HC-ISCCC

Pharmaceutical Sector Subsidy Review

Reports

National Anti Corruption Commission

Libyan Audit Bureau

Executive Summary

Libya ranked 124 out of 194 countries on the World Health Organization's Universal Health Coverage index in 2019. That same year, Libya ranked 86th in GDP per capita, indicating that its health sector was underperforming given Libya's financial resources. Between 2022-2025, Libya expended 11.82 billion Libyan dinars on supplies of medicines for the public sector. This expenditure was, however, characterised by sharp and unjustified fluctuations: a sudden increase of 134% occurred in 2023, as expenditure reached 4.15 billion dinars, only to be followed by a sharp decline of 49% in 2025. These dramatic fluctuations illustrate how expenditures presented no clear link to actual health needs or approved epidemiological indicators.

This report provides a comprehensive, integrated digital and analytical review of spending in the Libyan pharmaceutical sector by analysing the pharmaceutical supply chain from needs identification and treatment protocols, through registration and procurement processes, to storage and distribution of suitable, valid medicines. The analysis reveals specific and growing structural gaps that are leading to substantial wastage of public funds, emerging health and environmental risks, and a direct threat to the state's sovereignty in this sector.

Key Findings

First: Absence of a structured national framework

There is no overarching national framework regulating the pharmaceutical supply chain in Libya, a flaw from which the remaining deficiencies originate. The lack of a unified national treatment protocol, due to the adoption of multiple therapeutic approaches by various scientific bodies, leads to the development of inconsistent medicines formularies (official lists of approved medicines) which has had a negative impact on the standardisation of clinical practices and the planning of pharmaceutical needs.

The estimation of pharmaceutical needs currently uses a speculative methodology not based upon actual consumption data or disease burden. The system for determining pharmaceutical needs is the cornerstone of any sound health planning, however this is currently managed using traditional estimation-based methods not grounded in actual consumption data or unified digital systems. This has led to a clear imbalance between supply and demand, leading to significant surpluses of some medicines — in quantities exceeding needs by hundreds of thousands of units — and severe shortages in other vital medicines, such as neurological medicines and iron preparations. Other medicines no longer in use (such as Gonadorelin) are still present within official needs lists in quantities exceeding 10,000 units. These dynamics result in significant financial wastage and a direct impact on the availability of treatment for citizens.
This shortfall is compounded by the absence of a national electronic system linking the Ministry of Health, the Pharmacy Directorate, healthcare institutions, and the Medical Supply Organisation, thereby depriving the state of planning, monitoring, and audit capability.

Second: Distortions affecting the supply system

Furthermore, the analysis of procurement-related correspondence and requests for foreign currency allocations for supply purposes over a four-year period has revealed unusual and questionable surges in the volume of demand for foreign currencies. The value of foreign currency requests submitted by the private sector amounted to approximately 653 million US dollars, whilst the public sector opened documentary credits worth 742 million euros. Upon examination of the supplying companies and the medicines imported through both the public and private sectors, a notable overlap emerges in many of the companies and pharmaceutical items supplied through both channels.

This situation raises a fundamental oversight question regarding the actual destination of the imported quantities and the extent to which they correspond with the real needs of the local market. It also points to heightened risks arising from the weak enforcement of "Know Your Customer" (KYC) requirements and banking compliance controls, and the consequent potential for large-scale financial leakages within the pharmaceutical sector which is threatening the efficiency of public expenditure and the sound management of financial resources allocated to health.

Third: Weak audit of company registration and lack of control

At the core of this system, which lacks transparency, the process of registering pharmaceutical companies stands out as one of the most significant points of vulnerability and risk. The analysis has revealed indicators of conflicts of interest, manifested in the unnatural growth of revenues of certain companies in which officials at the Ministry of Health and members of the House of Representatives hold stakes. These findings point to the urgent need to strengthen governance and oversight mechanisms to curb the preferential treatment of individuals with political and economic influence.

In one example, the credits of "Tayseer Pharmaceutical" rose from 2.2 million dollars in 2022 to 43 million dollars 2025, a growth rate of 1,834%, whilst other companies recorded growth exceeding 1,300%. These rates far surpass the natural growth of the pharmaceutical sector globally (5–20% per annum), raising serious suspicions of market dominance and weak ex-ante audit.

The analysis further demonstrates that a limited number of private Libyan companies are increasingly dominating the pharmaceutical sector, with clear disparities between their tax contributions and the volume of their financial flows. This issue is partly attributable to the shortcomings of the current registration system, which is not based on the registration of pharmaceutical products in accordance with approved international standards, but rather relies on a general registration system encompassing a variety of products, including foodstuffs and other related goods rendering it unsuitable for the nature of the pharmaceutical sector and its specialist auditing requirements.

The national register currently includes 728 pharmaceutical companies, comprising 538 foreign companies, 104 importation companies, and 86 distribution companies. However, the analysis has revealed a significant concentration of medicine distribution rights in the hands of a limited number of local agents. By way of example, companies such as ALFA, ALDAWLIA, and EKLIL hold a large number of distribution licences, markedly exceeding the statutory limit prescribed for distribution licences, which is set at ten licences per distribution company.

ALFA stands out in particular, as it holds the exclusive representation rights for 53 international pharmaceutical companies, granting it exceptional influence within the Libyan pharmaceutical market. Such practices entrench monopolistic conditions rather than promoting fair competition, as the major local distribution companies and their affiliated entities become capable of imposing their contractual and commercial terms upon the Libyan state, thereby weakening its negotiating capacity and adversely affecting the efficiency of the management of the pharmaceutical supply system.

Fourth: Stockpiles of expired medicines

To date, there is no approved national mechanism for the disposal of expired medicines. As a result, these medicines continue to accumulate at numerous collection and storage sites, giving rise to additional financial burdens associated with transport and storage, as well as the health risks arising from their prolonged retention without treatment or safe destruction.

These deficiencies have led to the accumulation of vast quantities of dead stock and expired medicines over the period spanning 2001 to 2025. In one example documented in the official records, Libya holds more than 200,000 tablets of a psychiatric medicine that expired in 2025. The data further indicate that 626,124 expired pharmaceutical items are stored at Al-Razi Hospital for Psychiatric and Neurological Diseases alone.

This matter takes on particular importance given that some of the medicines stored at Al-Razi Hospital fall within the category of medicines used to treat viral diseases, which makes them a tangible risk to public health if they are not handled, stored, and disposed of in accordance with approved technical standards.

The analysis has shown that this accumulation is not an incidental phenomenon, but rather a direct result of weak planning, deficiencies in tracking and oversight systems, and the absence of a unified coding and pharmaceutical identification system across the various stages of the supply chain. This has led to a diminished capacity to manage pharmaceutical stock and to effectively monitor the movement and shelf life of items.

These medicines constitute one of the most hazardous types of medical waste, given the serious health, environmental, and economic risks they pose. These risks are compounded by non-compliance with the World Health Organisation guidelines on safe storage, proper transport, and the final disposal of expired medicines — a situation that calls for urgent intervention to establish an effective national system for pharmaceutical waste management and to curb its further accumulation.

Indicators and Suspicions of Corruption in the Pharmaceutical Supply Chain

The analysis of the pharmaceutical supply chain reveals seven enabling factors for corruption within the Libyan pharmaceutical ecosystem:

1. **Conflicts of interest (the highest-risk indicator):**

- Certain members of the House of Representatives and officials of the Ministry of Health own pharmaceutical companies, and have directly contributed to shaping the procurement and supply policies and procedures that serve the interests of those companies — creating a serious state of conflict of interest that threatens the public interest and undermines the principles of integrity and transparency in the management of the health sector.
- The ownership of pharmaceutical companies by certain influential figures within the legislative and executive authorities, or their direct association with entities operating in this sector, does not constitute a mere theoretical conflict of interest, but translates in practice into the ability to influence the formulation of public policies, steer regulatory decisions, and control supply and procurement pathways. This situation rises to the level of policy capture, whereby policies shift from being instruments for regulating the market and serving the public interest into means of redistributing economic opportunities in favour of specific, influential groups.
- Pharmaceutical companies bear the full costs associated with inspection teams' visits to their factories, which undermines the independence of inspection and oversight processes and renders them susceptible to commercial influences and conflicts of interest, potentially compromising the objectivity of technical and auditing assessments.
- Certain private companies have assumed an influential role in the process of determining pharmaceutical needs, thereby transforming public tenders from a mechanism for meeting national health needs into a tool that may be used to serve private commercial interests, at the expense of efficiency and equity in the allocation of resources.
- The non-compliance with the statutory limit on the number of pharmaceutical agencies per company reinforces market monopoly and entrenches control over administrative and even the political decisions related to pharmaceutical sector.

2. **Market dominance and anti-competitive practices:**

- The exceptional and accelerated increases in the revenues of a limited number of companies point to alarming indicators of the misuse of influence and the potential prevalence of favouritism and cronyism. The growth rates achieved by certain companies, which have significantly exceeded the normal growth rates for the pharmaceutical sector globally, cannot be explained by increased demand alone, but rather suggest the existence of directed trade flows or preferential advantages granted to these entities to the exclusion of others.

- The repeated reliance of official bodies on specific companies for the supply of medicines unjustifiably weakens competition in the market and limits the opportunities for other suppliers to enter or expand, which adversely affects the efficiency of public expenditure and leads to increased costs and diminished incentives for improving quality and pricing.
- The existence of notable disparities between the tax records of certain companies and the volume of their actual financial flows raises suspicions of tax evasion or money laundering. In the absence of an integrated financial oversight system linking tax data, banking records, and government contracts, some of these companies may transform from commercial entities engaged in legitimate economic activity into conduits for the transit and transfer of funds further complicating the oversight landscape and limiting the ability of the competent authorities to trace financial flows and verify their legitimacy.

- The concentration of market shares and distribution rights in the hands of a limited number of companies heightens the risk of monopolistic practices and undermines the principles of fair competition, granting those companies an increasing ability to influence prices, supply terms, and market dynamics, to the detriment of the public interest and the efficiency of the national pharmaceutical system.

3. **Weak governance and audit:**

- The shift from a centralised expenditure model to a multi-entity model lacking coordination and clear criteria has created an environment more susceptible to the risks of financial and administrative corruption. Procurement and funding decisions have become dispersed among multiple entities, without a unified governance framework to ensure consistency and effective oversight of the use of public resources.
- In such fragmented institutional environments, audit and oversight processes become dispersed, with each entity's view confined to a part of the process without full comprehension of its various stages. This results in the emergence of oversight gaps that can be exploited for illicit gain or to conceal deficiencies and mismanagement. Furthermore, the absence of any linkage between funding and performance indicators, or between the volume of expenditure and the health outcomes achieved, makes it difficult to assess the efficiency of the decisions taken or to hold those responsible to account.
- The subsidy and supply system has witnessed an uncontrolled expansion in the number of entities benefiting from public funding, without the adoption of clear criteria linking resource allocation to the level of institutional performance, or to the actual disease burden and the health needs of the population.
- Weak oversight of procurement procedures and the allocation and use of foreign currency opens the door to practices of embezzlement and the manipulation of accounts and financial data, and limits the ability of the competent authorities to trace public funds and verify the propriety of their expenditure.

- The absence of an integrated national electronic system for data management and information exchange between the relevant entities has weakened levels of transparency and institutional oversight, and has also prevented the establishment of clear accountability pathways making it difficult to assign responsibilities and hold decision-makers to account for procurement and supply choices and their financial and technical outcomes.
- This accumulated institutional weakness undermines the principles of good governance and limits the state's ability to plan effectively, manage risks, and ensure the optimal use of resources allocated to the health sector.

4. **Duplication and mismanagement:**

- The data reveal a recurring pattern of duplicate procurement, whereby multiple entities purchase the same pharmaceutical items simultaneously or in close succession, without coordination or demand aggregation. This behaviour results in the loss of economies of scale which leads to higher prices being paid, and creates surpluses of some items alongside shortages of others.
- Although this pattern may appear on the surface to be the result of weak management or the absence of institutional coordination, its recurrence and widening scope raise the possibility that it is being used as a cover to conclude multiple deals with the same suppliers, or to distribute expenditure across different channels with the aim of reducing the level of financial and administrative audit and oversight.

- The inconsistent medicines formularies, together with the inaccurate estimates of pharmaceutical needs, reflect a clear weakness in planning processes and the absence of the precise scientific data upon which procurement and supply decisions ought to be based.

- The continued accumulation of expired medicines over more than two decades is a clear indicator of the failure of resource management, and perhaps also of the existence of a vicious cycle in which supply takes place without regard to consumption which potentially conceals unsound financial practices behind it that are difficult to trace given the weakness of auditing and tracking tools.

5. **Financial Imbalance and Suspicions of Fraud:**

- The trajectory of foreign currency requests reflects a clear gap between the volume of allocated funding and actual needs, with the data showing unjustified fluctuations and surges that do not align with health demand indicators or disease burden. In this context, a fundamental question arises as to whether all of the allocated financial credits are actually being used to import medicines destined for the local market, or whether they are granted on the basis of non-objective considerations, including connections or political influence.
- The overlap between the supply channels in the public and private sectors, in terms of the companies involved and the pharmaceutical items imported, creates a fertile environment for duplicate funding or the unjustified inflation of demand. This may lead to the entry of quantities exceeding actual need, or to the diversion of part of the imports outside the formal distribution and oversight system.
- Moreover, the weak enforcement of banking compliance rules, including Know Your Customer (KYC) requirements and anti-money laundering procedures, increases the likelihood of the pharmaceutical sector being used as a financial conduit to transfer funds or conceal their sources. In the absence of an integrated financial audit system linking documentary credits, contracts, and actual supply, these risks persist without sufficient capacity to detect them or establish them conclusively, thereby weakening the effectiveness of financial oversight over the sector as a whole.

6. **Absence of regulations and legal framework:**

- The pharmaceutical system in Libya operates within an incomplete legislative environment, where laws and regulations proliferate without a unified framework governing the relationship between registration, supply, distribution, and consumption. This fragmentation creates a wide space for differing interpretations and leads to inconsistent application from one entity to another.
- The absence of a unified national treatment protocol means that the determination of pharmaceutical needs is not based on a stable and approved scientific reference, but may instead be influenced by non-objective factors or divergent institutional discretion. Similarly, the absence of a unified national coding system for pharmaceutical items opens the door to the re-registration of the same product under different names, and to difficulties in tracking its path through the various stages of the supply and distribution chain.

- One of the most serious manifestations of this regulatory vacuum is the absence of a clear national mechanism for the disposal of expired medicines, which creates potential risks relating to their re-introduction into the market through illicit channels or their disposal by unsafe methods that fail to observe health and environmental standards. In this context, the deficiency is not merely administrative, but transforms into systemic risks that can be exploited for illicit gain, threatening the integrity of the health system and undermining public confidence in the pharmaceutical system.

7. **Health and environmental risks as an extension of corruption:**

- In this context, the health and environmental risks cannot be separated from the broader environment of administrative and financial corruption; rather, they may be regarded as a direct extension of it. The accumulation of expired medicines, poor storage conditions, and weak transport and distribution systems not only lead to financial losses, but also contribute to creating an environment in which medicines unfit for use may leak into the pharmaceutical market.
- The lack of compliance with international standards in storage, distribution, and waste disposal opens the door to practices such as the recycling of medicines or their sale through informal channels, posing a direct threat to the health of citizens. In such cases, corruption transforms from a financial issue into a matter of public health and societal safety.

Recommendations

A. Rebuild the pharmaceutical system as a unified national system: registration, tracking, procurement, and distribution, all within a single, integrated, centralised electronic system.
B. Adopt a binding national treatment protocol as the sole basis for developing medicines formularies and pharmaceutical requirements.
C. Undertake a fundamental reform of the company and product registration system: transition to the registration of pharmaceutical products in accordance with international standards and prohibit conflicts of interest.
D. Unify procurement and supply operations within the pharmaceutical sector: ensure expenditure is linked to disease burden indicators and actual consumption.
E. Strengthening oversight of credit and foreign currency: the strict enforcement of banking compliance standards and "Know Your Customer" (KYC) requirements.
F. Establish a national system for pharmaceutical waste management and safe disposal in compliance with World Health Organisation (WHO) standards, including a comprehensive inventory of accumulated stockpiles.
G. Empower regulatory bodies to audit activities across the pharmaceutical supply chain to enhance accountability.

Foreword by the High Committee

To the esteemed people of Libya, and to all those concerned with the future of a state founded on greater integrity, efficiency, and transparency.

With appreciation and respect

The High Committee for the Implementation of the Strategic Cooperation Plan between the Audit Bureau and the National Anti-Corruption Authority extends its sincere appreciation to its working group and to all the national bodies and institutions that contributed to providing data and information. It also expresses its gratitude to those supporting efforts to strengthen integrity and transparency, in the belief that combating corruption is a shared national responsibility requiring complementary roles and concerted efforts.

As part of the implementation of the Strategic Cooperation Plan between the Audit Bureau and the National Anti-Corruption Authority, the High Committee was established to serve as a joint national framework for integrating roles and channelling institutional efforts towards confronting corruption and strengthening integrity and transparency, through institutional work grounded in evidence, data, and professional analysis.

In carrying out its mandate, the Committee has adopted an approach that moves beyond the traditional treatment of corruption as isolated incidents or sporadic violations, towards a comprehensive approach aimed at understanding recurring patterns, analysing structural and institutional vulnerabilities, and identifying legal, operational, and procedural gaps that may contribute to undermining efficiency and create environments conducive to and enabling of corruption.

Proceeding from this approach, the Committee has prioritised its work in key areas through integrated phases, encompassing a review of the legal and operational framework, the collection and analysis of data, and the assessment of corruption risks and indicators, culminating in the development of practical, actionable recommendations and reforms aimed at enhancing the efficiency of public resource management and achieving the highest levels of transparency and accountability.

The publication of this report comes as part of the Committee's commitment to presenting an accurate and objective picture based on facts, data, and analysis, in order to support decision-makers, enable the relevant authorities to take informed action, and help build broader societal understanding of existing challenges and ways to address them.

The High Committee views its outputs as more than mere reports or technical findings; it regards them as a practical foundation for reform and an instrument for supporting good governance, and as a starting point for a state that is more efficient, more transparent, and possessed of greater integrity thereby safeguarding public resources, strengthening public trust, and supporting economic stability and state institutions.

Scope and objectives of the analysis

Scope of analysis: -

This analysis encompassed a comprehensive and integrated review of the entire pharmaceutical supply chain in Libya during the period (2022–2025), with a focused analytical emphasis on the years (2023–2025) as the phase that witnessed the highest levels of change in expenditure patterns, the multiplicity of implementing entities, and the escalation of significant regulatory indicators.

The scope of the analysis was not confined to a single financial or administrative aspect, but was based on a full end-to-end supply chain analysis, tracing the path of the medicine from the design of health policies through to the final disposal of pharmaceutical waste, in order to understand the interconnections between the stages of the system, rather than merely assessing each stage in isolation.

The analysis covered the following core stages:

- Preparing treatment protocols and standard lists, as the fundamental reference determining the types of medicines approved within the health system, and their impact on procurement and supply decisions.
- Mechanisms for determining pharmaceutical needs, as the starting point of the supply chain, with an assessment of the extent to which they rely on actual data versus administrative estimates.
- The registration of pharmaceutical companies and products, and analysis of the regulatory framework governing the entry of companies into the market, and the degree to which registration is linked to actual needs and subsequent audit.
- Public tender and procurement procedures, including analysis of the relevant data, the level of competition, and the transparency of technical and contractual specifications.
- The opening of documentary credits and foreign currency requests, as the critical financial stage at which a health-related decision is converted into an actual financial commitment.
- Supply, storage, and distribution operations, with an assessment of the efficiency of supply chains, tracking mechanisms, and the level of coordination between the various entities.
- The management of dead stock and expired medicines and the disposal of medical waste, as a final stage reflecting the efficiency of the system as a whole, and revealing the quality of planning, distribution, and stock management.

