare in Greece has not yet managed to deepen the compilation of audit standards with the

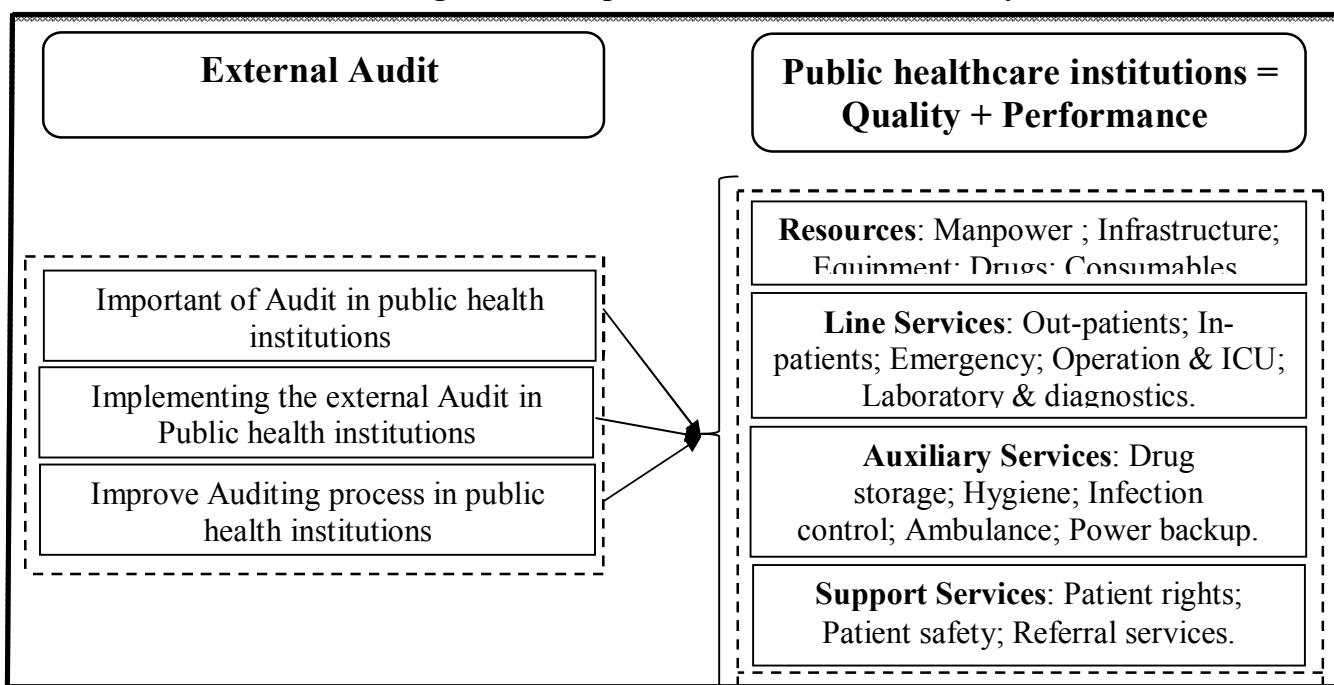
general principles and responsibilities governing a health organization (Drogalas, 2019, p 15). In other hand, Maisigova et al (2021) tries to explore how can audit support the russian hospital performance, The results indicate that the performance audit promote the financial interests of the state, to ensure public health needs (the diagnosis, treatment, prevention, rehabilitation of patients, etc), to support accountability and responsibility regarding the activities of healthcare institutions. The implementation of a performance audit in the health sector should increase the medical, social and economic efficiency of the health system. Despite that, their non-systematic work, lack of interconnection in the implementation of supervisory activities as a factor that reduces the effectiveness of audit in this type of organizations (L.A. Maisigova, 2021; p 171). And for studying the economic responsibility audit of leading cadres in chinese public hospitals during 2019 to 2022, Jiayu Yang (2023) believes that audit can promote the health industry, decision-making (policies), and to seriously investigate and punish violations of discipline and regulations. Therefore, the study further encourages leading officials to be conscientious in accordance with the law and audit standards, responsible and promising, promote the high-quality development and the modernization of hospital governance capacity (Jiayu Yang, 2023, p 120). In the same context, Ouyang (2024) investigates how such emergencies affect the audit behavior of listed companies in China and the quality of their audits between 2018 and 2021. This research highlights the intricate relationships between health crises, auditing practices, and economic outcomes across different global contexts. His findings indicate that public health emergencies have a significant negative impact on audit quality, affect audit behavior, and also the increase of audit fees (Ouyang, 2024, p 02). From his side, Simões (2024) tried to identify the determinants of the auditor's qualified opinion in 71 Portuguese privately owned hospitals from 2019 to 2021. The study shows that the qualified opinion from the previous year, the hospital's debt level, and its performance are the most factors influential factors on the auditor's opinion (Simões, 2024; p 14).

III– Study methodology and tools:

III.1. Study issues and main hypotheses

The study proposes the impact of External Audit mechanisms on the public healthcare institutions in the following fields:-

Figure 04: Proposed areas and fields of study



Source: Prepared by the researcher according to (Safety, 2017, p 85).

From the figure 05, it can propose the main research problem as follows:-

What are the significant Consequences and Expectations that can Algerian public health institutions gain from the application of external audit mechanisms to achieve the goals of the National Health Strategy?

This main question can be divide into the following sub-questions:-

H₀₁: What are the most significant advantages/gains achieved by Algerian public health institutions from adopting external audit mechanisms? And what at the national level?

H₀₂: Do managers and medical stuff in Algerian public health institutions have a full understanding/knowledge of the various stages of the auditing process?

H₀₃: What measures/practices can be enhanced to improve the performance of Algerian public health institutions, particularly in light of the challenges they encounter?

To answer this question, the study adopts the following main research hypothesis:-

The effectiveness of introducing external audit mechanisms in Algerian public health institutions largely depends on their ability to adapt these practices, as well as the influence of institutional, social factors and the goals of the National Health Strategy.

Accordingly, we can present the sub-hypotheses as following:-

H₁₁: Public health institutions stand to gain significantly from adopting external audit mechanisms, with one of the primary advantages being the enhancement of healthcare services quality.

H₁₂: managers and medical stuff in Algerian public health institutions have a full understanding/knowledge of the various stages of the auditing process.

H₁₃: Key areas for ongoing improvement will be identified across different aspects of these institutions themself, institutional and social factors, and the efficient allocation of resources.

III.2. Estimating Model

To etimate the various relationships that showcase the varying impacts of external auditing practices on the quality/performance of public health institutions, several statistical models can be proposed. These models are grounded in simple/multiple linear regression analysis according to Robert F. Engel and C.W.J. Granger model. The areas covered by these models can be discussed as follows:-

Table 01: The study models

In field of Financial Reporting Quality
$\text{FIREQUA}_t = B_0 + B_1 \text{SCF(IFRS)}_t + B_2 \text{COMPE}_t + B_3 \text{ACCOUDISC}_{t3} + B_4 \text{LAFRAU}_t + \varepsilon_t$ Where: B₀: Constant; SCF(IFRS): Accounting system and rules; COMPE_t: Accounting Competence; ACCOUDISC_t: Accounting disclosure; LAFRAU: lack fraud; ε_t: Random Error.
In field of Auditing Reporting Quality
$\text{AUREQUA}_t = B_0 + B_1 \text{NAA(IFAC)}_t + B_2 \text{COMPE}_t + B_3 \text{AURIS}_{t3} + B_4 \text{SINTCONSYS}_t + B_5 \text{PROSKEP}_t + \varepsilon_t$ Where: B₀: Constant; NAA(IFAC): National Auditing Algerian; COMPE_t: Auditing Competence; AURIS_t: Audit risks; SINTCONSYS_t: Strength of the internal control system; PROSKEP_t: Professional Skepticism; ε_t: Random Error.
In field of the Performance of Public Health Institutions
$\text{PERPHIA}_t = B_0 + B_1 \text{GOVSTR}_t + B_2 \text{INSTFAC}_t + B_3 \text{PROBOD}_{t3} + \varepsilon_t$ Where: B₀: Constant; GOVSTR: Governance Strong; INSTFAC_t: Institutional Factors; PROBOD_t: Professional bodies; ε_t: Random Error.