This scope is based on a fundamental analytical premise that any deficiency in the early stages of the chain (planning and legislation) will have a cumulative impact on the subsequent stages (financing, supply, and distribution), a premise that was tested by linking indicators across the entire cycle.

Objectives of the analysis

This analysis aims to provide an integrated audit assessment of the pharmaceutical system, one that is not limited to describing the current situation but extends to interpreting its causes and measuring its effects, through the achievement of the following objectives:

- Assessing the efficiency and transparency of the pharmaceutical supply system from the perspective of public financial governance, with a focus on the relationship between the volume of expenditure and the health outcomes achieved.
- Identifying points of weakness and structural imbalances across the supply chain, and analysing whether these imbalances are incidental or the result of a recurring operational pattern.
- Measuring the degree of compliance with recognised international standards in pharmaceutical management, particularly those issued by the World Health Organisation and the World Bank, in terms of unified procurement, transparency, and traceability.

- Uncovering the multidimensional risks (financial, health, and environmental) arising from current practices, and assessing the extent of their impact on the sustainability of the health system.
- Providing an objective audit foundation upon which a comprehensive reform matrix can be designed, based on evidence and data rather than estimates.

This analysis proceeds from the premise that improving the pharmaceutical system cannot be achieved through partial reform, but rather requires an integrated understanding of the relationship between policies, financing, implementation, and outcomes.

Methodology

The report adopted a multi-tool audit and analytical methodology, designed to enable an examination of the system from different angles and to link financial data with operational data and actual outcomes, through the following:

- Analysis of official documents, including award minutes, documentary credits, and administrative correspondence, with the aim of tracing the decision-making pathway from planning to implementation.
- Analysis of financial data, foreign currency data, and supply data, to measure the volume of financial flows, expenditure patterns, and the degree to which they align with actual needs.
- Field inspection of a sample of health facilities and warehouses, to verify the operational reality, and to match the office data with the actual situation on the ground.
- Time series analysis, to track the evolution of expenditure and documentary credits over the years and to detect abnormal patterns or sharp fluctuations.
- Analysis of compliance with national legal frameworks and international standards, to assess the extent of the system's adherence to regulatory requirements and good governance.
- Linking operational findings with the ultimate impact, whether financial (wastage, inflation), health-related (medicines shortages), or environmental (accumulation of waste).

  A cause-effect analysis approach was adopted as the principal framework, whereby the focus was not confined to describing the phenomena, but extended to tracing the relationship between regulatory or legislative deficiencies and the negative outcomes manifest in the system, thereby enabling an understanding of the root causes of the problem, not merely its symptoms.

Chapter One: General framework of the pharmaceutical sector and its legislative basis

There is a clear structural imbalance in the legislative framework governing the pharmaceutical sector in Libya, stemming primarily from the lack of harmonisation between the existing health and pharmaceutical laws on the one hand, and the financial and administrative implementing regulations on the other. The pharmaceutical support system during the period (2022–2025) stands out as one of the manifestations of this imbalance, in the absence of a unified national law regulating the pharmaceutical supply chain as an integrated financial and operational system.
This legislative vacuum has led to a multiplicity of legal references and overlapping competences among the relevant entities, thereby weakening the ability to achieve effective coordination between the stages of planning, financing, supply, distribution, and oversight. It has also contributed to the emergence of disparities in the practical application of policies and procedures, and has created an environment that allows regulatory and administrative gaps to arise, which may adversely affect the efficiency of the pharmaceutical resources and the transparency of is usage.

Accordingly, addressing the existing deficiencies in the pharmaceutical sector is not confined to reforming the operational or administrative aspects alone, but requires a comprehensive review of the legislative framework with the aim of building an integrated and clear legal system that defines roles and responsibilities and links planning, financing, implementation, and oversight within a unified governance framework that ensures efficiency, accountability, and sustainability.

General framework of the pharmaceutical system

Overall structure of the pharmaceutical supply chain

The pharmaceutical supply system in Libya is managed through a complex, interconnected institutional chain, beginning with the production of medical knowledge and the formulation of treatment policies, extending through the stages of planning, procurement, financing, and implementation, and concluding with final distribution to healthcare facilities and the management of pharmaceutical waste. This chain operates not as a unified system, but rather as a network of overlapping entities sharing roles, without a unified operational or digital centre to ensure full coherence between its various stages.

The chain begins with the specialist scientific bodies responsible for developing treatment protocols for various diseases, which serve as the primary technical reference upon which the determination of approved medicines within the health system is based. Thereafter, the process moves to the Pharmacy Directorate at the Ministry of Health, which converts these protocols into official medicines formularies, and then to the healthcare facilities, which are responsible for determining their day-to-day operational needs, managing stock, and dispensing medicines to patients. At a subsequent stage, the Public Tender Committee, affiliated with the Cabinet, undertakes the management of procurement and contracting operations, followed by the Medical Supply Organisation as the executive body responsible for implementing award minutes and completing supply operations. Numerous audit and financial bodies participate in this system, including the Administrative Control Authority, the Audit Bureau, and the Central Bank of Libya, in addition to the Medicines and Food Control Authority and the Customs Authority, through to the stage of storage and distribution via the warehouses of the Medical Supply Organisation and its regional branches.

Operational indicators suggest that the full-time cycle for a medicine to reach the patient may extend, under normal circumstances, to no less than six months, reflecting the length and complexity of the chain and the numerous points of administrative and financial intervention within it.

Scientific bodies and treatment protocols

The specialist scientific bodies represent the first technical starting point in the pharmaceutical supply chain, as they are tasked with developing the treatment protocols that define the scientific framework for treatment within each medical specialty, from which the approved essential medicines list is derived. However, this stage suffers from the absence of a unified national therapeutic reference, as the scientific committees are composed of consultants from diverse academic and clinical backgrounds, leading to clear variance in the medical schools of thought adopted and disparity in the bases for pharmaceutical selection.

This multiplicity of scientific references, in the absence of a binding national treatment protocol, renders the process of therapeutic harmonisation incomplete and leads to non-standardised differences in the determination of treatment priorities, which is subsequently reflected in the needs assessment and supply stages and affects the coherence of the entire system.

The medicines formulary and pharmaceutical needs

The Pharmacy Directorate at the Ministry of Health prepares the medicines formulary based on the approved treatment protocols, and this formulary serves as the official reference for medicines within the health sector. However, the process of determining annual pharmaceutical needs is not based on a central data system or a unified information platform, but is instead carried out through paper-based correspondence and administrative estimates that rely primarily on the previous year's data, with the addition of estimated percentages ranging between 10 and 15 percent. The absence of an electronic link between the Ministry of Health, the Pharmacy Directorate, and healthcare facilities results in a clear information gap, as needs are compiled without reliance on actual consumption data or real stock levels, thereby weakening the accuracy of planning and leading to deviations in supply quantities.

Integration of pharmaceutical companies and agencies within the pharmaceutical supply chain in Libya

Pharmaceutical companies and local and foreign agencies represent a central link within the pharmaceutical supply chain in Libya, where their role is not confined to the importation and implementation stage, but extends to form an influential market and regulatory layer that overlaps with all stages of the chain, from needs determination through to final distribution.

This link interacts with the pharmaceutical system at three interconnected levels: the level of commercial representation for international medicines, the level of direct importation, and the level of local distribution, making it a pivotal element in shaping the dynamics of the pharmaceutical market, rather than merely an executive party within it.

This sector is subject to a fragmented, non-unified legislative framework, relying on a collection of disparate laws and decisions, most notably Pharmacy Law No. (4) of 1983, Law No. (106) of 1973, Resolution No. (167) of 2006 which opened the door to private sector importation, and Resolution No. (87) of 2008 which restricted certain specialist items to centralised procurement. However, this framework has not been accompanied by the establishment of a unified audit system, leading to weak regulation of the relationship between registration, actual need, and subsequent audit.

This has resulted in a significant expansion in the number of registered companies (728 companies), with a notable concentration of agencies in the hands of a limited number of entities, producing an imbalanced market structure that tends towards concentration and dominance, rather than regulated competitiveness. The absence of strict controls on the number of agencies, and the overlapping of roles between importation, distribution, and commercial retail, have also contributed to creating structural conflicts of interest within the chain.

This link directly affects the remaining stages of supply, extending into the needs determination stage through indirect influence over medicines formularies, intervening in the public tender stage by shaping competitive

dynamics, controlling part of the financing pathways through documentary credits, and ultimately affecting the availability of medicines in the local market through distribution channels.

Thus, pharmaceutical companies and agencies are not merely a stage within the supply chain, but represent a parallel system within the chain that operates as a controlling link governing the flow of medicines across multiple levels, making them one of the most important structural determinants of the efficiency or dysfunction of the pharmaceutical supply system as a whole.

The Public Tender Committee

The Public Tender Committee reports directly to the Cabinet and is the body responsible for managing public procurement operations for medicines. The process begins with the receipt of pharmaceutical needs from the Pharmacy Directorate, followed by the announcement of public tenders and the specification of technical and financial participation conditions, then the evaluation of bids submitted by companies and the determination of prices and sources, culminating in the issuance of award minutes according to therapeutic categories.

The committee refers these minutes to the Medical Supply Authority as the executive body, however, the nature of its direct affiliation with the executive authority makes the purchasing decision-making process susceptible to interference between technical, political and administrative considerations.

The Medical Supply Organisation

The Medical Supply Organisation undertakes the central executive role in the supply chain, implementing award minutes, issuing purchase orders, and contracting with supplying companies. However, this process is tied to a number of complex procedural requirements, including obtaining approved financial appropriations from the Cabinet, fulfilling regulatory approvals, and opening documentary credits through the Central Bank of Libya.

Multiple audit and executive bodies intersect at this stage, such as the Medicines and Food Control Authority and the Customs Authority, further complicating the implementation cycle and extending the time required to complete supply operations.

Storage and distribution

Storage and distribution operations are carried out through the central warehouses of the Medical Supply Organisation and its regional branches across various areas. Despite this organisational structure, effective audit of the supply chain declines markedly after the distribution stage, as there is no precise system in place for monitoring stock levels within hospitals, measuring actual consumption, or tracking depletion and wastage.

This data gap creates an audit blind spot at the end of the chain, preventing the formation of a complete picture of the movement of medicines after they leave the central warehouses.

Legal roles

Roles within the pharmaceutical supply system are distributed among a number of bodies of a technical, audit, and financial nature; however, these roles are characterised by a clear overlap in competences and weak regulatory boundaries.

The specialist scientific bodies are responsible for developing treatment protocols and determining pharmaceutical items, yet they operate without a unified, binding legal framework, rendering their decisions susceptible to variance and indirect influences. The Pharmacy Directorate at the Ministry of Health is responsible for preparing the medicines formulary and compiling national needs, but it relies on incomplete data and suffers from weak tools for monitoring compliance. Meanwhile, healthcare facilities are responsible for determining needs, dispensing medicines, and managing stock, but they lack integrated information systems.

The Public Tender Committee undertakes the management of procurement and award procedures; however, it operates under direct subordination to the executive authority, which limits the independence of technical decision-making. The Medical Supply Organisation carries out the primary executive role, yet the limited scope of its financial powers and the multiplicity of required approvals constrain its operational efficiency.

As for the audit and financial bodies, such as the Administrative Control Authority, the Audit Bureau, and the Central Bank of Libya, they perform ex-ante and ex-post audit roles; however, the duplication of procedures and the absence of a unified timeframe reduce the effectiveness of audit intervention. The Medicines and Food Control Authority performs the role of inspection, conformity, and release; yet the absence of a precise legal definition of these functions and the overlap of its powers with other bodies weaken its position within the chain.

Supply of medicines

Furthermore, Resolution No. (167) of 2006 contributed to opening the door to private sector importation without a corresponding strengthening of quality and audit tools, thereby increasing the risk of medicines of unverified origin and quality entering the market. As a consequence, the gap between the legal text and practical application widened, and the ability to control the flow of foreign currency and link it to actual health needs was weakened, in the absence of a unified legislative framework regulating the relationship between the Ministry of Health, the Central Bank of Libya, and importing entities.

Legal functions of pharmaceutical companies

The legal framework is fragmented across Pharmacy Law No. (4) of 1983, Law No. (106) of 1973 concerning medicines and pharmaceutical audit, Resolution No. (167) of 2006 which opened the door to private sector importation, and Resolution No. (87) of 2008 which restricted certain specialist items through centralised procurement via official bodies such as the National Pharmaceutical Company. The practical reality reveals an uncontrolled expansion in the granting of agencies and the registration of companies, with agencies concentrated in the hands of a limited number of entities, and overlapping roles between importation, distribution, and foreign agencies, without safeguards to prevent conflicts of interest.

Determination of pharmaceutical needs

For the same reasons mentioned previously, the process of determining pharmaceutical needs is managed through administrative practices that lack a sound legal framework. Although the Pharmacy Directorate undertakes the role of compiling needs:

- This role is not founded upon a binding legal text that governs the methodology.
- There is a multiplicity of intervening entities, with no single body legally responsible for approving the final needs assessment.
- There is no systematic relationship between needs, actual consumption, stock levels, and health plans.

Furthermore, there is no requirement to use health information systems or unified digital platforms, which has rendered the planning process reliant on inaccurate paper-based estimates.

Distribution, storage, and disposal operations

The legislative shortcomings extend to the management of expired medicines and pharmaceutical waste.

The legislative shortfall extends to the management of expired medicines and pharmaceutical waste, despite the existence of an environmental legal framework and draft modern legislation regulating healthcare waste management. The management of medical waste in Libya currently relies on Law No. (15) of 2003 on the protection and improvement of the environment, in addition to the executive regulation for integrated medical

waste management, which affirms adherence to international standards such as the Basel, Stockholm, and Rotterdam Conventions.

There are also recent draft legislative instruments, most notably the draft Healthcare Waste Management Law No. (2) of 2024, which remains under review. This draft establishes a more comprehensive framework for regulating this process, specifying the competent bodies, headed by the Ministry of Environment, with the participation of the Ministry of Health, the municipalities, and the relevant audit bodies.

These draft laws stipulate the prohibition of the circulation of falsified, substandard, or non-conforming medicines, placing full responsibility on the entities responsible for their unsafe disposal, both in terms of costs and legal liability, which may extend to fines and imprisonment depending on the severity of the offence. They also clearly regulate the stages of segregation, collection, transport, and treatment, including the use of high-temperature incineration techniques, chemical treatment, or autoclave treatment to ensure safe disposal. However, practical implementation remains limited due to the absence of a central national database, weak infrastructure, and the lack of unified identification codes for pharmaceutical items.

As a result:

- There is no stable national mechanism for the disposal of pharmaceutical waste.
- There is no unified coding and tracking system, leading to a loss of ability to trace the lifecycle of a medicine.
- Stock management is weak and consumption forecasting is absent.

Conclusion:

The main problem lies not in the absence of legal texts, but in their fragmentation, poor integration, and weak enforcement. This makes the legislative framework a decisive prerequisite for any financial or administrative reform in the pharmaceutical sector, as it entrenches an environment characterised by weak transparency, a market susceptible to monopolistic practices, and the absence of a unified mechanism for the evaluation, approval, and ongoing review of companies.

This necessitates the unification of the regulatory authority and the linking of registration to a continuous audit system based on health need and actual performance. Furthermore, the needs determination process represents a central point of vulnerability, having contributed to the creation of dead pharmaceutical stock, the misallocation of resources, inflated supply costs, and weak public expenditure efficiency.

The most critical challenge within the pharmaceutical supply system remains the management of pharmaceutical waste, which requires a transition to an integrated operational system founded on digital tracking, unified coding, and comprehensive central oversight extending through to the final disposal stage.

Chapter Two: Analysing Financial Allocations (4 Years)

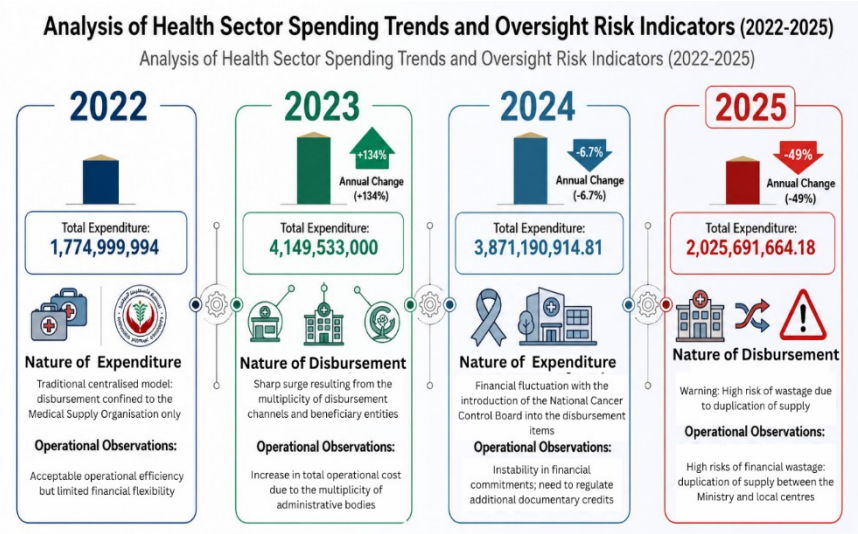
The reality in figures: Analysis of allocations (4 years) and the gap between appropriation and execution

This section reviews the evolution of expenditure on pharmaceutical support during the period (2022–2025). Total expenditure over the study period amounted to approximately 11.82 billion Libyan dinars, a figure reflecting a substantial financial volume directed towards pharmaceutical support over four years. However, this expenditure was neither stable nor clearly linked to actual needs.

Rather than reflecting steady or gradual growth that could be interpreted as a response to evolving health needs, the year 2023 witnessed a sharp rise in expenditure, reaching approximately 4.15 billion dinars, compared to 1.77 billion dinars in 2022, an increase exceeding 134%. Expenditure then gradually declined to 3.87 billion dinars in 2024, before falling more sharply in 2025 to approximately 2.02 billion dinars. This occurred despite the continued opening of additional documentary credits under Chapter Four of the General Budget and the expansion of entities benefiting from funding.

This unstable financial trajectory reflects a structural shift in the disbursement model, from a clear, centralised system centred on the Medical Supply Organisation to a multi-entity system involving national boards, medical centres, and local hospitals, leading to the fragmentation of expenditure and a multiplicity of procurement and supply channels, in the absence of a unified mechanism for coordination or linkage.