Source: Prepared by the researcher.

Note: Based on the collected data, not all proposed models may be fully valued, leaving room for future studies to explore their potential.

III.3. Data Collection

The study society included number of public healthare institutions and auditors agencies. The research subjects consisted of directors, management department, Internal Auditor Unit (if there), accounting and finance department, some doctors. The interview questions were prepared both in paper and electronic formats by using the Google Form application, This was intended for interviewees residing in remote areas or those working late hours. making direct meetings challenging. you can have a look in the site: https://docs.google.com/forms/d/e/1FAIpQLSemtlj4pjuJgCbLUYxEIP8JN_y5CoGgEXbBKxP-4G3WlUx2Q/viewform?usp=publish-editor.

Respondent data collection took place from january 05, 2026, to february 10, 2026. After interviewing every subject, the narrative text should be composed as soon as possible to avoid lost of memorization, the following table shows different information about the sample:-

Table 02: Data Collection

The public health institution	Education level	Fuction	Expe rienc e	Date of the visit	Length of the visit	Total number of visits
Multi-specialty hospital	Master degree (Accounting)	Accountant (Cash Service)	3 Years	10/01/20 26	02 Hours	08 Visits
	Master degree (Finance)	Finance Service	4 Years	15/01/20 26	1.30 Hours	
	Doctor of Philosophy (pharmacy)	Head of Service Division	12 Years	18/01/20 26	2.00 Hours	
	Bachelor	Receptionist	3,5 Years	23/01/20 26	45 Minutes	
	Master degree (Public Administration)	Head of Financial department	7,5 Years	28/01/20 26	2.00 Hours	
The new hospital: 244 beds	Doctor	X-ray Service	6 Years	29/01/20 26	01 Hour	06 Visits
	Doctor	Medical Services	9 Years	31/01/20 26	01 Hour	
	Master degree (Accounting)	Department of Pharmacology	4 Years	04/02/20 26	1.15 Hours	
	Master degree (Medical Diagnosis)	Medical Diagnosis	2,5 Years	04/02/20 26	01 Hour	
	Doctor of Philosophy (medicine)	Emergency Section	6,5 Years	07/02/20 26	30 Minutes	
	Doctor of Philosophy (medicine)	Emergency Section	8 Years	08/02/20 26	30 Minutes	
Maternity hospital: Mother and child	Master of Accounting and Finance	Management department	3 Years	08/02/20 26	02 Hours	05 Visits
	Master of health and Environment	Department of Inpatient Care	11 Years	09/02/20 26	01 Hour	
	Master of management	Secretary	5 Years	10/02/20 26	01 Hour	
	Certified Public Health Professional	Department of Epidemiology	5,5 Years	10/02/20 26	02 Hours	
Total	15	15	//	34 days	19 Hours, 30 Minutes	19 Visits

Source: Prepared by the researcher by using Excel.

From the above table, some descriptive statistical data about the sample can be presented as shown in the following table:-

Table 03: Descriptive Statistics of the sample

Education level	Frequency	%	Function	Frequency	%	Experience	Frequency	%
Bachelor	1	06.66	Accounting Field	07	46.67	Hess than 5 years	07	46.67
Master degree	8	53.33	Health Field	08	53.33	6 to 10 years	06	40
Doctor	5	33.35	Total	15	100	11 to 15 years	02	13.33
Professional Certificate	1	06.66				Total	15	100
Total	15	100						
Members	Frequency	%	Hours that have been spending	Frequency	%	Visits	Frequency	%

Multi-specialty hospital	05	33.33	Multi-specialty hospital	08 Hours, 15 Minutes	42.3	Multi-specialty hospital	08	42.1
The new hospital: 244 beds	06	40	The new hospital: 244 beds	05 Hours, 15 Minutes	26.92	The new hospital: 244 beds	06	31.57
Maternity hospital: Mother and child	04	26.67	Maternity hospital: Mother and child	06 Hours,	30.77	Maternity hospital: Mother and child	05	26.31
Total	15	100	Total	19 Hours, 30 Minutes	100	Total	19	100

Source: Prepared by the researcher.

The table outlines the main characteristics of the target sample, indicating a commendable academic level, as 86.68% of the participants hold either a master's degree or a Ph.D. The respondents are predominantly from the accounting (46.67%) and medical (53.33%) sectors, with an average professional experience exceeding 06 years ($90.5 \div 15$). The least experienced individual in the group has 2.5 years of professional background. The sample is distributed across three hospitals, we were spending 42.3% of the total work time at the first hospital, 26.92% at the second, and 30.77% in the last one. Furthermore, visits to these hospitals accounted for 42.1%, 31.57%, and 26.31% of the total visit percentage, respectively.

IV- Research Results and Hypothesis Discussing:

The key points discussed during the various interviews can be summarized as follows:-

IV.1. Important of Audit in public health institutions

The significance of adopting external auditing practices in public health institutions was reflected in the following findings:-

Table 04: Important of Audit in public health institutions

Important of Audit	Frequency	%	the social standing	Frequency	%
improve the healthcare Patient.	13	24.53	the auditor ansure that all patients of different castes and ethnicities, genders and age groups receive equal treatment.	12	30.77
Professional development of healthcare staff.	08	15.09	the community can easily obtain information about public health institutions activities and how much they cost.	09	23.07
Risk management related with hopital operations.	10	18.87	The public health institutions use many means to reach their information to the various stakeholders such as media, local radio, newspaper.	07	17.95
The reuirement of legal and tax issues that the hospital feced	08	15.09	Spreading awareness and health culture within communities.	11	28.2
Supporting the implementation of the national health strategy.	14	26.42	-	-	-
Total	53	100	Total	39	100

Source: Prepared by the researcher.

According to the table and respondents' perspectives, the two primary objectives behind adopting external auditing practices in public health institutions are aligned with achieving the Ministry's health policy goals (26.42%) and enhancing healthcare services for patients (24.53%). One of the interviewees adds: 'health sector reforms reflect the broader institutional changes Algeria has undergone since the early 21st century. With the population reaching 47.8 million in

February 2026, and may be 48 million by the end of 2027, restructuring the health system became imperative to address various challenges, including crises like COVID-19. These reforms necessitated a shift in management systems and the adoption of modern strategies to boost the efficiency and productivity of both public and private health organizations. As part of these changes, auditing health institutions became essential". the Director of the Administrative Department.

Meanwhile, the second section of the table highlights the social significance of public hospitals. Respondents identify the equitable distribution of health services across diverse societal groups (30.77%) and promoting health awareness within the community (28.2%) as their most important social objectives. In this context, another respondent noted that: "despite advancements in health information systems and financial reporting within these institutions, Algerian health institutions have yet to release regular periodic reports on their operational performance to the public. Considering the sensitive nature of their work and the data they handle, these institutions are unlikely to share information on unofficial platforms or social media channels". the Head of the Accounting and Finance Department.

Considering the overall trend in the sample, which highlights the significant role of auditing in the public health sector despite certain institutional barriers to publishing financial information, it can reject the null hypothesis H01, and the alternative hypothesis is accepted H11. As a result, Public health institutions stand to gain significantly from adopting external audit mechanisms, with one of the primary advantages being the enhancement of healthcare services quality.