Figure 1: Analysis of financial spending trends in the health sector and regulatory risk indicators (2022-2025)



Before starting the detailed analysis and statement of the most important indicators, gaps, weaknesses and suspicions of corruption, the size of the expenditure was analysed in detail for each year and the entities benefiting from these funds were identified in the following table, which shows the years and the aspects of expenditure for the centres and bodies that received them from Chapter Four:

Matrix of Pharmaceutical Support chapter for (2022 - 2025)

Entity/Year	2022	2023	2024	2025
Medical Support Organization	1,774,999,994	3,629,533,000	1,547,363,914.81	1,192,350,314.89
National Centre for Disease Control	—	500,000,000	725,000,000.00	640,608,090.29
Emergency Medicine & Support Centre	—	20,000,000	35,000,000.00	33,000,000.00
National Cancer Control Authority	—	—	1,563,827,000.00	12,000,000.00
Tripoli University Hospital	—	—	—	7,500,000.00
Misrata Medical Centre	—	—	—	8,500,000.00
Zliten Medical Centre	—	—	—	4,000,000.00
Jalaa Maternity Hospital	—	—	—	3,500,000.00
Abu-Salim Trauma Hospital	—	—	—	6,000,000.00
Alhadba Alkhadra Hospital	—	—	—	7,000,000.00
Al-Khmus Teaching Hospital	—	—	—	3,000,000.00
Al-Razi Mental and Psychological Hospital	—	—	—	3,000,000.00
Zawiya Central Hospital	—	—	—	4,500,000.00
Zahra General Hospital	—	—	—	2,500,000.00
El-Agelat General Hospital	—	—	—	1,500,000.00
Bani Walid Hospital	—	—	—	2,500,000.00
Tarhuna Hospital	—	—	—	2,500,000.00
Sabratha Teaching Hospital	—	—	—	4,000,000.00
Surman General Hospital	—	—	—	1,500,000.00
Tripoli Central Hospital	—	—	—	6,000,000.00
Gharyan Central Hospital	—	—	—	2,500,000.00
National Blood Services Authority	—	—	—	13,000,000.00

National General Authority for Organ, Tissue and Cell Transplantation	—	—	—	6,000,000.00
National Nephrology Authority	—	—	—	10,000,000.00
National Diabetes Authority	—	—	—	4,000,000.00
Department of Support and Development Medical Services	—	—	—	44,733,259.00
Total	1,774,999,994	4,149,533,000	3,871,190,915	2,025,691,664.18

- The sharp fluctuation in expenditure on pharmaceutical support during (2022–2025) reveals a structural imbalance in financial planning, with expenditure jumping from 1.77 billion dinars in 2022 to 4.14 billion dinars in 2023 without any specific health or epidemiological justification. This reflects a sudden financial expansion not based on actual needs or gradual planning, and raises indicators of a weak methodology in the approval of allocations and their linkage to the actual health situation.
- The successive decline after 2023, to 3.87 billion in 2024 and then 2.05 billion in 2025, represents an illogical trajectory in a sector that should be characterised by stability or gradual growth, particularly given the continued opening of additional documentary credits under Chapter Four and the expansion of beneficiary entities. This reveals a clear disconnect between the volume of allocated funding on the one hand and actual local health needs on the other.
- Comparing this pattern with health financing standards demonstrates a deviation from the normal model of pharmaceutical expenditure, as expenditure in countries with stable systems is typically based on gradual increases linked to population growth, inflation, and disease burden not on sharp leaps or sudden declines. This points to weak financial sustainability and the absence of a clear, long-term pharmaceutical policy.
- The expansion of documentary credits under Chapter Four for medical centres, without clear linkage to actual needs, has led to undisciplined financial management, with funding distributed widely across multiple entities in the absence of a unified central system ensuring coordination or preventing duplication. This has weakened expenditure efficiency and led to the fragmentation of financial decision-making.
- Despite the issuance of Resolution No. 12 of 2023, which permits the operation of local procurement committees, practical implementation has revealed adverse effects on the efficiency of public funds, reflected in the duplicate procurement of the same pharmaceutical items by more than one entity, the booking of additional amounts without accurate needs assessments, and the absence of coordination between local procurement and centralised supply, in contravention of the principles of transparency, efficiency, and value for money.
- This pattern reflects a clear weakness in pharmaceutical financial planning and in audit tools, as there is no systematic link between allocations and actual needs, leading to heightened risks of financial wastage and the misallocation of resources in a vital sector linked to health security.
- The structural analysis of expenditure trends reveals a serious escalation in the complexity of the audit system. The system began in 2022 with a clear, single-entity, centralised expenditure pathway, then expanded in 2023–2024 with an increase in the number of channels, reaching a point in 2025 where the number of entities exceeded 25, leading to a severe weakening of traceability and financial audit capabilities.

This shift from centralisation to institutional fragmentation has resulted in a high-risk financial environment, characterised by duplicate disbursement, multiple procurement pathways, and weak transparency which fundamentally heightening the likelihood of wastage and corruption, and fundamentally undermining the effectiveness of public expenditure management on medicines.

2. Analysis of corruption suspicion indicators

The financial trajectory of the Medical Supply Organisation during the period 2022–2025 is non-linear and reflects the absence of a stable pharmaceutical demand planning model.

Year	Expenditure	Annual Change
2022	1.77	—
2023	3.63	105%
2024	1.55	-57%
2025	1.19	-23%

The sharp fluctuation in expenditure is inconsistent with the nature of the health sector, which should be characterised by stability or gradual growth, indicating weak financial planning and the absence of a link between allocations and actual consumption indicators.

Comparison Criterion	Normal Benchmark	Consequences (Libya 2022–2025)
Expenditure trend	Gradual, incremental	Sharp leaps and declines
Demand linkage	Based on disease indicators	Unclear / undocumented
Financial stability	High	Very weak

The shift from centralised procurement to institutional fragmentation in 2025 reflects a structural weakness in the management of medical supply, whereby each entity has become an independent procurement unit, weakening the negotiating power of the state and increasing the total cost without achieving an increase in service delivery, due to the loss of economies of scale.

Model	Number of Entities	Impact on Procurement
2022 Centralised	1	Unified procurement and lower prices
2025 Fragmented	25+	Multiple prices and suppliers

The absence of a unified standard for the distribution of allocations has led to unjustifiable disparities between health institutions, with the volume of supply bearing no relation to the demographic characteristics of the treatment area. This indicates that allocations are determined on the basis of political considerations rather than medical ones, and there is no correlation whatsoever between the number of beds, patients, and consumption (beds / patients / consumption) and the volume of expenditure.

Entity Type	Assumed Allocation Criterion	Reality
Large hospital	High	Unified procurement and lower prices
Medium size centre	Medium	Multiple prices and suppliers
Specialist board	According to patient volume	Not fixed

The overlap of roles within the system (financing + procurement + storage + distribution) has led to the absence of segregation of duties, which weakens internal audit and increases the risk of financial irregularity.

Function	Current situation	Audit standard
Financing	Same entity	Segregated
Procurement	Same entity	Independent
Audit	Weak / Internal	Independent body

The sharp contradiction in the funding of certain specialist authorities reflects the absence of stability in financing policies, with the National Cancer Control Board recording a decline from 1.56 billion (2024) to 12 million (2025).

Year	Financial support (Billion dinars)	Percentage change
2024	1.56	—
2025	00.12	-99%

The institutional expansion in the number of beneficiary entities has led to a clear audit proliferation challenge, with the system shifting from clear centralisation in 2022 to more than 25 entities in 2025, resulting in weakened traceability and heightened corruption risks.

Year	Number of entities	Level of audit
2022	1-3	High
2023-2024	10-15	Medium
2025	25+	Weak

The assessment of financial efficiency reveals a structural weakness in the financial governance of pharmaceuticals, reflected in the absence of centralised procurement, weak traceability, and fluctuating expenditure which results in heightening the likelihood of wastage and misuse.

Efficiency Indicator	Number of entities
Clarity of expenditure	Weak
Centralisation of procurement	Fragmented
Equity in distribution	Unverified
Traceability	High risk
Risk of wastage	High

3. Analysis and comparison with international standards

Comparative analysis with international standards (WHO / World Bank)

3.1 World Health Organisation (WHO) Standards

World Health Organisation (WHO)	
Requirement	Current Situation
- Centralised procurement of essential medicines. - Unified national formularies - Distribution based on disease burden (the extent of the impact of the disease on the community or the individual).	- Fragmented procurement - Multiple suppliers - Absence of linkage between disease burden and financing

World Bank Standards

World Health Organisation (WHO)	
Focus	Current Situation
- Achieving best value for money. - Traceability. - Centralised procurement.	- Reduced value for money - Difficulty in tracking expenditure - High risk of administrative corruption

Comparison summary: The current expenditure pattern does not align with international best practice and is classified as a high-risk model in health financing management, as detailed in the following table:

Element	WHO Standard	World Bank Standard
Planning and needs	Based on the essential medicines list and linking quantities to actual health needs (National Centre for Biotechnology Information)	Develop procurement strategy based on prior needs analysis and timelines (thedocs.worldbank.org)
Centralised procurement	Encourage unified procurement and/or pooled purchasing (National Centre for Biotechnology Information)	Unify procurement to achieve VfM through larger individual or collective contracts (thedocs.worldbank.org)
Transparency	Availability of clear documentation and assessments; open competition (who.int)	Apply clear, defined evaluation criteria in tender documents (thedocs.worldbank.org)
Traceability	Quality assurance and monitoring of pharmaceutical supplies (who.int)	Systems to track every step from procurement to distribution (ieg.worldbankgroup.org)

4. Pharmaceutical financial planning risks

Through the process of financial analysis of allocations, identification of corruption suspicions, and international comparison, a matrix illustrating pharmaceutical and financial planning risks has been adopted:

Year	Financial risks	Wastage indicators	Additional notes
2022	Fully centralised, low risk	No duplication, but audit limited	Disbursement to a single entity only (Medical Supply Organisation)
2023	Sharp increase in expenditure, multiplicity of entities	Potential duplication in the supply of certain items	Beneficiary entities: National Centre for Disease Control, Medical Supply Organisation, Centre for Physical Medicine.
2024	Continued fragmentation, opening of documentary credits for national boards	Risk of duplicate procurement of the same medicines by different entities	Example: The National Cancer Control Board receives 1.56 billion, whilst the Medical Supply Organisation continues to supply the same medicines.
2025	Clear duplication between local procurement + Medical Supply Organisation supplies + opening of Chapter Four authorisations for centres	A medical centre purchases medicines under allocations and holds a Chapter Four authorisation worth 8.5 million, whilst the Ministry also distributes to it	Increased risk of wastage, difficulty in financial forecasting, conflict of roles

5. Financial Transparency: A Roadmap for Enhancing Expenditure Efficiency and Audit

In light of the legislative, financial, and operational analysis of the pharmaceutical support chapter during the period (2022–2025), it is evident that the problem represents a structural deficiency in the system of financial transparency and pharmaceutical governance. Accordingly, enhancing financial transparency in this sector cannot be achieved through partial measures, but rather requires a comprehensive re-engineering of the pharmaceutical expenditure system based on unified governance, centred on centralising financial decision-making, unifying procurement rules, and linking allocations to measurable health indicators thereby, ensuring that expenditure shifts from a logic of administrative disbursement to a logic of health value for money.

Within this framework, a multi-level reform roadmap can be drawn up, beginning with:

- **First, unifying the pharmaceutical procurement system within a single central body responsible for all supply operations,** in order to curb institutional fragmentation, rebuild the negotiating power of the state, and strengthen the capacity to achieve best value for money. This also requires the establishment of a unified digital system to track all procurement, distribution, and dispensing operations, linking beneficiary entities with national medicines formularies, thereby ensuring the possibility of real-time and retrospective audit of all financial and pharmaceutical transactions.
- **Second, recalibrating the relationship between financing and health needs by adopting objective distribution criteria based on measurable indicators**, such as the number of beds, volume of services, disease burden, and actual consumption rates, ensuring equity in the distribution of resources and limiting the potential for subjective estimation or unjustifiable disparities between entities.
- **Third, the clear segregation of duties between the functions of financing, procurement, distribution, and audit**, in order to reduce conflicts of interest, enhance the effectiveness of internal controls, and entrench the principle of clear institutional accountability at every level of the pharmaceutical supply chain.
- **Fourth, setting stable, proportionate annual funding ceilings for each health entity according to clear criteria**, instead of relying on the opening of documentary credits unconnected to an annual expenditure plan, thereby, achieving financial stability and preventing unjustified fluctuations in support allocations.
- **Fifth, obliging all health entities to adhere to the national medicines formularies and the centralised procurement frameworks approved by the World Health Organisation and the World Bank,** thereby enhancing transparency, raising expenditure efficiency, and ensuring compliance with the principle of value for money, whilst strengthening mechanisms for full traceability at every stage of the medicine cycle, from procurement to distribution.
- **Sixth, activating an annual retrospective audit system for each implementing entity,** allowing for the periodic assessment of financial and operational performance, the timely correction of deviations, and ensuring continuous improvement in the efficiency of public expenditure.

Chapter Three: Analysis of Executed Documentary Credits (4 Years)

The analysis of foreign currency request data and documentary credits for the importation of medicines during the period (2022–2025) reveals a significant financial inflation in the pharmaceutical financing system, with total levels approaching or exceeding 742 million euros in direct banking documentary credits, equivalent to LYD 3,862,643,510.431, in addition to more than 653 million dollars in foreign currency requests in the private sector, equivalent to LYD 3,137,165,817.654. These figures, drawn from a sample covering only two years (namely 2023 and 2024) equal the value of four years of documentary credits for the supply of medicines in the public sector. The analysis of these documentary credits reveals that the same companies are importing the same pharmaceutical goods through both public and private channels. The absence of safeguards makes it difficult to identify the distribution points of these goods, raising the possibility that pharmaceutical products procured for the public sector may have been sold into the private sector.

The chronological trajectory of foreign currency requests shows a clear, unstable fluctuation, falling from 490 million dollars in 2022 to 294 million in 2023, then rising again to 359 million in 2024, before surging sharply to 581 million dollars in 2025 a pattern that does not reflect a natural evolution in pharmaceutical demand, but rather points to non-linear changes in supply and financing policies, without a stable planning reference or a unified health needs indicator.

In parallel, the analysis of the behaviour of supplying companies reveals the existence of unnatural growth in the financial credits of a number of companies during the same period, with some entities recording increases exceeding 1,000% to 1,800% over just four years. Examples include Tayseer Pharmaceutical Company, which rose from 2.2 million to 43 million dollars, and Dar Qurtuba Company, which rose from 2.6 million to 37 million dollars far exceeding the normal global growth rates for the pharmaceutical sector, which typically range between 5% and 20% per annum, placing these leaps within the scope of unexplained growth from a regulatory standpoint (Red Flags).

This complexity is compounded by the analysis of the documentary credit system, with approximately 420 million euros in credits opened within the public tender, and 321 million euros outside the public tender, a significant portion of which remains not fully settled, cancelled, or left open without final closure reflecting a clear weakness in the financial closure cycle, and the existence of gaps in the oversight of the actual execution of contracts.

The data also show that a number of documentary credits were subject to subsequent amendments, such as an increase in value by 15% after award, or the acceptance of invoice discrepancies, missing documentation, or delays in certificates of origin indicating an unjustified regulatory flexibility in contractual compliance that may undermine the principle of contract finality in public procurement and open the door to post-award cost increases.

At the market structure level, the linkage between the public and private sectors reveals that total foreign currency requests in the private sector (653 million dollars) closely approaches the total documentary credits opened in the public sector (approximately 637 million euros), with an overlap in the same companies and the same pharmaceutical items across both channels. This raises a fundamental oversight question regarding the actual destination of the imported quantities and the extent to which they correspond with the real needs of the local market.

The comparison between public and private expenditure points to the absence of central coordination in the management of pharmaceutical foreign currency, with the two channels operating in near parallel without integration or data unification — leading to potential duplication in importation and a multiplicity of funding sources for the same pharmaceutical items, thereby weakening the ability to regulate the market and increasing the risks of uncontrolled saturation or the informal redirection of goods.

At the financial governance level, the multiplicity of documentary credits that remain unsettled, partially settled, or closed without the completion of actual supply, alongside those cancelled after award, reflects a weakness in

the effectiveness of the documentary credit system as a regulatory tool for foreign currency, and indicates a gap between the financial decision and actual implementation within the supply chain.

Overall, the analysis demonstrates that the pharmaceutical foreign currency system during the period (2022–2025) operates within an environment characterised by:

uncontrolled expansion in demand, unbalanced growth among supplying companies, a multiplicity of supply channels, weak financial closure, and overlap between the public and private sectors without a unified reference for pharmaceutical demand.

This configuration creates a pharmaceutical financing system that is highly complex and of low transparency, with heightened risks of invoice inflation, duplicate importation, and a weakened ability to track the movement of foreign currency and link it to actual consumption. From an international oversight perspective, this places the system within the scope of high-sensitivity financial systems requiring comprehensive audit and a restructuring of governance and oversight mechanisms.

1. Reality and Challenges: Analysis of Documentary Credits, Supply, and Corruption Suspicions

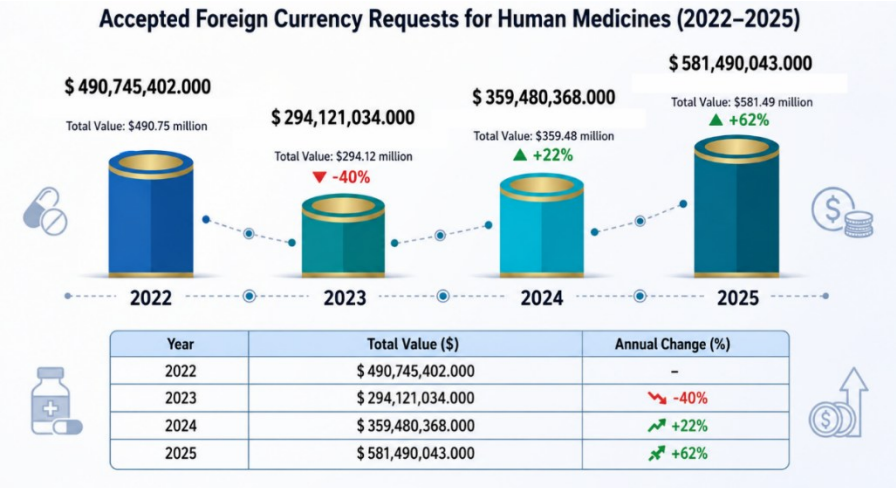
1.1 Total value of approved foreign currency requests for human medicines during the years (2022 – 2023 – 2024 – 2025):

Foreign currency requests	Year			
	2022	2023	2024	2025
Total	**$490,745,402.000**	**$ 294,121,034.000**	**$ 359,480,368.000**	**$ 581,490,043.000**

From the table (above) and linking it with the analysis of data on financial allocations, several key matters become apparent:

- **Multiplicity of channels:** Supplying companies exploited diverse procurement channels (local sales and financing through documentary credits) to maximise their benefit.
- **Market dominance:** The names of certain companies recur frequently, representing a large number of agencies and items registered with the Ministry of Health.
- **Unnatural growth:** The analysis revealed a suspicious, illogical increase in the value of documentary credits and foreign currency requests for these companies compared to others.

Illustrative Figure 2: Foreign Currency Requests for Human Medicines (2022–2025)



What is the natural growth rate according to international standards (Pharma & Medical Supply Sector)?

- Globally, normal annual growth is:
    1. 5% – 12% (stable markets)
    2. 15% – 20% (emerging markets or crises)
- Exceptional growth:
  3. 25% – 30% (with expansion, merger, or pandemic)
- Any growth exceeding 50% per annum for several consecutive years = regulatory/audit red flag

This benchmark leads us to a direct comparison with the companies operating in the Libyan market:

Company	Annual growth average	Rating
First	~68%	Abnormal
Second	~48%	High risk
Third	~134%	Very dangerous
Fourth	~121%	Very dangerous
Fifth	negative	Normal, requires deeper investigation

1.2 Value and number of documentary credits opened within the public tender and outside the public tender

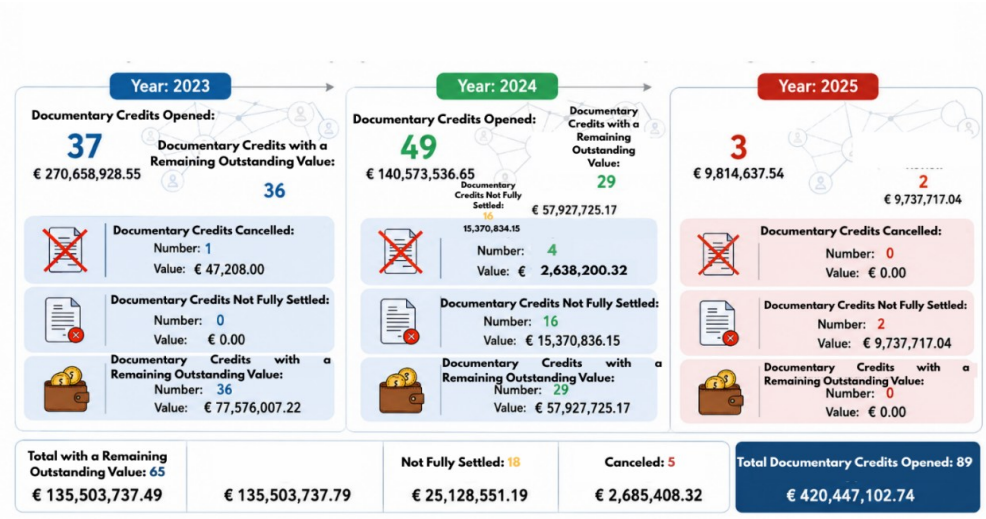
Year	Statement				
	Documentary Credits Opened Within the Public Tender		Documentary Credits Outside the Public Tender		Total
	Quantity	Amount	Quantity	Amount	
2023	37	270,058,928.550 €	45	123,924,048.770 €	€393,982,976.48
2024	49	140,573,536.650 €	44	165,545,169.782 €	€306,118,706.43
2025	3	9,814,637.540 €	2	32,502,225.000 €	€42,316,862.54
Total	89	420,447,102.74 €	91	321,971,443.55 €	742,418,546.29 €

1.3 The analysis revealed the existence of additional documentary credits opened under tender 19 where the credit value was increased by15% for the year 2025

Execution Status of Documentary Credits Opened Under Tender 19 — Credit Value Increased by 15% for the Year 2025						
No	Company	Proforma Invoice Number	Value in Euros	Credit Number	Date of Proforma Invoice	notes
1	HIKMA	2,757	1,245,360.00	232180004	17/06/2025	Fully supplied
2	SANOFI WINTHROP	8086010349	2,285,108.00	232180504	16/06/2025	Documents
3	NOVONORDISK	2000390134	2,809,440.00	232570501	17/06/2025	• Documents + receipt
4	J&J	989011312	1,084,965.00	232620001	16/06/2025	• Discrepancies / deficiencies
5	KEDRION	2025020314	670,800.00	233590004	17/06/2025	/
6	PFIZER	31851838	1,071,630.00	233650052	17/06/2025	• Acceptance of discrepancies
Total value of the documentary credits, unsettled					**€9,167,303.000**	

Illustrative Figure 3: Number of Documentary Credits Opened During the Years (2023–2024–2025)

1.4 Number of documentary credits opened during the years (2023–2024–2025) at the Central Bank of Libya for the public tender and their execution status



2. **Results of the analysis of documentary credit tables**

Documentary credit for (2023 – 2024 -2025)

The following was observed in the documentary credits within and outside the public tender:

- The existence of numerous documentary credits not fully settled, without clear explanation of the reasons.
- The existence of documentary credits that were cancelled without supply being completed, despite having undergone the full procedures of a tender.
- The existence of a large number of documentary credits with a remaining outstanding value. Upon enquiry, the response given was that these pertain to the accounts of the Medical Supply Organisation, which contained numerous observations, including:

✓ Acceptance of discrepancies for a number of credits.

✓ Missing declarations preventing settlement.

✓ Suspension of settlement due to missing certificate of origin stamp

✓ Acceptance of discrepancies with deficiencies + suspension of settlement due to discrepancy in country of origin

✓ Documentary credits whose value was increased.

- Regarding the public tender, the award took place in the year (2019) and implementation of the public tender began in the year (2023). This gap between award and implementation created significant discrepancies in the number of items, as is evident in the list of credits for the year (2023), where one finds a large number of credits opened, but with a remaining value outstanding. This is due to suppliers withdrawing from certain items, reducing quantities, or withdrawing from execution altogether.

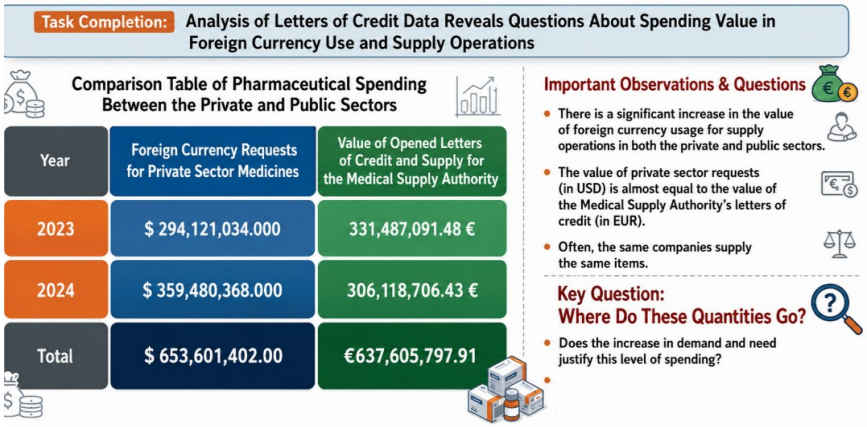
2.2 The vaccination item as an example of the value of award minutes and documentary credits for a sample of entities that supply separately, with a detailed statement of the total value for each company

company	Number of Items Supplied by the Company	Total Financial Values in Euros Inclusive of Freight and Insurance up to Arrival at Libyan Airports for Each Company Over the Years			Total Value per Company
		2023	2024	2025	
Al-Sana	6	**€28,898,720.000**	**€29,739,600.000**	**€30,652,200.000**	**€89,290,520.000**
Alfa	7	**€18,441,920.000**	**€29,930,180.000**	**€30,839,170.000**	**€79,211,270.000**
Alshada	2	**€23,399,710.000**	**€24,096,960.000**	**€24,822,100.000**	**€72,318,770.000**
North Africa	5	**€646,490.000**	**€665,470.000**	**€685,287.500**	**€1,997,247.500**
Total	**20**	**€71,386,840.000**	**€84,432,210.000**	**€86,998,757.500**	**€242,817,807.500**

2.3 Final Observation

Through the process of analysing documentary credit data, both in the private and public sectors and within other entities, we note the substantial value in the use of foreign currency and supply operations. We observed that the value of foreign currency requests for the purchase of medicines in the private sector equals or approximates the value of documentary credits opened within the Medical Supply Organisation, with the majority being for the same companies and supplying the same items. The question here is: where do these quantities go, and does the rate of increase and need warrant this volume of expenditure, given the expansion and multiplicity of procurement channels and the conflict of competences? The following illustrative diagram provides a comparison of two years with respect to the volume of expenditure on medicines at the level of the private and public sectors.

Figure 4: Questions about the value of spending on foreign currency and procurement



Reform Roadmap: Towards a Transparent and Efficient Supply System

Addressing the deep-rooted imbalance resulting from the inflation of documentary credits, the fluctuation in expenditure, the absence of centralised governance of foreign currency, and the failure of the current legislative framework to regulate the fragmentation of mandates and duplication of decision-making, alongside the emergence of patterns of unnatural growth among certain companies and weaknesses in audit and traceability, necessitates the adoption of a "Reform Roadmap" as an urgent, strategic necessity to redesign the system based on an integrated, unified model for managing financing and linking expenditure to actual need. The following are the recommendations under the documentary credits section:

Firstly: Restructuring the pharmaceutical governance system and unifying decision-making authority

The findings reveal a multiplicity of decision-making pathways between the Medical Supply Organisation, treatment centres, and specialist bodies, alongside private sector channels leading to the fragmentation of the procurement system and the proliferation of expenditure centres without a unified reference. Accordingly, the study recommends the necessity of rebuilding a unified, centralised governance system for the pharmaceutical sector, with a single body serving as the sole reference authority for planning, procurement, and distribution, while abolishing or curtailing the parallel powers exercised by subsidiary entities in direct supply, thereby ensuring the unification of financial and pharmaceutical decision-making and the linking of expenditure to certified national health needs indicators.

Secondly: Regulating the foreign currency system and linking documentary credits to actual need

The analysis demonstrates the existence of sharp fluctuation in foreign currency requests (from 294 million to 581 million dollars over a short period), without a clear link to the health situation or actual consumption. Accordingly, the study recommends the establishment of a joint national mechanism between the Ministry of Health and the Central Bank of Libya, based on a mandatory annual National Drug Forecasting Model for pharmaceutical needs, so that no documentary credit is opened except after matching the request with actual consumption data and approved national medicines formularies, together with the imposition of capped, binding annual funding ceilings linked to population growth indicators and a defined disease burden.

Thirdly: Reforming the documentary credit system and closing audit gaps

The analysis reveals the existence of unsettled credits, others cancelled after award, and credits amended retrospectively after contracting which indicates a weakness in the financial closure cycle. Accordingly, the study recommends redesigning the documentary credit system to include:

- Prohibiting any financial amendment after award except through an independent audit body.
- Mandatory closure of the credit within a defined timeframe linked to actual supply.
- Introducing a digital tracking system linking the credit, the shipment, and the final invoice, to ensure closure of the financial loop and prevent the accumulation of incomplete credits.

Fourthly: Regulating the relationship between the public and private sectors and preventing duplication in supply

The analysis demonstrates an overlap between foreign currency requests in the private sector (653 million dollars) and government documentary credits (637 million euros), with the same companies supplying the same items through multiple channels. Accordingly, the study recommends the establishment of a unified national database for the movement of medicines (National Pharmacy Tracking System), obliging all public and private entities to register importation and distribution operations, thereby enabling the tracking of quantities and preventing duplication in supply or the inflation of demand through more than one financing channel.

Fifthly: Regulating the performance of supplying companies and linking growth to audit indicators

The analysis revealed unnatural growth in the credits of a number of companies exceeding 1,000% over a short period, constituting an audit red flag. Accordingly, the study recommends activating a strict audit mechanism including:

- Implementing a periodic vendor performance scoring system.
- Introducing a natural annual growth limit for credits not exceeding specified regulatory limits, except with justified exceptional approval.
- Subjecting companies exhibiting unnatural growth to financial and compliance audits and supply activity.

Sixthly: Reorganising the award system and long-cycle contracts

The analysis established that the time gap between award (2019) and implementation (2023) led to significant discrepancies in items and changes in contractual obligations. Accordingly, the study recommends the necessity of:

- Setting a binding time limit for the implementation of any pharmaceutical tenders.
- Periodically reassessing long-term contracts every 12 months.
- Incorporating conditional flexibility clauses linked to prices and financing, in place of rigid contract fixing.

Seventhly: Enhancing transparency and audit of the pharmaceutical financial cycle

The findings confirm the existence of a gap between the volume of expenditure (more than 742 million euros + 653 million dollars) and its actual impact on the availability of medicines. Accordingly, the study recommends the establishment of a pharmaceutical financial transparency system based on:

- Publishing periodic reports on pharmaceutical expenditure and linking it to actual availability.
- Obliging entities to submit monthly consumption data.
- Establishing an independent audit unit within the health sector, specialised solely in tracking pharmaceutical finances.

Eighthly: Reforming the legislative framework and unifying the legal reference

The analysis establishes that one of the root causes of the imbalance is the fragmentation of legislation and the weakness of its integration. Accordingly, the study recommends the issuance of a unified pharmaceutical law (Pharmaceutical Governance Law) that comprehensively regulates:

- Importation, distribution, and storage.
- Pharmaceutical foreign currency.
- The powers of public and private entities.
- Audit and accountability mechanisms.

Chapter Four: Pharmaceutical Companies (Registration, Supply, and Verification)

Summary: Pharmaceutical Companies (Registration, Supply, and Verification)

Of the 728 companies registered with the Ministry of Health, 538 are foreign companies, 104 are importation companies, and 86 are local distribution companies. Analysis of the local distribution companies illustrates some worrying trends.

Market data confirms a distortion in the distribution and concentration of distribution licences for pharmaceutical products. Companies such as ALFA, ALDAWLIA and EKLIL control a large number of distribution licences, dramatically exceeding the statutory limit on distribution licences (10 agencies per agent). Cases of multiple representations for international companies under a single agent weakens competitiveness, heightening the risks of market and price control, and contravening the spirit of the regulatory controls established by Regulation No. 1 of 1961 concerning the regulation of commercial agencies. This is leading to the establishment of monopolistic practices rather than competition, as powerful local distribution companies and their affiliates can dictate terms to the Libyan state.

The analysis also reveals a serious overlap between the roles of companies (importation – distribution – foreign agencies) without a clear regulatory separation, leading to a direct conflict of interest within the pharmaceutical supply chain and weakening the ability of audit bodies to trace the path of medicines from source to consumer.

Accordingly, the system of legislation and mandates relating to the registration of companies and agencies suffers from:

- A multiplicity of uncoordinated legislative references.
- Weak enforcement of existing laws.
- The absence of a unified system for registration and continuous assessment.
- Uncontrolled expansion in the granting of agencies.
- A market concentration conducive to monopolistic practices.
- Conflicts of interest between importation, distribution, and commercial representation.

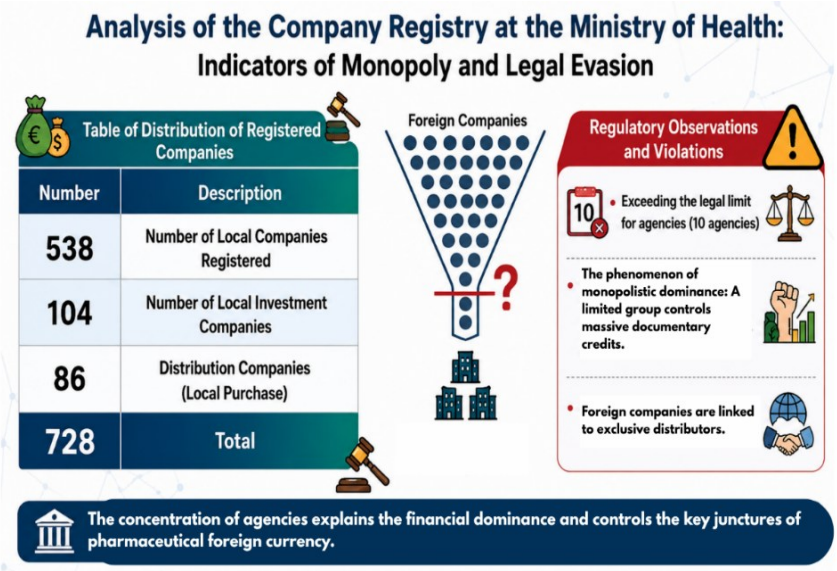
Consequently, addressing this imbalance requires a comprehensive restructuring of the legislative and regulatory framework through the unification of the legal reference governing pharmaceuticals, the enforcement of statutory limits on the number of agencies, and the linking of registration to actual health needs and a continuous audit system based on performance and compliance in order to restore transparency, prevent monopolistic practices, and strengthen national pharmaceutical security.

1. **The reality in figures: Analysis of the pharmaceutical company market, monopolistic practices, and conflicts of interest**

1.1 The register of companies at the Ministry of Health

The register of companies at the Ministry of Health is divided into three categories: (importation companies), (foreign companies), and (distribution companies). All registered foreign companies are linked to, and act through, one of the registered importation companies. The following illustrative diagram shows the number of registered companies through the aforementioned approvals. It is abundantly clear that there are companies exceeding the statutory limit on distribution licences, which is ten (10). Furthermore, among the findings is the existence of registered companies holding documentary credits of substantial value and holding dominance at all levels.

Illustrative Figure 5: Register of Registered Companies

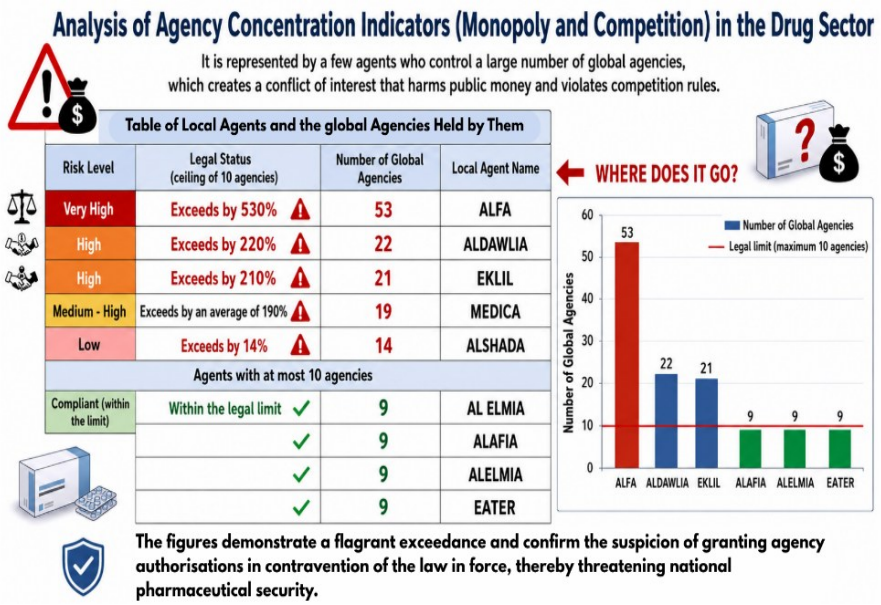


1.2 Analysis of corruption suspicions

First suspicion: Agency monopolisation (monopoly and dominance)

This is represented by the number of major international pharmaceutical companies represented by a small number of Libyan agents. This creates a monopolistic situation that harms pharmaceutical security and contravenes competition controls.

Illustrative Figure 6: Monopoly and dominance



A sample of the companies represented by Alfa Company:

No	Company	Country of origin	Local agent	Reference number and date	Production line
1	**LIPTIS FOR PHARMACEUTICAL AND MEDICAL PRODUCTS**	**EGYPT**	**ALFA**	**303-105/2021**	**NON-STERILE SOLID DOSAGE FORM.**
2	**BOEHRINGER INGELHEIM ELLAS A.E**	**GREECE**	**ALFA**	**313-106/2022**	**NON STERIL SOLID DOSAGE FORMS**
3	**GILEAD SCIENCES IRELAND UC**	**IRELAND**	**ALFA**	**331-109/2022**	**NON STERIL SOLID DOSAGE FORMS. PACKAGING ONELY (CAPSULES,**
4	**ROTTENDORF PHARMA GMBH.**	**GERMANY**	**ALFA**	**349-111/2022**	**NON-STERILE SOLID DOSAGE FORM**
5	**EXCELLA GMBH/ JANSSEN.**	**GERMANY**	**ALFA**	**355-111/2022**	**NON-STERILE SOLID DOSAGE FORM**
6	**LILLY FRANCE FEGERSHEIM**	**FRANCE**	**ALFA**	**403-116/2022**	**STERILE LYOPHILISATES & SMALL VOLUME DOSAGE FORM**

A concentration of representation was observed in the hands of a single local agent, who represents several international companies operating in different production lines (Non-Sterile Solid Dosage Form). This may lead to a reduction in effective competition, a weakening of negotiating capacity, and an increase in the risks of inflated needs or non-competitive pricing which is a situation necessitating a reassessment of agency approval policies and the distribution of production lines.

Applicable legal provision: Regulation No. 1 of 1961 concerning the determination of the number of commercial agencies: "No person or company operating in Libya as a representative or agent of a foreign commercial or industrial company, or a foreign commercial establishment, may register agencies in his name exceeding ten in number. A commissioner, authorised representative, deputy, or commission agent shall be deemed to have the same legal status as an agent or representative. Moreover, none of the foregoing may act as an apparent or silent partner in a number of agencies exceeding the limit prescribed in this article."

Second suspicion: Circumvention of the state monopoly on the supply of specialist medicines

This is represented by the registration of private agencies for pharmaceutical items (oncology, viral hepatitis, immunology) which the law stipulates must be procured and supplied exclusively through the state-owned National Pharmaceutical Company.

Example from the company registration file

Company	Country of origin	Local agent	Reference number and date	Production line
LEK PHARMACEUTICALS D.D.	**SLOVENIA**	**ALFA**	**695-157/2025**	**STERILE LIQUID DOSAGE FORM AND LYOPHILISATE. (RIXATHON 100mg/ 10ml. & RIXATHON 500mg/ 50ml.)**

Applicable legal provision: Article (2), paragraph (9) of Resolution No. 87 of 2008 concerning pharmaceutical procurement controls: The procurement of specialist pharmaceutical items shall be restricted exclusively to the National Pharmaceutical and Medical Supplies Company, and solely through that company.