IV.2. Understanding of managers and medical stuff about the external Audit working

This section aimed to assess how familiar the respondents were with the different phases/stages of external auditing, starting from the initiation of the process to the issuance of the final report, with a focus on quality review for continuous improvement. The findings are summarized as follows:-

Table 05: Stages of the external Audit in Public health institutions

The stages		Frequency	%
Stage 01: Planning for Audit		18	40
Step 1:	Involving stakeholders in the healthcare audit.	04	26.67
Step 2:	Determining the audit topic.	08	53.33
Step 3:	Planning the delivery of audit fieldwork.	06	40
Stage 02: standard/criteria selection		27	45
Step 4:	Identify standard (evidence based).	07	46.66
Step 5:	Identify audit criteria.	05	33.33
Step 6:	Set targets/expected performance levels.	07	46.66
Step 7:	Agree acceptable exceptions (if appropriate).	08	53.33
Stage 03: Measuring performance		28	46.66
Step 8:	Collect data.	08	53.33
Step 9:	Analyse data.	07	46.66
Step 10:	Draw conclusions.	07	46.66
Step 11:	Present results.	06	40
Stage 04: Making Improvements		35	38.89
Step 12:	Share audit report.	06	40
Step 13:	Review areas for improvement and agree priorities for action.	07	46.66
Step 14:	Identify appropriate interventions.	05	33.33
Step 15:	Develop quality improvement plan (if required).	04	26.67
Step 16:	Identify: (1) the persons responsible for actions; (2) reasonable timescale for completion; (3) how and when progress will be measured.	06	40
Step 17:	Ensure that change is supported by those with the necessary authority to effect such change.	07	46.66
Stage 05: Sustaining Improvements		18	40
Step 18:	Monitor implementation of changes.	07	46.66
Step 19:	Report on progress of implementation as required.	06	40
Step 20:	Re-audit to ensure changes have improved practice and decide if further audit procedures are required.	05	33.33

Source: Prepared by the researcher.

The table above highlights a noticeable lack of understanding among respondents regarding the various stages of audit implementation, with no individual stage surpassing the 50% mark. While such findings might appear normal within medical institutions, they pose significant concerns in the context of external audits, where comprehensive knowledge of all steps is crucial. Stage 4: Making Improvements, had the worst point, with only 38.89%, whereas Stage 03: Measuring performance, achieved the highest percentage at 46.66%.

Notably, aspects like the relationship with shareholders and stakeholders in Stage 1 (Step 1) and Develop quality improvement plan (Step 15) scored the lowest at just 26.67%. Furthermore, there was limited awareness regarding public sector auditing standards (Step 5), Identify appropriate interventions (Step 14), and Re-audit to ensure changes have improved practice and decide if further audit procedures are required (Step 20), each scoring 33.33%.

Based on the insights from those interviewed, these figures can be understood from various viewpoints. An employee from the administrative department shares his opinion by saying: "Firstly, it appears that public hospital administrations prioritize traditional principles of government accounting (cash accounting) over modern frameworks, possibly due to legal and judicial mandates tied to their operations. Secondly, these results may reflect an incomplete transition by Algerian public health institutions to fully adopting management accounting practices. This inconsistency stems from varying institutional and social factors, which hinder uniform progress in implementing international accounting standards".

According to them, It is necessary for the government and the Ministry of Health to urgently implement stringent measures to oversee the transition to international financial accounting and auditing standards within the algerian public health system. Additionally, an emphasis on enhanced training programs is critical to equip both medical and administrative staff with the expertise needed to navigate this essential transformation effectively.

Considering the negative attitude demonstrated by the sample toward understanding the various aspects of external audit procedures, the null hypothesis H02 is accepted. This hypothesis posits that managers and medical staff in Algerian public health institutions have not a full understanding/ knowledge of the various stages of the auditing process. As a result, it becomes imperative for the government, the ministry, and the directors of these institutions to take immediate and effective actions to resolve this issue and address the identified gaps.