- Basis for inference: Granting private agencies for these companies allows them to contract directly with hospitals and centres, which constitutes an encroachment upon the competence of the "National Pharmaceutical Company" as guaranteed by law, and opens the door to price inflation and "directed tenders."
- Risk: The supply of oncology and hepatitis medicines by the private sector creates a parallel economy that drains the state budget: The agent sells the medicine to private healthcare facilities, and the state is subsequently compelled to pay the invoices of these facilities at multiplied prices (treatment at the state's expense). Second, when a private agent registers a "sovereign" medicine, it prevents the manufacturing company from dealing with the state-owned National Pharmaceutical Company on the grounds of the existence of an "exclusive agent," thereby placing the state's livelihood in the hands of the trader.

Third suspicion: Misrepresentation of origin (dual origin)

The registration of a single company with more than one country of origin under a single registration number, thereby allowing the importation of items from "cheaper" countries and passing them off as "European."

Company	Origin	Local Agent	Reference number and date	Production line
MATEX LAB	SWITZERLAND / ITALY	ALANDULS	698-157/2025	Sterile Liquid
WAYMADE PLC	UK / INDIA	EKLIL	362-145/2023	Various Forms
NERPHARMA S.R.L	ITALY / GERMANY	ALDAWLIA	313-127/2022	Sterile/Non-Sterile

Applicable legal provision: Article (7) of the regulation appended to Resolution No. 24 of 1969: "The factory from which (the pharmaceutical substance) was imported or in which it was manufactured must be stated."
Basis for inference: Dual registration prevents inspection authorities from identifying the "actual manufacturing site" from which the shipment originated at the port, thereby facilitating commercial fraud regarding the country of origin in order to obtain illegal profit margins.

Fourth suspicion: Registration of food supplement companies as pharmaceuticals (Documentary Credits Corruption)

The registration of food supplement companies in the official pharmaceutical registers to facilitate access to hard currency allocations designated for medicines.

Company	Country of origin	Local agent	Reference number and date	Production line
LABORATORIES SURVEAL SPRL/LABO PHYTOPHAR NV	BELGIUM	AL EHTIMAM	700-157/2025	NON-STERILESOLID DOSAGE FORM (FOOD SUPPLEMENTS).

Fifth suspicion: Legal nullity due to material errors

The existence of gross material errors in dates and reference numbers suggests that the data were entered without technical review or under external pressure to approve the files.

Company	Country of origin	Local agent	Reference number and date	Production line
MEDISEL (K) LTD	KENYA	**ALTAKA**	**762-112/2122**	**Registered with year 2122**
Multiple companies	Different companies	**Different agents**	**Same batch number (157)**	**Repetition of batch numbers for more than 10 companies**

Applicable legal provision: Article (9) of Law No. 69 of 1972: "Any act, transaction, or procedure shall be null and void... if it is carried out in violation of the provisions."

Basis for inference: Registering a company with a future date (2122), or with repeated reference numbers lacking a logical sequence, nullifies the registration from an administrative standpoint and points to the existence of "deliberate manipulation" in the official records of the Pharmacy Directorate.

Sixth suspicion: "Batch Registration" (Batch 157 of 2025)

These companies obtained the green light in the same session, in alternating sequence, according to the data:

Production Line	**Country of origin**	**International** Company	**Local agency**	**Ref no**
RIXATHON (Rituximab 100mg/10ml & 500mg/50ml)	SLOVENIA	**LEK PHARMACEUTICALS D.D**	**ALFA**	695-157/2025
Solid forms, liquid forms, sterile injections, eye drops, and antibiotics (Beta Lactam).	UKRAINE	**PRIVATE JOINT STOCK COMPANY "PHARMACEUTICAL FIRM" (DARNYSTIA)**	**RAWAD ALMUSTAQBIL ALDAWLIA**	696-157/2025
Non-sterile solid dosage forms.	SAUDI ARABIA	**PHARMA PHARMACEUTICAL INDUSTRIES AND BIOLOGICAL PRODUCT**	**AL RAYA AL HADITHA**	697-157/2025
Sterile liquids: Hyaluronic Acid (NEAUVIA products) – specialist / aesthetic injections.	ITALY	**MATEX LAB SWITZERLAND S.A. / MATEX LAB S.P.A.**	**ALANDULS**	698-157/2025
Non-sterile solid and liquid forms (food supplements and general items).	UNITED KINGDOM	**NATURES AID LIMITED**	**SAMA ANDALUS**	699-157/2025
Non-sterile solid, liquid, and semi-solid forms.	ITALY	**GRUPPO FARMA IMPRESA**	**AL EHTIMAM**	700-157/2025

- Registration of the Ukrainian company DARNYTSIA under the agency of RAWAD ALMUSTAQBIL in early 2025.

- The issue: Ukraine is a war zone. Technically, how did the Registration Committee dispatch inspectors to verify the safety of the "production lines" (GMP) in a factory located in the heart of a conflict zone?
- Conclusion: If there was no actual travel report for the inspectors in 2024/2025, then this registration is "perfunctory" and was carried out based on documents sent by post, in violation of registration regulations that require on-site inspection.
- The administrative challenge: The issuance of 6 major decisions for companies from 6 different countries (Slovenia, Ukraine, Saudi Arabia, Italy, United Kingdom) in a single session (Batch 157) confirms the absence of the scrutiny that must accompany the "inspection" process before approving these names.
- The items model (Item 698): The registration of Matex Lab for the production of Hyaluronic Acid injections for a private agent raises a suspicion of exploiting documentary credits allocated for medicines to import "cosmetic" materials of high profitability, instead of life-saving medicines.
- Suspicion of fraud in origin and manufacturing site (GLOBALPHARMA as an example).
- Review of the data contained in registration batch No. (385/115/2022), and comparing it with regional pharmaceutical technical information (by analogy with the Emirati company Julphar), reveals an audit deficiency represented in the acceptance of the registration of GLOBALPHARMA under general production classifications (non-sterile solid and liquid forms) without specifying the nature of the items precisely.

The suspicion arises in the following respects:

1. Apparent origin: There are indications of the exploitation of the company's name as a "transit and secondary packaging station" for medicines fully manufactured in countries with a low regulatory classification (such as India), for the purpose of re-exporting them as an Emirati product to benefit from the customs and pricing advantages granted to Arab countries.
2. Weak value addition: The company's lack of specialist production lines (such as biologicals or hormones), which are registered for its counterparts among major Emirati companies (such as Julphar), reinforces the hypothesis of its use as a commercial front rather than as an integrated pharmaceutical manufacturer.
3. Violation of quality standards: The acceptance of this type of "unscrutinised" registration opens the door for the local agent (HI-T INTERNATIONAL) to import items that have not undergone individual technical assessment, constituting a breach of the duties of the Company Registration Committee to verify the integrity of the active pharmaceutical ingredient (API) and its true source.

Market reform – A strategy for regulation and the promotion of fair competition:

The analysis of the pharmaceutical sector in Libya has revealed deep structural imbalances, through which the market has shifted from a competitive framework to a highly concentrated, monopolistic environment controlled by a limited number of entities monopolising agencies, thereby threatening pharmaceutical security and weakening audit. The proposed reform strategy aims to rebuild the market on the foundations of fair competition and good governance by dismantling monopolistic practices and regulating supply chains.

Recommendations: Pharmaceutical Companies (Registration, Supply, Verification)

First: Legislative reform and legal restructuring

Prepare a unified, comprehensive pharmaceutical law that eliminates the current fragmentation between Pharmacy Law No. (4) of 1983, Law No. (106) of 1973, and Resolutions (167) of 2006 and (87) of 2008, consolidating them within a single legal framework that governs the pharmaceutical sector as an integrated system.

Review and update the regulation governing commercial agencies (1961) to keep pace with the modern pharmaceutical reality, with strict enforcement of the agency ceiling and the prohibition of any exceedance of the statutory limit (10 agencies).

Redefine legal mandates with precision between regulatory bodies to prevent overlap and conflict of competences.

Second: Unify the audit and administrative reference

Establish an independent national pharmaceutical authority with exclusive responsibility for: registration, approval, audit, and assessment, in place of the current fragmentation between the Ministry of Health, the Audit Centre, the Medical Supply Organisation, and the Central Bank.

Oblige all three types of entities to operate within a unified pharmaceutical data platform to ensure integration, transparency, and the prevention of duplication.

Third: Reform the company and agency registration system

Link the registration process to the actual health needs of the state, and not solely to administrative procedures.

Adopt a periodic re-assessment system for every company and agent to ensure the continuity of technical, financial, and planning eligibility.

Halt any new agency registrations except in accordance with a national market study for pharmaceutical security that determines actual need.

Fourth: Combat monopolistic practices and market concentration

Strictly enforce the statutory limit on the number of agencies, with a comprehensive review of entities that have exceeded the legal ceiling.

Dismantle cases of market concentration held by specific companies, and prohibit the bundling of a large number of international agencies under a single agent.

Impose competition policies that prevent indirect monopolisation within the pharmaceutical supply chain.

Fifth: Regulate conflicts of interest and segregate roles

Prohibit the combining of importation – distribution – commercial retail activities within a single entity, whether directly or indirectly.

Impose a legal obligation to segregate supply chains to ensure transparency and prevent market control.

Establish a register to disclose the beneficial interests of companies and agencies.

Sixth: Strengthen technical audit and pharmaceutical inspection

Activate a national electronic pharmaceutical tracking system (Track & Trace) along the supply chain, from manufacturer to patient.

Obligate all companies to submit periodic compliance reports covering the true source of medicines and production lines.

Reinforce the principle of "no registration without actual on-site inspection."

Seventh: Addressing market distortions and protecting companies

Conduct a comprehensive national review of the register (728 companies) to reclassify companies according to genuine compliance criteria.
Suspend or cancel the registration of any company that exceeds the statutory limits on agencies or is proven to be in breach of regulatory standards.
Undertake a comprehensive review of agency contracts exhibiting high concentration to ensure a rebalancing of the market.

Eighth: Safeguarding national pharmaceutical security

Link pharmaceutical policy directly to national health security, and not solely to commercial considerations.
Prohibit any registration that leads to the creation of artificial scarcity or monopolisation of vital medicines (oncology, immunology, hepatitis).
Strengthen the National Pharmaceutical Company as a sovereign entity in the strategic supply of specialist medicines.

Chapter Five: Mechanism for Determining Needs and Supply

Summary: Mechanism for Determining Needs and Supply

The results of the analysis of the pharmaceutical needs system in Libya demonstrate that the deficiency is not confined to the supply or registration aspects alone, but extends to a fundamental stage that constitutes the starting point for the entire pharmaceutical supply chain: the stage of needs determination. This stage, which is presumed to represent the scientific and planning basis for regulating the pharmaceutical market, in practice operates within a clear legislative and regulatory vacuum, in the absence of a unified legal framework governing the mechanism for preparing needs and linking them to actual consumption and epidemiological data.

Although the current administrative system relies, in form, on medical centres and hospitals submitting their needs to the Pharmacy Directorate, these needs are, in the majority of cases, prepared in an estimation-based, routine manner, replicated from previous years, without reliance on real consumption data or digital monitoring systems. As a result, the pharmaceutical planning process is reduced to an unproductive administrative procedure, reproducing the same annual errors and leading to the inclusion of items that are no longer actually in use within the official needs lists.

This structural deficiency has been directly reflected in the pharmaceutical market, resulting in a pattern of inflation and stockpiling of certain items within warehouses (pharmaceutical dead stock), alongside severe shortages of other vital items. Items that are not used at all, such as (GONADORELIN), have been recorded within official needs in quantities exceeding 10,000 units, without any actual demand for them. The data also revealed cases of serious oversupply for specific items such as (Carbidopa, Iron Sucrose, Metronidazole), alongside clear shortages in other essential items, reflecting an absence of balance between planning and real consumption.

This imbalance is further compounded by the absence of a unified national electronic system linking medical centres, the Medical Supply Organisation, and the Tender Committee, leading to continued reliance on partial estimates and individual impressions instead of actual consumption data. The multiplicity of supplying entities and the fragmentation of decision-making centres have also contributed to producing a state of inconsistency in quantities, quality, and pricing, with items being supplied that sometimes do not correspond with the actual requests of healthcare facilities.

This gap between theoretical need and actual need is no longer merely an administrative problem, but has become one of the most significant drivers of distortion in the pharmaceutical market, leading to the misallocation of resources, the freezing of substantial funds in unused stock, and the creation of a fertile environment for inefficiency and the weakening of fair competition. The continuation of this model deepens dependence on inaccurate estimates and undermines the state's ability to direct pharmaceutical expenditure in a rational and transparent manner.

Accordingly, reform of the pharmaceutical market cannot be achieved without fundamentally rebuilding the needs determination system, through a transition from a fragmented, estimation-based model to a unified system grounded in actual data, real consumption, and digital integration between all health and audit bodies that ensure the rationalisation of supply, the achievement of market balance, the strengthening of fair competition, and the protection of public resources from wastage and distortion.

The Reality in Figures: Analysis of Needs (Medicines – Equipment) and Comparison with Actual Need

1.1 Comparison of submitted needs with actual need

Significant errors in the determination of needs have been observed, particularly in the absence of an electronic system linking all medical centres with the Medical Supply Organisation. This is needed so that tracking can occur

and needs can be entered directly into the Tender Committee, which calculates according to clear criteria and accurate consumption rates. The following was noted:

- There is always a discrepancy in quantities between the requested need and the quantity supplied, whether by way of surplus or deficit.
- There is also a discrepancy in quality: some centres request specific items, yet items are supplied that were not requested and that do not correspond with the nature and specialisations of the medical centres. In one example, an item indicated for tuberous sclerosis patients that has not been supplied for a long period, and has only recently been supplied as part of the public tender. The item provided was (REBIF 22 MCG VIAL) and (CARBIDOPA) in vial form, whereas the approved concentration for this item for a long period has been (44 MCG). Another example, is the existence of large quantities of a psychiatric medicine (CARBIDOPA) in the 50 mg and 150 mg strengths in central warehouses and hospital warehouses, totalling 200,000 tablets, at a price of €0.3440 per tablet, out of a total need of 211,000 tablets, i.e., a value of €68,774.000, equivalent to 550,192.000 Libyan dinars, noting that the expiry date of the item is 9/2025.

2. Proportion of total supply that reaches health centres

2.1 Needs matrix for selected leading samples:

Comparative Note	Central Need 2024	Previous Status	Item (Matching / Approximate)
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	44052	Exceeds need / Dead stock	**Carbidopa 150 Mg + Entacapone 37.5 Mg + Levodopa 200 Mg Tabs.**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	87050	Exceeds need / Dead stock	**Carbidopa 50 Mg + Entacapone 12.5 Mg + Levodopa 200 Mg Tabs.**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	1301	Exceeds need / Dead stock	**Etomidate 2 Mg/Ml - 10 Ml Vials**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	21137	Exceeds need / Dead stock	**Hydroxyzine 25 Mg Tabs.**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	100588	Exceeds need / Dead stock	**Iron Sucrose 20 Mg/Ml - 5 Ml Amps For Iv Injection**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	297	Exceeds need / Dead stock	**Metronidazol 500Mg/100Ml**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	12814	Exceeds need / Dead stock	**Sodium Valproate 300 Mg/5Ml - 200 Ml Elixir Botts.**
Previously unused item — discontinue its inclusion or restrict it to justified requests / specific centres.	10528	Unused	**Gonadorelin**
Previously unused item — discontinue its inclusion or restrict it to justified requests / specific centres.	10528	Unused	**Gonadorelin (Gnrh.Lh-Rh Analogue)100 Mcg/Ml-1 Ml Amps With Diluent.**

Previously unused item — discontinue its inclusion or restrict it to justified requests / specific centres.	421	Unused	**Terbinafine 250**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	4100047	Below need	**Carbamazepine 200 Mg Retard Tabs.**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	4300048	Below need	**Carbamazepine 400 Mg Retard Tabs.**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	15460	Below need	**Darbepoetin Alfa 40 Mcg/0.5Ml**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	478	Below need	**Digoxin 250 Mcg/Ml - 2 Ml Amps.**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	1119130	Below need	**Haloperidol 5 Mg Tabs.**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	200535	Below need	**Human Albumin 20% Solution - 50 Ml Botts.**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	387161	Below need	**Levetiracetam 250 Mg Tabs.**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	387161	Below need	**Levetiracetam 500 Mg Tabs.**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	96192	Below need	**Rebif 22Mcg Vial**
Previously fell short of need — the current estimate should be supported by a safety stock and a supply plan.	96192	Below need	**Rebif 44Mcg Vial**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	44052	Exceeds need / Dead stock	**Carbidopa 150 Mg + Entacapone 37.5 Mg + Levodopa 200 Mg Tabs.**
Risk of recurrent oversupply — it is recommended to reduce the quantity or split the shipments and link them to consumption.	87050	Exceeds need / Dead stock	**Carbidopa 50 Mg + Entacapone 12.5 Mg + Levodopa 200 Mg Tabs.**

2.2 A matrix of requests exceeding what is needed

situation	item
Stated that "the quantity exceeds the request"	CARBIDOPA/ENTACAPONE/LEVODOPA (50/12.5/200) Tablets
Stated that "the quantity exceeds the request"	CARBIDOPA/ENTACAPONE/LEVODOPA (150/37.5/200) Tablets
Quantity exceeds the request	ETOMIDATE 2 mg/ml – 10 ml Vials
101,000 (exceeds the request) against a need of 100,000	IRON SUCROSE 20 mg/ml – 5 ml Amps
Quantity exceeds the request	DOPAMINE 2.5 mg/ml – 1 ml Amps
Quantity exceeds the request (exceeds the need)	RISPERIDONE Depot Vials (2mg ،3.75mg ،25mg)
Quantity exceeds the request	SODIUM VALPROATE 300 mg/5ml Elixir 200 ml
Quantities exceeding the need (example: 138,000)	GLYCIN FOR Y.U.I + SET
2,000,000 + 750,000 (grossly exceeds the need)	METRONIDAZOLE 500 mg/100 ml IV
Exceeds the need, according to the notes	DIGOXIN Amps (ANFARM Company)
Exceeds the needs of the centres, according to the notes	HERCEPTIN/MADOPAR/CELCEPT (Roche Supplies)
Exceeds the need	BETAFERON 250 mcg Vial (BAYER)

A matrix of requests below the required amount:

situation	item
Below need	HALOPERIDOL 5 mg Tabs
Below need	LEVETIRACETAM 250 mg Tabs
Below need	LEVETIRACETAM 500 mg Tabs
Below need	IREMOFAR 25 mg Tab
Below need	DIGOXIN 250 mcg/2 ml Amps
Below need	DARBEPOETIN ALFA 40 mcg/0.5 ml
Supply below need (147,059 against 210,848)	HUMAN ALBUMIN 20% – 50 ml
Supply below need (16,408 against 32,816)	REBIF 22 mcg Vial
Supply below need (47,000 against 53,424)	REBIF 44 mcg Vial
Stated: below the request	CARBAMAZEPINE 200/400 mg Retard Tabs

A list of unused medications that are not in demand:

Situation	Item
Below need	HALOPERIDOL 5 mg Tabs
Below need	LEVETIRACETAM 250 mg Tabs

3. Distribution gaps and poor estimation

The distribution stage is one of the most sensitive stages in the pharmaceutical supply chain, representing the executive link through which the central supply is converted into a practical health service reaching the patient. Its role is not confined to the transfer of medicines from warehouses to healthcare facilities; rather, it constitutes

a complex process that must ensure equity in distribution and responsiveness to medical needs. Any deficiency at this stage is therefore directly reflected in the quality of healthcare and patient safety.

In practice, this stage is characterised by a high degree of audit risk, as it is considered the weakest link in the supply chain in terms of the potential for leakage, smuggling, and manipulation particularly given its heavy reliance on data accuracy and the integrity of dispensing procedures. It also represents a direct reflection of the deficiencies of the preceding stages, especially the weak accuracy of needs determination and poor supply planning, making it a point of accumulation for errors and not merely an executive stage.

The distribution process relies, in theory, on inputs consisting of a pharmaceutical stock that conforms to technical specifications and has passed inspection, alongside centralised distribution plans that ought to be based on accurate needs data. In reality, however, these inputs suffer from a clear shortfall, as they are often built upon imprecise estimates, thereby weakening the efficiency of the various steps involved in dispensing and distribution operations that should be documented and serve healthcare facilities according to their actual needs.

The Medical Supply Organisation, or authorised entities, are formally responsible for managing this stage; however, the multiplicity of entities and the overlapping of mandates in some cases leads to weakened governance and audit. Furthermore, distribution decisions may sometimes be subject to non-technical considerations, affecting the objectivity and efficiency of resource distribution.

Among the most prominent structural gaps afflicting this stage is the absence of a national unified digital tracking system, which has resulted in a complete loss of the ability to trace the supply journey from the central warehouse to the point of actual use. This has led to difficulty in identifying the final destination of supplied items, an increased likelihood of medicines leaking into the unregulated market, and a weakened capacity to redirect stock or manage shortages effectively. The absence of an electronic link between healthcare facilities and supply warehouses has also resulted in continued reliance on outdated or estimated data, depriving the distribution process of its accuracy and effectiveness.

This reality has produced a number of clear imbalances, most notably a significant gap between quantities dispensed and quantities actually used; poor geographical distribution leading to the accumulation of medicines in some facilities alongside severe shortages in others; and the supply of items that do not align with the nature of the specialisation of certain health entities. It has also led to the inflation of the phenomenon of pharmaceutical dead stock and the expiry of large quantities of medicines without use, reflecting a direct wastage of financial resources.

The indicators of audit risk at this stage are manifested in the dispensing of large quantities without a link to consumption data; the mismatch between dispensing records and actual stock within healthcare facilities; the absence of a link between supplied medicines and operational data and expiry dates; the repeated request for items despite their prior availability; and the absence of accurate reports measuring distribution efficiency or the scale of wastage.

In conclusion, the distribution stage, in its current state, suffers not only from operational deficiencies, but from the absence of an integrated governance system linking needs, supply, distribution, and consumption. This has led to the weakening of health system efficiency, the depletion of financial resources, and the creation of an environment susceptible to manipulation and corruption. Accordingly, reforming this stage requires rebuilding it on an integrated institutional and digital foundation that ensures transparency, strengthens audit, and links distribution directly to actual consumption.

4. Roadmap for Correction: Developing an Accurate Methodology for Determining Needs

- Addressing the structural deficiencies in the pharmaceutical needs determination system requires the issuance of binding national legislation that explicitly regulates this process, transforming it from routine administrative practices into a legal framework grounded in clear scientific standards. This should

encompass the linking of needs to actual consumption rates, disease burden, and approved treatment protocols, with the designation of a single central body bearing full legal responsibility for the approval of national needs thereby curbing the current fragmentation and establishing a unified reference linking needs, distribution, and supply within an integrated framework.

- In this context, digital transformation becomes an urgent necessity, through the establishment of a unified national electronic platform linking all elements of the health system, including healthcare facilities, warehouses, Medical Supply Organisation stores, and tender committees, so that needs are entered, tracked, and analysed in real time. This should be accompanied by the activation of a comprehensive pharmaceutical tracking system tracing the path of the medicine from the supply stage through to actual consumption thereby eliminating reliance on paper-based forms and manual estimates, and providing an accurate database to support decision-making.
- The reform also requires rebuilding the needs determination methodology itself, through a transition from annual repetition and general estimates to a planning model based on actual data, where needs are calculated according to real consumption indicators, patient numbers, and actual therapeutic requirements. This must include the removal of any items that lack a record of actual use or are proven to have been unused previously, alongside the adoption of the concept of a safety stock for vital medicines only, achieving a balance between the availability of medicines and the prevention of stockpiling.
- Supply must be directly linked to this methodology, by eliminating the practice of open-ended supply or supply not linked to demand, and adopting phased supply executed in batches linked to actual consumption rates, together with the renewal of contracts to reduce the risks of stockpiling and expiry. A legal obligation must be imposed preventing any supply except on the basis of electronically documented consumption data, ensuring that resources are directed solely towards real needs.
- It is also essential to address the existing distortions in the pharmaceutical market by halting the listing and supply of items proven to be unused or repeatedly stagnant in warehouses, and redirecting resources towards medicines suffering genuine shortages. A dynamic national medicines formulary should be established, updated periodically according to consumption data, so as to prevent the continued inclusion of ineffective items within the system.
- At the distribution level, reform requires restructuring this stage to operate according to a system based on actual demand from healthcare facilities, instead of the centralised push of quantities. An obligatory link must be enforced between dispensing data, stock, and consumption, and the dispensing of any quantities not based on real needs or processed outside the electronic system must be prohibited ensuring that medicines reach the entities that genuinely need them and curbing misdistribution.
- On the audit side, it becomes essential to establish a real-time, data-driven audit system capable of detecting surpluses, shortages, and deviations instantly. All healthcare facilities must be obliged to submit accurate periodic reports on consumption, wastage, and stock, and legal accountability must be activated in cases of gross misestimation, misrepresentation of needs, or leakage and wastage of resources to strengthen institutional discipline.
- Emphasis must also be placed on curbing the financial wastage resulting from poor planning, by linking pharmaceutical expenditure to actual consumption, conducting periodic stock reviews, and adopting clear performance indicators such as stock turnover rate, wastage percentage, and supply efficiency to ensure optimal use of financial resources and reduce the freezing of funds in unused stock.
- The reform also requires restructuring the institutional governance of the pharmaceutical sector, by unifying the entities involved in the supply system within a clear institutional framework of competences, and establishing a central national body to undertake the management of planning, distribution, and tracking to ensure clarity of responsibility and enhancing the efficiency of decision-making.
- Within the broader strategic framework, pharmaceutical policy must be linked to the concept of national health security, with priority in supply given to vital medicines, chronic diseases, and critical cases. Any practices that lead to the creation of artificial scarcity or unjustified surplus must be prohibited, thereby achieving market balance and safeguarding the right of citizens to access medicines.

Chapter Six: Management and Disposal of Medical Waste

1. The approved disposal mechanism

To this day, there is no established mechanism for the disposal of expired medicines. Expired medicines remain present and accumulated in numerous collection sites, resulting in illnesses and transportation and storage costs. No action has been taken regarding this issue from 2001 to 2025. The problem is not merely the failure to destroy the medications, but the absence of a comprehensive system for managing the end of the drug lifecycle. Unless (supply – tracking – usage – disposal) are linked within a single system, the waste will continue to accumulate, even if the current quantities are disposed of.

2. Table of medical waste quantities by type

The files received from the specialised authority were analysed; however, the data are significantly distorted, particularly with respect to the failure to quantify amounts using clear metrics, as well as their classification. The stocktaking process was carried out using item names that differ from their names in the supply and distribution process. This is a result of the absence of an integrated electronic system spanning from the supply stage through to disposal, where each item should have a single, unique code that is repeated across all operations. From our stocktaking exercise for a sample of centres, namely Al-Razi Psychiatric Hospital, the quantity of items reached (626,124) items.

The centres and quantities are present and are at the analysis stage, including: comparing the costs of expired items with their supply costs, and comparing the supply process for items that are dead stock and close to expiry.

3. Roadmap for Quality: Improving Distribution Efficiency and Reducing Wastage

- Addressing the fundamental deficiency in the system for the management and disposal of medical waste requires the issuance of binding national legislation that regulates this process in a comprehensive and detailed manner, so that the matter of disposing of expired medicines is no longer subject to discretionary interpretation or a regulatory vacuum, but rather becomes a clear legal framework that defines the responsibilities, procedures, and technical standards for each stage, from the detection of an expired item within the healthcare facility, through the stocktaking and collection processes, to final disposal. This must include the designation of a single central body bearing full legal responsibility for audit and execution, thereby ending the current state of fragmented mandates and establishing a sustainable system that prevents the recurrence of the crisis.
- In this context, the establishment of a unified national electronic system for managing the lifecycle of a medicine becomes an urgent necessity, whereby all stages of the medicine's journey are linked within a single digital system spanning from supply, through storage, distribution, and consumption, to disposal. A unified coding system (Barcode/Serialisation) must be adopted for each pharmaceutical item, preventing name duplication and ensuring accurate tracking of the item. This would resolve the current challenges in stocktaking and classification, and enable real-time, accurate knowledge of expired quantities, their locations, and their financial value.
- The reform also requires rebuilding the methodology for the confining and classification of expired medicines, by adopting unified standards for the classification of medical waste, with a clear separation between hazardous, cytotoxic, biological, and general medicines. Confining mechanisms must be unified using precise, approved units of measurement, instead of relying on non-matching item names thereby ensuring data accuracy and preventing manipulation or estimation errors.
- The stage of temporary storage of medical waste must be regulated according to strict standards, through the establishment of designated, secure sites for the collection of expired medicines within healthcare

facilities or central warehouses, meeting environmental and health safety conditions. The storage of these materials for prolonged periods, as is currently the case, must be prohibited, given the direct risk it poses to workers and the environment, in addition to unjustified financial costs.

- At the disposal level, reform requires the adoption of a clear, binding national mechanism for the final disposal of expired medicines, through contracting with specialist, accredited entities utilising safe techniques (such as incineration in accordance with environmental standards or advanced thermal treatment). The disposal process must be fully documented with official minutes and electronic records, ensuring transparency and preventing the leakage of these medicines into the informal market.
- It is also essential to address the roots of the problem by linking waste management directly to the performance of the supply and distribution system, so that expired medicines are not viewed as a separate stage, but rather as a direct consequence of poor planning and estimation. Accordingly, performance indicators must be introduced obliging the responsible entities to reduce rates of wastage and expiry, and holding them accountable in the event that acceptable limits are exceeded, thereby, creating a direct relationship between operational efficiency and waste reduction.
- On the audit side, an integrated audit system must be established enabling real-time monitoring of medical waste, revealing accumulated quantities and their causes. All health entities must be obliged to prepare detailed periodic reports on expired medicines, including quantities, financial values, and reasons for expiry, with legal accountability activated in cases of negligence or mismanagement, particularly in light of the existence of accumulations extending over years without remediation.
- Efforts must also be made to reduce the environmental and health impact of this waste by imposing strict environmental standards in line with international guidelines, and prohibiting any indiscriminate practices in the disposal of medicines, given their serious effects on soil, water, and public health. The environmental dimension must be integrated within pharmaceutical management policies as part of national health security.
- At the financial level, reform requires conducting a comprehensive review of the economic value of expired medicines and linking it to supply costs, with the aim of measuring the scale of real wastage within the system and taking corrective decisions to prevent the continued supply of items close to expiry or dead stock thereby contributing to the protection of public resources and improving expenditure efficiency.

Recommendations in accordance with international standards:

- Implement the FEFO (First Expired, First Out) stock management system.
- Establish an electronic register to track expiry dates and spoilage.
- Improve supply and distribution chains to reduce wastage.
- Follow WHO-approved disposal methods, such as high-temperature incineration.
- Train healthcare facility personnel in the handling of pharmaceutical waste.
- Implement community medicines collection programmes to prevent indiscriminate disposal.
- Cooperate with manufacturers to implement pharmaceutical take-back programmes (Reverse Logistics).

Chapter Seven: Comprehensive Risk Mapping

1. Operational Risks: Weakness of the Supply Chain and Critical Points of Failure

The pharmaceutical supply system in Libya suffers from deep operational imbalances affecting all links of the supply chain, from needs determination through procurement and supply operations, to distribution and consumption within healthcare facilities. The deficiency in this chain is one of the most significant sources of instability in the availability of medicines, given the absence of a systematic interconnection between its components.

These risks begin at the needs determination stage, where pharmaceutical needs are prepared in a repetitive, estimation-based manner, relying on previous results rather than on actual consumption data or accurate epidemiological indicators. This estimation-based approach has led to the production of unrealistic needs, repeated annually without genuine operational review, creating a clear gap between theoretical needs and actual demand within the health system.

In the absence of a unified national electronic system linking healthcare facilities, the Medical Supply Organisation, and tender committees, the process of transferring data between parties has come to rely on paper-based or partial means, leading to a loss of accuracy in information and a weakening of the capacity for data-driven planning.

Moreover, supply is often carried out in isolation from actual consumption, leading to clear imbalances in the quantities of medicines supplied, with cases of oversupply recorded for certain vital items, alongside severe shortages of other items of essential importance. This has resulted in the accumulation of large stockpiles within central warehouses and hospitals, while, at the same time, shortages of vital medicines are observed at service delivery points.

The seriousness of these imbalances is compounded by the weakness of tracking systems within the supply chain, as there is no real-time mechanism enabling the monitoring of the movement of medicines from the moment they leave the central warehouse until they reach the patient rendering the system vulnerable to a loss of operational efficiency and making it difficult to pinpoint areas of deficiency with accuracy.

2. Financial Risks: Wastage, Misallocation of Resources, and Suspicions of Structural Corruption

The financial aspect of the pharmaceutical system represents one of the areas most exposed to indirect wastage as a result of poor planning and weak governance, with substantial financial credits directed towards the supply of medicines that do not reflect the real needs of healthcare facilities.

The core of the financial risk lies in the absence of a link between pharmaceutical expenditure and actual consumption, leading to inflated procurement quantities without a clear operational justification. This has resulted in significant sums of money being frozen in dead or expired pharmaceutical stock representing a compounded loss: a direct financial loss due to expiry, and an indirect loss due to the costs of storage, transport, and re-supply.

The data indicate the existence of clear cases of oversupply for a number of vital items, such as certain neurological medicines, iron preparations, and biological dressings, alongside shortages of other essential medicines reflecting a deficiency in the mechanisms for allocating and directing budgets.

Moreover, the absence of a financial audit system linked to actual consumption data creates a regulatory environment of weak transparency, as it is impossible to trace the relationship between what is actually procured and what is actually used. This opens the door to:

- Unjustified inflation of needs requests
- Weak audit of supply decisions
- Repeated procurement of the same items despite their availability

- The absence of accurate financial performance indicators to measure efficiency

In conclusion, the financial waste is not limited to mismanagement, but extends to form a structural distortion in the health spending system as a whole.

3. Health and Sovereignty Risks: A Threat to Pharmaceutical Security and the Stability of the Health System

The deficiency in the pharmaceutical supply system constitutes a direct threat to national health security, given the complete dependence of the health system on the uninterrupted continuity of vital medicines supply.

The most prominent health risks are represented in recurrent shortages of medicines for chronic diseases and critical cases, leading to treatment interruption for patients or delays in their receiving medication in a timely manner directly reflected in morbidity and mortality rates and the quality of healthcare.

Conversely, unbalanced supply leads to the availability of medicines that are not required or not actually used within the health system, further complicating stock management and resulting in the accumulation of dead stock items that expire without any therapeutic benefit being derived from them.

Moreover, the existence of large quantities of unused or expired medicines within warehouses poses an additional risk, represented in the potential for their leakage into the informal market, or their poor storage, which may lead to a loss of efficacy or their transformation into a source of health hazard.

At the political level, the absence of an accurate system for managing pharmaceutical supply diminishes the state's ability to control its pharmaceutical security and exposes it to fluctuations in supply chains, particularly in times of crisis or health emergencies, thereby weakening the independence of national health decision-making.

4. Institutional Risks: Weak Governance, Overlapping Mandates, and the Absence of Centralised Decision-Making

Institutional risks are among the most serious structural challenges facing the pharmaceutical system, reflecting a state of administrative fragmentation and overlapping mandates between multiple entities, in the absence of a unified governance framework regulating the decision-making process.

The responsibilities of the Pharmacy Directorate, the Medical Supply Organisation, tender committees, and audit bodies overlap, without a single entity possessing the full authority to approve final needs or to supervise the pharmaceutical supply cycle in an integrated manner.

This multiplicity of decision-making centres has led to:

- An absence of clear legal accountability for supply decisions
- Conflicting decisions between different entities
- Weak coordination between the stages of needs assessment, supply, and distribution
- The loss of a unified reference for pharmaceutical policies

Furthermore, the absence of a data-driven governance system has resulted in continued reliance on individual discretion and non-standardised estimates, instead of decisions being based on accurate performance indicators and scientific analysis of consumption.

Added to this is the weak integration between administrative, financial, and technical systems within the health sector, creating a fragmented system lacking horizontal and vertical cohesion which has negatively impacted the efficiency of decision-making and the sustainability of pharmaceutical supply.

Ultimately, this institutional weakness does not represent a mere organisational deficiency, but is the root factor that fuels all other types of risk operational, financial, and health-related within the system.

5. Overall Summary of the Risk Map

This risk map demonstrates that the pharmaceutical supply system does not suffer from partial deficiencies, but from a comprehensive structural crisis extending across operational, financial, health, and institutional levels simultaneously.

The persistence of the separation between these levels, the absence of a unified digital system, and the multiplicity of decision-making centres leads to the cyclical reproduction of the same risks, rendering partial reform insufficient without rebuilding the system on the foundations of unified governance, real-time data, and institutional integration.

Chapter Eight: Defining Responsibilities and Accountability

Chapter One: Failure in Financial Planning and Allocations (2022–2025)

First Failure: Sharp Fluctuation in Expenditure on Pharmaceutical Support

Administrative Responsibility: Primary administrative responsibility lies with the Ministry of Health, represented by the Minister's Office and the Finance Directorate, for their failure to establish stable annual planning and for adopting sudden, unjustified financial decisions. The Ministry of Planning bears secondary administrative responsibility for permitting the approval of allocations without accurate needs assessments. Added to this is the responsibility of the Cabinet for approving this ill-considered financial expansion.

Financial Responsibility: The Ministry of Planning bears primary financial responsibility for approving an increase of 2.38 billion dinars in 2023 without specific health or epidemiological justification, constituting a gross financial miscalculation. The Ministry of Health bears secondary financial responsibility for implementing this unstable expenditure.

Criminal Responsibility: Criminal suspicions arise from the nature of the sudden financial decisions, which are not subject to a consistent planning methodology, potentially indicating unjustified political or administrative interference warranting investigation into the possibility of breach of official duties or exploitation of influence, in accordance with the provisions of the Libyan Penal Code.

Contractual Responsibility: There is no direct contractual responsibility under this item; however, the financial fluctuation has weakened the state's contractual capacity for long-term planning with suppliers.

Entity Responsible for the Failure: Ministry of Health (primary responsibility), Ministry of Planning (secondary responsibility), Cabinet (tertiary responsibility).

Second Failure: The Unplanned Shift from Centralised Procurement to Institutional Fragmentation

Administrative Responsibility: The Cabinet bears primary administrative responsibility for approving this ill-considered expansion through its Resolution No. 12 of 2023 on the formation of local procurement committees, without studying the impact on expenditure efficiency. The Ministry of Health bears secondary administrative responsibility for implementing this resolution without establishing a comprehensive governance framework ensuring coordination.

Financial Responsibility: Local procurement committees and local medical centres bear financial responsibility for causing duplicate procurement and purchasing the same items supplied centrally by the Ministry, leading to the fragmentation of expenditure and the loss of economies of scale, estimated at 15–25% of total expenditure.

Criminal Responsibility: Criminal suspicions arise in cases of local procurement despite the availability of central supply, which may indicate favouritism, cronyism, or conflicts of interest between local officials and suppliers.