IV.3. Improve the quality of auditing process in public health institutions

To determine ways to enhance the quality of external audit processes in public health institutions, two primary areas of analysis were established. The first focuses on the audit procedures, while the second pertains to the external environment. The table below highlights the key trends observed among respondents:-

Table 06: Improve the quality of Auditing Process in Public Health Institutions

Statements		Frequency	%
In field of Public Health Institutions Operations		61	81.33
01	External auditors ensure that the public health institutions provide patient care in an ethical manner and to protect patients and their rights (e.g. respect patient confidentiality; have grievance mechanism, etc.).	12	80
02	External auditors make effort to promote safety at the hospital and to manage wastes (e.g. promote safe workplace for staff; infection control, etc.).	10	66.66
03	External auditors ensure that all personnel within Public Health Institutions undergo continuous training and education to sustain or improve their skills and expertise. This may include on-the-job training, in-house programs, or external courses, among other methods.	13	86.66
04	External auditors make sure about effort to manage and continually improve the facilities (e.g. physical assets; information systems) in hospital operation.	14	93.33
05	External auditors make effort to ensure that the public health institution has a medical reports for every section of department, and such records are available to doctors/staff so that they can communicate the essential information.	12	80
In field of Stakeholders and Society		41	91.11
06	On the overall, External auditors make effort to ensure that Public Health Institutions have a good communication with key stakeholders (patients and families, suppliers, community, etc.), and meet their information needs (e.g. timely; understandable language; in an expected format; with the desired	14	93.33

	frequency; etc.).		
07	On the overall, External auditors make effort to maintain mutually beneficial relationships with key stakeholders of Public Health Institutions.	13	86.66
08	External auditors ensure that the government can measure and analyse information to understand performance of Public Health Institutions and health systems, and use factual information and data and statistics when making decisions, Evaluating health strategies and preparing reforms.	14	93.33

Source: Prepared by the researcher.

The respondents' answers displayed a high level of similarity, emphasizing the significance of auditing in boosting the performance of public health institutions with a majority agreement of 81.33%. Additionally, they highlighted its role in strengthening community and stakeholder trust, which was agreed upon by 91.11% of participants. External auditors were regarded as crucial in preserving the health institution's assets, maintaining strong relationships with stakeholders, and delivering accurate reports for the government's benefit—areas that received top priority with 93.33% agreement. Overall, the findings indicate a strong awareness among respondents regarding the importance of external audits in public health institutions. One respondent highlights that the areas requiring improvement should encompass the following: (1) Clear allocation of responsibilities among employees to minimize the errors or fraud; (2) control over access the assets, accounts, and similar assets; (3) Evaluation of the institution's overall performance. As a result, the null hypothesis is rejected and accept the alternative hypothesis H13, suggesting that ongoing improvements are achievable both in auditing processes and in the performance quality of health institutions. This is particularly evident when considering institutional and social factors, as well as the efficient allocation of resources.

V- Conclusion:

Health holds a crucial role within the framework of modern societies as a whole. It is a key, if not the most significant, determinant of overall quality of life. Considering the evolving global landscape, it has become increasingly crucial to strengthen and refine their management practices. External audits are indispensable tools for ensuring quality and accountability in healthcare systems. When systematically implemented, they lead to measurable improvements in patient care, professional behavior, and system performance. The study findings reveal that Algerian public hospitals continue to face challenges in establishing effective auditing practices within their diverse medical units. To enhance performance in Algerian public health institutions, these practices can be improved by focusing on several key areas:-

First, it is essential to establish clear and transparent guidelines for the audit process, ensuring alignment with the broader objectives set within the national health strategies. These guidelines should be designed to examine both operational efficiency and the quality of health services provided while identifying gaps and areas for improvement.

Second, external audits must involve qualified and independent professionals who possess expertise in healthcare management and compliance. Their neutrality will foster trust and ensure that audits are conducted fairly, producing objective and actionable insights. Also, Introducing and implementing updated training programs for healthcare professionals would contribute to skill development and improved service delivery.

Third, integrating advanced digital tools and technologies into the auditing process can modernizing infrastructure, optimize patient care, management, improve accuracy and streamline operations such as digital health records and telemedicine. Leveraging data analytics and performance metrics can enable auditors to monitor key indicators in real time, offering a more dynamic and continuous evaluation framework.

Fourth, fostering partnerships with international health organizations and promoting research initiatives could bring innovative solutions and practices to the forefront. It is also essential to encourage community engagement and prioritize transparent communication to build trust and ensure that services align with public needs. Stakeholder engagement is another critical component. Involving healthcare workers, administrators, patients, and policymakers in post-audit discussions ensures a collaborative atmosphere where solutions can be effectively implemented. This participatory approach promotes accountability across all levels of the healthcare system.