Contractual Responsibility: There is no direct contractual responsibility; however, the institutional fragmentation has weakened the state's negotiating capacity in its contracts with international suppliers.
Entity Responsible for the Failure: Cabinet (primary responsibility), Ministry of Health (secondary responsibility), local procurement committees and medical centres (tertiary responsibility).

Chapter Two: Failure in the Management of Documentary Credits and Foreign Currency

Fourth Failure: Accumulation of Unsettled Credits Over Years

Administrative Responsibility: The Medical Supply Organisation bears primary administrative responsibility for its negligence in following up on contracts and leaving credits open for years without closure. The Contracts Directorate within the Organisation bears direct administrative responsibility.

Financial Responsibility: The Medical Supply Organisation and the Central Bank of Libya bear joint financial responsibility for freezing substantial sums of money without recovery, constituting a direct financial loss to the state.

Criminal Responsibility: Criminal suspicions arise from the failure of financial closure, which may indicate harm to public funds or negligence in safeguarding public funds, in accordance with the provisions of the Penal Code.

Contractual Responsibility: The Medical Supply Organisation bears contractual responsibility towards suppliers for its failure to close credits within the specified timeframes, weakening confidence in the Libyan administration.

Entity Responsible for the Failure: Medical Supply Organisation (primary responsibility), Central Bank of Libya (secondary responsibility).

Fifth Failure: Cancellation of Credits After Award

Administrative Responsibility: The Medical Supply Organisation bears primary administrative responsibility for failing to link the award to a proven supply capacity of companies prior to award. The Tender Committee also bears secondary administrative responsibility for failing to review the seriousness of companies before award.

Financial Responsibility: The Medical Supply Organisation (represented on the Tender Committee) bears financial responsibility for the procedural wastage resulting from the cancellation of credits after the completion of award procedures.

Criminal Responsibility: Criminal suspicions arise in cases of repeated cancellation, which may indicate a breach of official duties or favouritism towards certain companies at the award stage, followed by subsequent cancellation of the contract.

Contractual Responsibility: The Medical Supply Organisation bears contractual responsibility towards the awarded companies for the cancellation of credits after award without clear legal justification, opening the door to litigation.

Entity Responsible for the Failure: Tender Committee (primary responsibility), Medical Supply Organisation (secondary responsibility).

Administrative Responsibility: The Medical Supply Organisation bears administrative responsibility for failing to coordinate central supply with local procurement and failing to prevent duplication. The local procurement committees also bear administrative responsibility for exceeding their remit in local procurement despite their knowledge of central supply.

Financial Responsibility: The local medical centres and specialist boards bear direct financial responsibility for disbursing additional sums without accurate needs assessments, leading to the booking of amounts under Chapter Four without justification.

Criminal Responsibility: Criminal suspicions arise in cases of procurement despite the availability of stock, which may indicate disguised embezzlement or the disbursement of public funds without lawful cause.

Contractual Responsibility: There is no direct contractual responsibility under this item.

Entity Responsible for the Failure: Local procurement committees and medical centres (primary responsibility), Medical Supply Organisation (secondary responsibility).

Sixth failure: Increase in the Value of Documentary Credits After Award

Administrative Responsibility: The Tender Committee bears administrative responsibility for accepting the amendment of contracts after award. The Contracts Directorate within the Medical Supply Organisation also bears administrative responsibility for implementing this amendment.

Financial Responsibility: The state bears financial responsibility for the unjustified increase in cost of 15%, constituting an unlawful cost increase estimated in the millions of euros.

Criminal Responsibility: Criminal suspicions arise from the acceptance of an increase in value after award, which may indicate bribery, favouritism, or a conflict of interest between committee officials and the supplying companies.

Contractual Responsibility: The state bears serious contractual responsibility for its failure to adhere to the principle of contract finality in public procurement, with contracts having been amended unilaterally in favour of the supplier without legal justification.

Entity Responsible for the Failure: Tender Committee (primary responsibility), Medical Supply Organisation (secondary responsibility).

Seventh Failure: Acceptance of Discrepancies and Deficiencies in Documentary Credits

Administrative Responsibility: The Medical Supply Organisation (Quality Directorate) bears administrative responsibility for accepting the receipt of goods that do not conform to specifications. The Customs Authority also bears administrative responsibility for permitting the entry of goods with incomplete documentation.

Financial Responsibility: The state bears financial responsibility for paying undue amounts for goods that do not conform to the contracted specifications.

Criminal Responsibility: Criminal suspicions arise from the acceptance of discrepancies, which may indicate bribery, breach of official duties, or falsification of receipt minutes.

Contractual Responsibility: The state bears contractual responsibility for accepting discrepancies in contracts without applying penalty clauses, weakening the value of future contracts.

Entity Responsible for the Failure: Medical Supply Organisation (primary responsibility), Customs Authority (secondary responsibility), Central Bank of Libya (tertiary responsibility).

Eightieth Failure: The Time Gap Between Award and Implementation

Administrative Responsibility: The Tender Committee bears administrative responsibility for failing to set a binding time limit for implementation. The Medical Supply Organisation also bears administrative responsibility for failing

Financial Responsibility: The state bears financial responsibility for the discrepancies resulting from price changes and changes in market needs over four years, leading to indirect financial loss.

Criminal Responsibility: Criminal suspicions arise from the delay in implementation, which may indicate breach of official duties or the deliberate sabotage of a tender in favour of other parties.

Contractual Responsibility: The state bears serious contractual responsibility for failing to execute contracts within a reasonable timeframe, opening the door to litigation or the rescission of contracts by suppliers.

Ninth Failure: Unnatural Growth in the Credits of Specific Companies

Administrative Responsibility: The Central Bank of Libya bears administrative responsibility for failing to implement a periodic vendor performance scoring system. The Medical Supply Organisation also bears administrative responsibility for directly awarding these companies contracts without verifying the justifications for their growth.

Financial Responsibility: The state bears financial responsibility for permitting unjustified increases in credits estimated at tens of millions of dollars, without feasibility studies.

Criminal Responsibility: Serious criminal suspicions arise from the unnatural growth, which may indicate bribery, favouritism, conflicts of interest, or disguised embezzlement. This warrants the opening of an immediate criminal investigation.

Contractual Responsibility: There is no direct contractual responsibility; however, the unjustified growth weakens the transparency of government contracts.

Entity Responsible for the Failure: Central Bank of Libya (primary responsibility), Medical Supply Organisation (secondary responsibility), audit bodies (tertiary responsibility).

Tenth failure: Fluctuation in Foreign Currency Requests

Administrative Responsibility: The Central Bank of Libya bears administrative responsibility for failing to establish a joint national mechanism with the Ministry of Health for pharmaceutical planning. The Ministry of Health also bears administrative responsibility for failing to provide accurate consumption data to the Central Bank.

Financial Responsibility: The state bears financial responsibility for failing to regulate the flow of foreign currency and link it to actual consumption, opening the door to the depletion of hard currency.

Criminal Responsibility: Criminal suspicions arise from the sharp surge in the year 2025, which may indicate inflated requests or falsification of needs data.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Central Bank of Libya (primary responsibility), Ministry of Health (secondary responsibility).

Chapter Three: Failure in the Registration of Companies and Agencies

Eleventh Failure: Exceeding the Statutory Limit on Agencies

Administrative Responsibility: The Pharmacy Directorate (Ministry of Health) bears primary administrative responsibility for systematically permitting the statutory limit to be exceeded. The Company Registration Committee also bears direct administrative responsibility.
Financial Responsibility: The state bears financial responsibility for the loss of negotiating capacity and the increase in prices resulting from market concentration.
Criminal Responsibility: Serious criminal suspicions arise from permitting the exceedance, which may indicate bribery, favouritism, exploitation of influence, or breach of official duties, in accordance with Article 225 of the Penal Code.
Contractual Responsibility: There is no direct contractual responsibility.
Entity Responsible for the Failure: Pharmacy Directorate (primary responsibility), Ministry of Economy (secondary responsibility).

Twelfth Failure: Registration of Specialist Medicines for Private Agents Despite State Exclusivity

Administrative Responsibility: The Company Registration Committee (Pharmacy Directorate) bears primary administrative responsibility for permitting the private registration of sovereign medicines. The Pharmacy Directorate also bears supervisory administrative responsibility.
Financial Responsibility: The state bears financial responsibility for the creation of a parallel economy that drains the state budget.
Criminal Responsibility: The members of the Registration Committee bear direct criminal responsibility for violating the legislation.
Contractual Responsibility: There is no direct contractual responsibility.
Entity Responsible for the Failure: Company Registration Committee (primary responsibility), Pharmacy Directorate (secondary responsibility).

Chapter Four: Failure in the Registration of Companies and Agencies

Eleventh Failure: Exceeding the Statutory Limit on Agencies

Administrative Responsibility: The Pharmacy Directorate (Ministry of Health) bears primary administrative responsibility for systematically permitting the statutory limit to be exceeded. The Company Registration Committee also bears direct administrative responsibility.

Financial Responsibility: The state bears financial responsibility for the loss of negotiating capacity and the increase in prices resulting from market concentration.

Criminal Responsibility: Serious criminal suspicions arise from permitting the exceedance, which may indicate bribery, favouritism, exploitation of influence, or breach of official duties, in accordance with Article 225 of the Penal Code.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Pharmacy Directorate (primary responsibility), Ministry of Economy (secondary responsibility).

Twelfth Failure: Registration of Specialist Medicines for Private Agents Despite State Exclusivity

Administrative Responsibility: The Company Registration Committee (Pharmacy Directorate) bears primary administrative responsibility for permitting the private registration of sovereign medicines. The Pharmacy Directorate also bears supervisory administrative responsibility.

Financial Responsibility: The state bears financial responsibility for the creation of a parallel economy that drains the state budget, whereby the agent sells the medicine to private healthcare facilities and the state is subsequently compelled to pay the invoices at multiplied prices.

Criminal Responsibility: The members of the Registration Committee bear direct criminal responsibility for a clear violation of legislation, harm to public funds, and endangering pharmaceutical security.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Company Registration Committee (primary responsibility), Pharmacy Directorate (secondary responsibility).

Thirteenth Failure: Registration of Food Supplements as Medicines

Administrative Responsibility: The Pharmacy Directorate bears administrative responsibility for permitting the registration of food supplements as medicines. The Registration Committee also bears administrative responsibility.

Financial Responsibility: The state bears financial responsibility for the depletion of pharmaceutical allocations on food supplements.

Criminal Responsibility: Criminal suspicions arise from gross negligence, harm to public funds, and endangering pharmaceutical security.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Pharmacy Directorate (primary responsibility), Central Bank of Libya (for approving credits – secondary responsibility).

Fourteenth Failure: Gross Errors in Records

Administrative Responsibility: The Registration Section (Pharmacy Directorate) bears administrative responsibility for entering data without review. The Pharmacy Directorate also bears supervisory administrative responsibility.

Financial Responsibility: There is no direct financial loss, but the errors weaken the credibility of the audit system.

Criminal Responsibility: The data entry officers bear criminal responsibility for falsification of official records, in accordance with Article 256 of the Penal Code. The administrative officials also bear criminal responsibility for negligence in supervision.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Registration Section (primary responsibility), Pharmacy Directorate (secondary responsibility).

Fifteenth Failure: The "Suspicious Batch" (Batch 157/2025)

Administrative Responsibility: The Chair of the Registration Committee bears primary administrative responsibility for organising a suspicious registration session. The committee members also bear administrative responsibility for participating.

Financial Responsibility: There is no direct financial loss yet, but the suspicious registrations open the door to subsequent financial corruption.

Criminal Responsibility: Serious criminal suspicions arise of embezzlement, breach of trust, bribery, or falsification of official minutes. This warrants the opening of an immediate and urgent criminal investigation.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Chair of the Registration Committee (primary responsibility), committee members (secondary responsibility).

Sixteenth Failure: Misrepresentation of Country of Origin (Dual Origin)

Administrative Responsibility: The Registration Committee bears administrative responsibility for accepting dual registrations. The Pharmacy Directorate also bears administrative responsibility.

Financial Responsibility: The state bears financial responsibility for the loss of customs and pricing advantages.

Criminal Responsibility: The supplying companies (agents) bear criminal responsibility for fraud in the declaration of origin, in accordance with Article 256 bis of the Penal Code. The committee members also bear criminal responsibility for complicity in the fraud.

Contractual Responsibility: The supplying companies bear contractual responsibility for submitting false information in registration contracts.

Entity Responsible for the Failure: Supplying companies (agents – primary responsibility), Registration Committee (secondary responsibility), Customs Authority (tertiary responsibility).

Chapter Five: Failure in Needs Determination and Supply

Seventeenth Failure: Inclusion of Unused Items in Official Lists

Administrative Responsibility: The Formulary Committee (Pharmacy Directorate) bears administrative responsibility for including an unused item. The medical centres also bear administrative responsibility for submitting unjustified needs.

Financial Responsibility: The state bears financial responsibility for the supply of an unrequired item, estimated at thousands of dinars.

Criminal Responsibility: Criminal suspicions arise from negligence or misrepresentation in the submission of needs.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Formulary Committee (primary responsibility), medical centres (secondary responsibility).

Eighteenth Failure: Oversupply of Dead Stock Items

Description of Failure: Supply of dead stock medicines (no longer in use or for which there is no demand)
Administrative Responsibility: The Medical Supply Organisation bears administrative responsibility for supplying without linkage to consumption. The Tender Committee also bears administrative responsibility, as does the Pharmacy Directorate at the Ministry of Health, which is responsible for preparing needs.

Financial Responsibility: The state bears financial responsibility for freezing hundreds of millions of dinars in dead stock, in addition to the costs of storage, transport, and subsequent disposal.
Criminal Responsibility: Criminal suspicions arise from harm to public funds or causing wastage.
Contractual Responsibility: There is no direct contractual responsibility; however, the oversupply undermines the seriousness of government contracts.
Entity Responsible for the Failure: Pharmacy Directorate at the Ministry of Health (primary responsibility), Medical Supply Organisation (secondary responsibility), Tender Committee (tertiary responsibility), health centres (for accepting receipt – tertiary responsibility).

Nineteenth Failure: Supply of Items in Incorrect Strengths

Administrative Responsibility: The Medical Supply Organisation (Procurement Directorate) bears administrative responsibility for failing to verify the required strengths.

Financial Responsibility: The state bears financial responsibility for paying for an unrequired item.

Criminal Responsibility: There are no clear criminal suspicions, but the error may indicate negligence.

Contractual Responsibility: The supplying company (Roche/agent) bears contractual responsibility for supplying an item in the incorrect strength, contrary to the contracted specifications.

Entity Responsible for the Failure: Supplying company (primary responsibility), Medical Supply Organisation (secondary responsibility).

Twentieth Failure: Absence of an Electronic System Linking Centres to the Supply Organisation

Administrative Responsibility: The Ministry of Health (Information Directorate) bears administrative responsibility for failing to establish the system. The Medical Supply Organisation also bears administrative responsibility.
Financial Responsibility: The state bears financial responsibility for the continued wastage resulting from data inaccuracy.
Criminal Responsibility: There are no criminal suspicions, but the failure represents prolonged administrative negligence.
Contractual Responsibility: There is no direct contractual responsibility.
Entity Responsible for the Failure: Ministry of Health (primary responsibility), Medical Supply Organisation (secondary responsibility).

Chapter Six: Failure in Medical Waste Management

Twenty-First Failure: Accumulation of Expired Medicines Since 2001

Administrative Responsibility: All successive Ministers of Health since 2001 bear extended administrative responsibility for failing to take decisive decisions to dispose of the waste. The Ministry of Environment also bears secondary administrative responsibility.

Financial Responsibility: The state bears financial responsibility for losses estimated in billions of dinars (supply costs + storage + transport + disposal).

Criminal Responsibility: The successive officials bear criminal responsibility for gross negligence leading to a health and environmental hazard, and harm to public funds over decades.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: All successive Ministers of Health (primary responsibility), Ministry of Environment (secondary responsibility), audit bodies (tertiary responsibility).

Twenty-Second Failure: Absence of an Approved National Mechanism for Waste Disposal

Administrative Responsibility: The Ministry of Health and the Ministry of Environment bear joint administrative responsibility for failing to issue an effective executive mechanism. The Cabinet also bears administrative responsibility for the delay in approving legislation.

Financial Responsibility: The state bears financial responsibility for the continued costs of storage and transport of the accumulated waste.

Criminal Responsibility: There are no clear criminal suspicions, but the delay represents administrative negligence.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Ministry of Health and Ministry of Environment (primary responsibility), Cabinet (secondary responsibility).

Twenty-Third Failure: Failure to Unify Coding Between the Supply and Disposal Stages

Administrative Responsibility: The Pharmacy Directorate and the Medical Supply Organisation bear administrative responsibility for failing to adopt a unified coding system (Master Drug Code).

Financial Responsibility: The state bears financial responsibility for the inability to determine the true value of the waste.

Criminal Responsibility: There are no criminal suspicions.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Pharmacy Directorate (primary responsibility), Medical Supply Organisation (secondary responsibility).

Chapter Seven: Structural and Institutional Failure

Twenty-Fourth Failure: Weak Governance and Overlapping Mandates

Administrative Responsibility: The Cabinet bears primary administrative responsibility for failing to restructure the pharmaceutical sector. The Ministry of Health also bears administrative responsibility.

Financial Responsibility: The state bears financial responsibility for all losses arising from this overlap.

Criminal Responsibility: There are no direct criminal suspicions, but the structural failure fuels corruption.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Cabinet (primary responsibility), Ministry of Health (secondary responsibility), all subsidiary entities (tertiary responsibility).

Twenty-Fifth Failure: Absence of a Unified Pharmaceutical Law

Administrative Responsibility: The House of Representatives bears administrative (legislative) responsibility for failing to enact the unified law. The Cabinet also bears administrative responsibility for failing to propose the draft law.

Financial Responsibility: The state bears financial responsibility for all losses arising from the legislative vacuum.

Criminal Responsibility: There is no criminal responsibility.

Contractual Responsibility: There is no contractual responsibility.

Entity Responsible for the Failure: House of Representatives (primary responsibility), Cabinet (secondary responsibility), Ministry of Health (tertiary responsibility).

Twenty-Sixth Failure: Absence of Linkage Between Expenditure and Health Outcomes

Administrative Responsibility: The Ministry of Health bears primary administrative responsibility. The Ministry of Finance and the Audit Bureau also bear administrative responsibility for audit.

Financial Responsibility: The state bears financial responsibility for high expenditure without tangible results.

Criminal Responsibility: There are no clear criminal suspicions, but the failure may indicate negligence or dereliction of duty.

Contractual Responsibility: There is no direct contractual responsibility.

Entity Responsible for the Failure: Ministry of Health (primary responsibility), Ministry of Finance (secondary responsibility), audit bodies (tertiary responsibility).

Chapter Nine: Recommendations and Reform Roadmap

Recommendations and Reform Roadmap

First: Urgent Recommendations (0–6 Months)

- This package of measures aims to halt the immediate financial haemorrhage, bring the unregulated audit situation under control, and prevent the crisis in the pharmaceutical sector from worsening.
- Foremost among these measures, the opening of any new documentary credits for entities benefiting under Chapter Four shall be frozen, pending the adoption of a comprehensive governance framework that precisely defines disbursement and needs criteria, with implementation under the responsibility of the Cabinet and the Ministry of Finance, and a performance indicator of achieving zero unjustified new credits.
- An immediate investigation committee shall be formed into the companies that have exhibited unnatural growth exceeding 50% per annum, including: Tayseer Pharmaceutical, Dar Qurtuba, Qasreen Al-Dawa, and Alfa, with responsibility shared between the Ministry of Health, the Administrative Control Authority, and the Public Prosecution, with the aim of completing the investigation within 90 days.
- In the same context, the inclusion of unused items in needs lists such as Gonadorelin shall be halted, and their supply cancelled with immediate effect, under the supervision of the Pharmacy Directorate and the Medical Supply Organisation, with a target indicator of zero unused items in the 2026 formularies.
- The registration of any new pharmaceutical company shall also be suspended pending the restructuring of the company register and the review of concentrated agencies, through the Company Registration Committee at the Ministry of Health, with a complete halt on registration for a period of 6 months.
- The measures also include the implementation of an emergency plan for the disposal of the accumulated stockpile of expired medicines dating back to 2001, through contracting with specialist entities, under the supervision of the Ministry of Health and the Ministry of Environment, with the aim of disposing of 30% of the stockpile within 6 months.
- All entities shall be obliged to cease independent local procurement and revert to centralised supply through the Medical Supply Organisation, such that the indicator becomes zero for any purchases outside the centralised framework.
- The FEFO (First Expired, First Out) system shall also be activated in all pharmaceutical warehouses to ensure that medicines are dispensed according to the nearest expiry date first, with a 100% implementation rate achieved in the main warehouses.
- Finally, the Ministry of Health shall be obliged to publish pharmaceutical expenditure data on a quarterly basis via its official website, with the first report to be issued within 60 days.