Fifth, audit entities can enhance transparency by sharing their reports with the public through various channels such as official websites, social media platforms, radio broadcasts, press

conferences. This approach aims to foster a better understanding of the responsibilities held by the leadership of public hospitals. Auditors should establish and sustain strong collaboration with departments like discipline inspection, taxation, medical insurance, and other relevant bodies to address issues uncovered during the audit process.

Finally, for these mechanisms to have a sustained positive impact, the recommendations derived from audits must be diligently followed up with concrete actions for fostering transparency, enhancing governance, and driving continuous performance improvements in Algerian public health institutions. Establishing a systematic feedback loop will allow institutions to measure progress and ensure that corrective measures lead to substantial improvements over time.

The limitations of the study

It's important to note that this study was based on a Interview administered to a small sample. Therefore, the reliability of the conclusions may require further validation (Sample Size). Also, The research focuses on Algeria (Spatial Limits) and suggests its findings could be extended to encompass Arab countries or comparable developing contexts, such as African and Asian countries. It would also be usefull to expand the variables of study that not mentioned in the research, such as organizational culture, corporate governance structures, ethical training, and regulatory oversight. In addition, the next studies should study the views of the stakeholders, society, the interntional professional bodies and others, to understand how can adopte the external audits across the countries.

VI- Referrals and references:

- AICPA. (2017). **Audit and Accounting Guide for Health Care Entities**. New York,the USA.
- Auditors, I. o. (2017). International Standards. Consulté le 01 24, 2026, Site: <https://www.iaa.org.uk/resources/ippf/international-standards/>.
- Augustine Osa Enofe, (2015). **The Effect of Accounting Ethics on the Quality of Financial Reports of Nigeria Firms**. Research Journal of Finance and Accounting, Vol 6, No 12, pp 123-131.
- Battu, H. S. (2025). **The Important of Clinical Audits in Healthcare: Enhancing Quakity, Safety, and Accountability**. International Journal of Advanced Research, Vol 13, N° 06, , pp 650- 653.
- Drogalas, G. K. (2019). **Evaluation of external audit services: An empirical approach on health care organizations**. Risk Governance and Control: Financial Markets & Institutions, Vol 9, n° 2, Site: <http://doi.org/10.22495/rgcv9i2p1>, pp 08-17.
- Eugeniu Iurlea, A. Ş.-P. (2011). **Empirical research on the internal audit into public hospitals from Romania**. African Journal of Business Management Vol 5, n° 01, pp 1509-1523.
- Finance, M. o. (November 25, 2007). **Law 07-11, which includes the application of the financial accounting system for the first time**, Official Gazette No. 74. Algiers, Algeria.
- FU, A. (2011). **Defining Public Health**. Indian Journal of Public Health, Vol 55, n° 4, pp 241-245.
- Hut-Mossel L, Ahaus K, Welker G, Gans R (2021) **Understanding how and why audits work in improving the quality of hospital care: A systematic realist review**. PLoS ONE, Vol16, N° 3, 16(3). site: <https://doi.org/10.1371/journal.pone.0248677>, pp 01-25.
- ISO, 9. (2025). **Systèmes de management de la qualité — Principes essentiels et vocabulaire**, 2015. Consulté le 01 19, 2026, Site: <https://www.iso.org/fr/standard/45481.html>.
- Jean-Marie Fessler, L.-R. G. (1988). **L'AUDIT À L'HÔPITAL**. Paris, france: Entreprise Moderne d'Édition.
- Jiayu Yang, X. Z. (2023). **Research on the Economic Responsibility Audit of Leading Cadres in Public Hospitals**. Frontiers in Business, Economics and Management, Vol 11, N° 2, pp 120-123.
- Kaziba Abdul Mpaata, B. L. (2017). **The Effect of Internal Audit Department Function on the Performance of the Internal Control System of a Public Hospital in Uganda**. International Journal of Science and Research, Vol 6, n° 2, pp 1068-1073.
- Kenfack, M. K. (2021). **Administrative and Financial Management Audit in an International Hospital**. Open Journal of Business and Management, Vol 09, site: <https://doi.org/10.4236/ojbm.2021.91008>, pp 136-166.