Second: Medium-Term Recommendations (6–18 Months)

- This phase aims to rebuild the institutional structure of the pharmaceutical sector, activate digital systems, and regulate the market on a more sustainable basis.
- At this stage, a Unified Pharmaceutical Law shall be enacted, eliminating the existing fragmentation between the laws issued in 1973 and 1983 and the Resolutions of 2006 and 2008, and clearly defining mandates, under the supervision of the House of Representatives and the Health Committee, with enactment within 12 months.
- An independent National Pharmaceutical Authority shall be established, assuming the functions of planning, centralised procurement, audit, and tracking, replacing the current fragmentation across more than four entities, with its formation and activation within 9 months.
- A unified national digital system (National Pharma Tracking System) shall be built, linking all stages of the pharmaceutical chain from supply, to stock, to distribution, consumption, and disposal under the supervision of the Ministry of Health and the Ministry of Communications, with deployment in 50% of facilities within 12 months.
- Pharmaceutical procurement shall be unified through a single central body, reducing the number of procuring entities from more than 25 to only 3 entities, under the supervision of the National Pharmaceutical Authority.

- The measures also include restructuring the company register, which comprises 728 companies, with a review of agencies and the enforcement of the statutory limit of only 10 agencies, cancelling the excess, with the aim of reducing concentration by 40%.
- The opening of documentary credits shall be linked to an annual health forecasting model based on actual consumption, in coordination between the Central Bank of Libya and the Ministry of Health, such that any credit not in conformity with the forecast is rejected.
- The financial closure cycle for documentary credits shall also be reformed by imposing a binding time limit, prohibiting post-award amendments, and linking closure to actual supply, with the aim of reducing unsettled credits by 70%.
- A National Pharmaceutical Fund, independent of the general budget, shall be established, financed from registration and agency fees, to ensure the sustainability of funding, under the supervision of the Ministry of Finance and the Cabinet, with its structure approved within 12 months.
- A vendor performance scoring system shall be activated and licence renewal linked to performance, with application to 100% of principal suppliers.
- Finally, the roles of importation, distribution, and agencies shall be legally segregated to prevent conflicts of interest, with the executive regulation to be issued within 9 months.

Third: Strategic Recommendations (18 Months – 3 Years)

- This phase aims to achieve sustainability, build national pharmaceutical security, and integrate with international standards.
- At this stage, a strategic national stockpile of vital medicines shall be built, covering 100% of essential needs and ensuring protection against shocks.
- A national reference laboratory for pharmaceutical quality shall be established, subject to international accreditation to ISO 17025 within 24 months.
- National pharmaceutical manufacturing shall be developed by encouraging local investment to raise the share of domestic production to 15%.
- The global GS1 system shall be joined and linked to a national tracking system, with application to 100% of items.
- Regional pooled procurement agreements shall also be signed with neighbouring countries such as Tunisia, Egypt, and Algeria, with the aim of reducing costs by 20%.
- A national health data system linking hospitals, health insurance, pharmacies, and warehouses shall be built, covering 80% of facilities.
- A National Academy for training pharmaceutical supply cadres shall be established, with a target of 200 specialists per annum.
- A national generic medicines programme shall be developed to raise the usage rate to 60%.
- A Pharmaceutical Insurance Fund for chronic diseases and critical cases shall be established, covering 100% of patients.
- Finally, a National Pharmaceutical Security Strategy shall be prepared, linked to national security, and approved by the Cabinet.

Appendix

Annex 1 (Tables of Illustrative Figures)

Chapter 1 tables

Analysis of Financial Expenditure Trends in the Health Sector and Indicators of Audit Risk (2022–2025) — Continuation of Illustrative Figure 1

Year	Expenditure Value	Notes
2022	1.77 billion dinars	Centralised disbursement to the Medical Supply Organisation only. Traditional centralised model.
2023	4.15 billion dinars	Sharp increase (+134%) compared to 2022. Multiplicity of beneficiary entities: National Centre for Disease Control, Medical Supply Organisation, Centre for Field Medicine.
2024	3.87 billion dinars	Decrease compared to 2023, with the opening of additional documentary credits for the National Cancer Control Board. Continued financial fluctuation.
2025	2.02 billion dinars	Significant decrease compared to 2024 (-49%). Chapter Four opened for multiple local medical centres. Increased risk of financial wastage due to duplication of supply (Ministry + local centres).

Foreign Currency Requests for Human Medicines (2022–2025) — Continuation of Illustrative Figure 2

Company	Value of Approved Documentary Credits for Companies from 2022 to 2025						
	2022	2023	2024	2025	**Percentage Increase from 2022 to 2025**	**Indicator Description**	**Growth Percentage**
Tayseer Pharmaceutical Company for the importation of medical equipment, medicines, pharmaceutical preparations, and mother and child supplies	$2,223,750.000	$0.000	$14,068,498.000	$43,010,394.000	1834%	Meaning the value of documentary credits in 2025 has become more than 18 times its value in 2022	68%
Alfa Company for the importation of medicines, medical equipment, pharmaceutical preparations, and mother and child supplies	$12,891,330.000	$26,754,491.000	$59,183,779.000	$42,031,206.000	226%	Meaning the value of documentary credits in 2025 has become more than 3.3 times its value in 2022	48%
Dar Qurtuba Limited Company for the importation of medical equipment, medicines, pharmaceutical preparations, and mother and child supplies	$2,694,850.000	$0.000	$5,047,551.000	$37,855,732.000	1304%	Meaning the value of documentary credits in 2025 has become more than 14 times its value in 2022	134%
Qasreen Al-Dawa Company for the importation of medical equipment, medicines, and pharmaceutical preparations	$2,915,575.000	$0.000	$14,211,527.000	$31,450,448.000	979%	Meaning the value of documentary credits in 2025 has become more than 10 times its value in 2022	121%
Lamsat Al-Hayat Company for the importation of medical equipment, medicines, pharmaceutical preparations, and mother and child supplies	$25,423,618.000	$29,893,332.000	$35,114,279.000	$23,520,396.000	-8%	It is true that it decreased, but it was high in 2024; however, what must be verified here is how a company's first documentary credits were opened at this value — it is essential to ascertain the Know Your Customer (KYC) information, the source of funds, and Suspicious Transaction Reports (STR)	*
Al-Ilmiya Company for the importation of medicines, pharmaceutical preparations, and mother and child supplies	$7,104,575.000	$13,309,728.000	$19,801,325.000	$23,310,870.000	228%	Meaning the value of documentary credits in 2025 has become more than 3.3 times its value in 2022	48%
Sifax Company for the importation of medicines, medical equipment, and mother and child supplies	$0.000	$0.000	$0.000	$8,363,738.000	Started with 8 million dollars	Meaning the value of documentary credits in 2025 has become more than 18 times its value in 2022	

Number of Documentary Credits Opened During the Years (2023–2024–2025) at the Central Bank of Libya Outside the Public Tender and Their Execution Status

Continuation of the Illustrative Figure

Year		Statement						
	Number	Value	Number	Value	Number	Value	Number	Value
2023	37	270,058,928.550 €	1	47,208.000 €	0	0	36	77,576,007.720 €
2024	49	140,573,536.650 €	4	2,638,200.320 €	16	15,370,834.150 €	29	57,927,729.770 €
2025	3	9,814,637.540 €	0	0	2	9,757,717.040 €	0	0
Total	89	420,447,102.74 €	5	€2,685,408.32	18	€25,128,551.19	65	€135,503,737.49

Queries Regarding the Value of Expenditure in the Use of Foreign Currency and Supply

Continuation of Illustrative Figure 4

Year	Category	
	Foreign Currency Requests for the Purchase of Medicines - Private Sector	Value of Documentary Credits Opened and Supplied to the Medical Supply Organisation
2023	$ 294,121,034.000	331,487,091.48€
2024	$ 359,480,368.000	306,118,706.43€
Total	653,601,402.00 $	€637,605,797.91

Register of Registered Companies
Continuation of Illustrative Figure 5

Statement	Number
Number of Registered Foreign Companies	538
Number of Importation Companies	104
Distribution Companies	86
Total	728

Monopoly and Favouritism
Continuation of Illustrative Figure 6

Agent	Number of Agencies Held
ALFA	53
ALDAWLIA	22
EKLIL	21
MEDICA	19
ALSHADA	14
AL ELMIA	9
ALAFIA	9
ALELMIA	9
EATER	9

Annex 2 (Reform Matrices)

Reform Matrix: Pharmaceutical Companies Section

Fundamental Deficiency	Audit Description	Root Cause	Proposed Reform Measure	Responsible Entity	Timeframe	KPI
Registration of the company instead of the product	Registration of factories / production lines without linking to the pharmaceutical product	Absence of a standardised pharmaceutical registration system (SIAMED / CTD)	Mandatory transition to product-based registration and linking it to (manufacturer + production line + pharmaceutical form + API)	Ministry of Health – Pharmacy Directorate	6–12 months	% of products registered under the CTD system
Conflict of interest in inspection	Companies financing inspection missions	Absence of separation between financing and decision-making	Establishment of an independent inspection fund financed by government fees, not by companies	Ministry of Health – Ministry of Finance	3 months	0% company-funded inspection missions
Monopolisation and exceeding the limit of 10 agencies	Control by agents holding dozens of agencies	Suspension of the enforcement of Law No. 6 of 2004	Comprehensive review of agencies and cancellation of those exceeding the statutory limit	Ministry of Economy + Ministry of Health	6 months	Reduction in market concentration (HHI)
Circumvention of state exclusivity	Registration of specialist medicines for private agents	Manipulation in the classification of items	Closure of private registration for sovereign medicines (oncology – immunology – hepatitis)	Ministry of Health	Immediate	100% specialist supply through the National Company
Misrepresentation of country of origin	Dual origin under a single registration number	Absence of tracking and port inspection	Mandating a single origin + single manufacturer per product and linking it to the batch	Customs Authority + Ministry of Health	3 months	0 cases of dual origin
Registration of food supplements as medicines	Depletion of foreign currency	Weak legislative separation	Establishment of a separate register for food supplements outside pharmaceutical allocations	Ministry of Health + Central Bank of Libya	Immediate	Halt documentary credits for food supplements
Gross errors in records	Future dates and repetition of reference numbers	Manual, unaudited data entry	Automation of the register + post-audit	Ministry of Health	6 months	0 reference errors
Perfunctory registration (conflict countries)	Unrealistic / implausible inspection	Circumvention of the on-site inspection requirement	Suspension of the registration of any manufacturer located in conflict countries	Registration Committee	Immediate	100% actual inspection reports

Reform Matrix: Mechanism for Determining Needs and Supply

Item / Stage	Current Situation (According to Data)	Problems	Technical Solutions (International Standards)	Pharmaceutical Policy Recommendations
Governance of needs determination	Needs are prepared on an estimation basis and repeated annually without linkage to actual consumption.	Estimative inflation / under-estimation; inclusion of unused items.	Adopt an approved forecasting methodology (consumption / morbidity / service) with biannual review, incorporating lead time and safety stock.	Ministerial decision adopting a national estimation methodology and mandating justification memoranda for any changes to the formulary.
Sources of needs data	Absence of a Logistics Management Information System (LMIS) and a live link with warehouses and facilities.	Incomplete data leading to dead stock or shortages.	Establish a national Logistics Management Information System (LMIS) with real-time linkage of warehouses; standardise consumption and receipt forms.	Oblige facilities to submit monthly digital reports and link funding to data compliance.
The formulary and the Essential Medicines List (EML)	Unregulated inclusion / exclusion of certain items.	Divergence of protocols and influence of external parties.	Rely on the Essential Medicines List, update it periodically, and link it to unified protocols.	An independent national committee to update the formulary every two years and publish its decisions and their justifications.
Estimation according to morbidity / service	Specialist items entered without genuine demand.	Supply of items with low morbidity / low usage.	Use the morbidity method where consumption data is unavailable, with service growth scenarios.	Require a disease burden study for every specialist addition.
Supply and stock planning	Supply of the full quantity in a single batch.	Dead stock / expiry.	Split shipments, calculate safety stock and pipeline stock, and adjust quantities according to consumption.	Incorporate split shipments and stock ceilings into contracts and referrals.
Management of dead stock and wastage	Existence of dead stock and expired quantities.	Financial wastage and quality risks.	Conduct ABC/VEN analysis and inter-regional stock rotation, alongside a controlled disposal plan.	A national policy for the rotation of dead stock and the classification of priorities (Vital / Essential / Non-essential).
Matching of award to need	Supply exceeding / falling short of need in several items.	Imbalance and inequity in distribution.	Pre-shipment verification; a mechanism for adjusting purchase orders according to consumption.	A contractual accountability framework with penalties / immediate compensation.
Quality of specifications and source	Suspicions regarding source / non-compliance with specifications for certain items.	Weak confidence and cessation of use.	Require GMP compliance, quality dossiers, and pre-shipment conformity.	A purchasing policy clearly restricted to the manufacturer or an approved exclusive agent.
Post-dispensing follow-up	No precise tracking of patient dispensing.	Difficulty in estimating real demand.	Electronic dispensing systems linked with patient file records.	Incorporate dispensing and treatment adherence performance indicators within the funding framework.

Reform Matrix: Medical Waste Management File (Expired Medicines)

Fundamental Deficiency	Audit Description	Root Cause	Proposed Reform Measure	Responsible Entity	Timeframe	KPI
Absence of a national mechanism for the disposal of medicines	Accumulation of expired medicines from 2001 to 2025	Absence of an approved policy or procedure	Adopt a national policy for the disposal of medicines in accordance with WHO guidelines	Ministry of Health	Immediate (3 months)	Formal adoption of the policy
Accumulation of medicines in warehouses	Health and environmental risks and additional costs	Complete cessation of disposal activities	Implement an emergency plan for the disposal of the accumulated stockpile	Ministry of Health + Ministry of Environment	6 months	% of stockpile disposed of
Absence of an electronic tracking system	Non-matching of item names	Manual and fragmented management	Establish a unified electronic system for tracking medicines through to disposal	Ministry of Health	6–12 months	100% of items coded
Lack of a unified coding system	Repetition and variation of names	Absence of a Master Drug Code	Adopt a unified national code for each item (Master Drug Code)	Pharmacy Directorate	6 months	One code per item
Poor stock management	Medicines expiring before use	Failure to apply FEFO (First Expired, First Out)	Oblige all warehouses to apply FEFO (First Expired, First Out)	Medical Supply Organisation	Immediate	Reduction in expired stock ≥50%
Weak storage and transport	Premature spoilage of medicines	Non-compliance with storage conditions	Update storage and transport standards	Medical Supply Organisation	3–6 months	Compliance reports
Absence of accurate quantitative stocktaking	Distorted data, not amenable to analysis	Stocktaking by names, not by quantities	Adopt stocktaking by units and weight	Waste Management Directorate	Immediate	Stocktaking accuracy ≥95%
Failure to classify waste	Mixing of hazardous medicines with non-hazardous ones	Weak training	Classify waste according to hazard level	Ministry of Health	3 months	100% classification
Absence of approved disposal facilities	No safe incineration	Lack of infrastructure	Contract high-temperature incinerators	Ministry of Health + Ministry of Environment	6–12 months	Operation of an approved incinerator
Weak training of personnel	Risk of infection and accidents	Absence of training programmes	Mandatory annual training programmes	Ministry of Health	Ongoing	% of personnel trained
Absence of accountability	Accumulation without accountability	Legislative vacuum	Enforce administrative and financial accountability	Audit bodies	Immediate	Accountability reports
Absence of pharmaceutical take-back (reverse logistics)	Significant financial loss	Failure to involve manufacturers	Activate Reverse Logistics (pharmaceutical take-back)	Ministry of Health	6 months	% of reverse logistics

Comprehensive Reform Matrix: Pharmaceutical Support Chapter

Problem	Financial / Audit Risk	Proposed Reform Measure	Responsible Entity	Expected Impact
Weak centralisation and multiplicity of procuring entities	Price inflation – duplicate supply	Unify pharmaceutical procurement centrally through a single national body	Ministry of Health / Medical Supply Organisation	Cost reduction + quality control
Weak traceability between Chapter Four and Chapter Two of the subsidy	Difficulty of review and audit	Establish a unified digital system to record every procurement and distribution operation and link it to the national medicines formularies	Ministry of Health	Full transparency; facilitation of retrospective audit
Conflict of roles (requesting / procurement / storage / distribution)	Potential administrative corruption	Separate the functions of requesting, procurement, distribution, and audit between different units	Ministry of Health / Cabinet	Strengthened governance and reduced risks
Absence of clear distribution criteria	Favouritism – inequity – absence of linkage between funding and service volume	Adopt distribution criteria (number of patients, beds, disease burden, actual consumption)	Ministry of Health	Equity and transparency; directing funding according to need

Reform Matrix: Documentary Credits Section

Fundamental Deficiency	Audit Description	Root Cause	Proposed Reform Measure	Responsible Entity	Timeframe	KPI
Unnatural growth in foreign currency requests	Increases of 68%–134% for supply-only companies	Absence of linkage between documentary credits and actual consumption	Link the opening of documentary credits to a health forecast + dispensing data	Central Bank of Libya + Ministry of Health	3–6 months	≤30% annual growth
Dominance of specific companies across all channels	The same companies (private / public / boards)	Multiplicity of procurement channels without coordination	Unify sovereign pharmaceutical procurement	Cabinet	6 months	Reduction in market concentration
Weak Know Your Customer (KYC) and Anti-Money Laundering (AML) controls	Tax records that do not reflect the movement of funds	Deficient banking compliance	Re-examine KYC + mandatory Suspicious Transaction Reports (STR)	Banks + Central Bank	Immediate	100% of files updated
Documentary credits unsettled for years	Large outstanding balances without justification	Weak contractual follow-up	Impose a binding time limit for the closure of documentary credits	Medical Supply Organisation	3 months	Zero aged documentary credits
Cancellation of documentary credits after award	Wastage of time and resources	Gap between tender and implementation	Link the award to a proven supply capacity	Tender Committee	Immediate	0% cancellation after award
Acceptance of discrepancies and deficiencies	Irregularities (origin, documentation)	Absence of penalties	Zero tolerance policy for discrepancies	Banks + Ministry of Health	Immediate	0 discrepancies accepted
Increase in documentary credit value by 15%	Post-opening amendment	Weak cost control	Prohibit any increase except with sovereign approval	Central Bank	Immediate	0 unjustified increases
Time gap between award and implementation	Award in 2019, implementation in 2023	Outdated tenders	Time-limited validity of the award (12 months)	Tender Committee	Legislative	Automatic expiry of the award
Overlap of channels (private / public)	The same items twice	Absence of national planning	A unified national needs plan	Ministry of Health	6–12 months	Reduction in duplicate procurement
Uncertainty over the fate of quantities	Massive expenditure without clear health impact	Absence of tracking	A national Track & Trace system	Ministry of Health + Customs Authority	12 months	100% traceability