- L.A. Maisigova, S. U. (2021). **Health Performance Audit**. BULLETIN of National Academy of Sciences of The Republic of Kazakhstan, Vol 1, n° 389, Site: <https://doi.org/10.32014/2021.2518-1467.23>, pp 170-177.
- Meiryani, D. W. (2021, p 159, April). **The Role of Accounting in Health Service Organizations**. In Proceedings of the 2nd International Conference on Recent Innovations (ICRI 2021), pages 158-163: Site: [DOI: 10.5220/0011242100003376](https://doi.org/10.5220/0011242100003376).
- Mensah, K. C. (2013). **The impact of external audits on financial accountability in Rwandan hospitals**. International Journal of Digital Transformation, Vol 12, n° 12, pp 291-300.
- Ministry of health, G. O. (2012). **Health Sector Social Audit**. Nepal.
- Ministry, H. (2018). **Law No. 18-11 of the Baselder of July 2, 2018 AD relating to health**. Algeirs, Algeria: Official Gazette N° 46.
- MIRAJ, S. (2022). **Effectiveness of quality clinical active audit in improving healthcare of a multispecialty hospital in a developing country**. European Review for Medical and Pharmacological Sciences, Vol 26, pp 2669-2675.
- MIZORAM, G. (2021). **Performance Audit of Select District Hospitals in Mizoram**. Mizoram, India.
- NUMBEO. (2026). Health Care Index by Country 2026. Consulté le 02 06, 2026, Site: https://www.numbeo.com/health-care/rankings_by_country.jsp.
- Olena Antoniuk, N. K. (2021). **Development of Internal Control and Audit in Ukraine**. Independent Journal of Management & Production (IJM&P), Vol 12, n° 6, pp 376-390.
- Ouyang, Y. C. (2024). **The Public Health Events on the Audit Behavior and the Audit Quality: An Empirical Study**. Journal of Social Systems and Policy Analysis, Vol, n° 1, pp 01-08.
- Putro, S. P. (2022). **The Effectiveness of Internal Audit in Regional Public Hospitals as Regional Public Service Agencies**. Jurnal Manajemen Kesehatan Indonesia, V 10, n° 01, pp 65-72.
- Safety, D. Q. (2017). **A Practical Guide to Clinical Audit**. Dublin, Ireland.
- Septo Pawelas Arso, A. S. (2022). **The Effectiveness of Internal Audit in Regional Public Hospitals as Regional Public Service Agencies**. Jurnal Manajemen Kesehatan Indonesia, Vol 10, n° 01, pp 65-72.
- Simões, M. d. (2024). **Determinants of Qualified Audit Opinion: Empirical Study of Portuguese Private Sector Hospitals**. Journal of Risk and Financial Management, Vol 17, n° 571, Site: <https://doi.org/10.3390/jrfm17120571>, pp 01-20.
- TING, H. W. (2017). **Theorising Management Accounting Practices and Service Quality**. Thesis submitted to the University of Nottingham for the degree of Doctor of Philosophy in Business and Management.
- WEEKS, R. (2012). **Health Care Services Management: A System Perspective**. Journal of Contemporary Management, Vol 9, pp 382-401.
- WHO, W. H. (2017, 12 10). Health is a fundamental human right. Consulté le 01 30, 2026, sur <https://www.who.int/news-room/commentaries/detail/health-is-a-fundamental-human-right>.

How to cite this article by the APA method:

Ahmed BEKKAYE (2026), The Rationality of Consequences and Expectations from Applying External Auditing Mechanisms in Algerian Public Health Institutions, Journal of Quantitative Economics Studies, Volume 12 (Number 01), Algeria: Kasdi Marbah University Ouargla, PP. 191-205.



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