

Results of global actors that influence and converge in the hospital sector

Resultados de actores globales que influyen y convergen en el sector hospitalario

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Abstract

Objective: Put into practice the MACTOR (Method, Actors, Objectives, Strength Results) method to identify and analyze convergence of objectives in actors with influence maps of strategic health power. **Method:** It is an analytical study, sampled for convenience in time and for accessibility to experts in three high specialty hospitals with deductive reasoning, of explanatory scope in correlation of strategic objectives convergent to health processes through MACTOR. **Results:** Understand the importance, analyze and understand the prospective in the decision making of the actors that impact this research with global leaders from the World Health Organization, the Pan American Health Organization, the CONACEM committee and the president of the Council of Health in its strategic deployment to hospital medical care. **Conclusions:** The prospective analysis of actors makes it easier to evaluate health leaders according to their influence due to the convergence or not of institutional objectives. MACTOR is relevant in order to visualize the contribution in favor or against the scope of effort with strategic alignment in institutions until reaching hospitals and continuing specific achievements for the benefit of medical care.

Keywords: Structural analysis. MACTOR. Influence of actors. Convergent objectives. Maps and plans. Histograms.

Resumen

Objetivo: Poner en práctica el método MACTOR (Método, Actores, Objetivos, Resultados de Fuerza) para identificar y analizar la convergencia de los objetivos en actores con mapas de influencia del poder estratégico sanitario. **Método:** Es un estudio analítico, muestra por conveniencia en tiempo y por accesibilidad a expertos en tres hospitales de alta especialidad con razonamiento deductivo, de alcance explicativo en correlación de objetivos estratégicos convergentes a los procesos de salud por medio de MACTOR. **Resultados:** Comprender la importancia de analizar y de entender la prospectiva en la toma de decisiones de los actores que impactan en esta investigación con líderes globales de la Organización Mundial de la Salud, la Organización Panamericana de la Salud, el comité CONACEM y el presidente del Consejo de Salud en su despliegue estratégico a la atención médica hospitalaria. **Conclusiones:** El análisis prospectivo de actores facilita evaluar a los líderes de salud de acuerdo con su influencia en razón a la convergencia o no a objetivos institucionales. MACTOR es relevante en pro de lograr visualizar el aporte a favor o en contra de alcance de esfuerzo con alineamiento estratégico en las instituciones hasta llegar a los hospitales y dar continuidad de los logros específicos en beneficio de la atención médica.

Palabras clave: Análisis estructural. MACTOR. Influencia de actores sanitarios. Objetivos convergentes de salud. Mapas y planos de actores de salud. Histogramas.

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Introduction

It is of vital importance to implement the strategic deployment of public health policies that integrate education, prevention, and universal hospital coverage in the global health process¹. The World Health Organization (WHO) foresees an immediate future in which science and technology must respond to real needs to adapt efficient health models², ensuring equitable access to healthcare services as a fundamental right³. The Pan American Health Organization (PAHO) sets an immediate timeframe for adapting health activities to implement globally competitive programs⁴. The Organization for Economic Co-operation and Development (OECD), through the creation of economic value chains⁵, focuses on developing capacities for social action, solving problems and conflicts, making decisions, and providing means and resources⁶.

The European Union analyzes and advocates for a shift to a circular economy, which is a vital priority for achieving carbon neutrality by 2050 while strengthening sustainable development and health benefits⁷. Prospective planning is linked as necessary in France and the U.S. for strategic and competitive public planning⁸, which brings intellectual structural analysis (SA) closer to changes in identified variables across various scenarios to analyze and reflect on strategic changes⁹. In the SA applied in the U.S. through *Global Trends 2030: Alternative Worlds*, a study of highly relevant global trends affecting Latin America and the Caribbean (LAC) is conducted¹⁰.

The population in LAC has increased, alongside a lack of competitiveness in global hospital medical services¹¹. In Mexico, health is a right for Mexicans, but there is a decline in public healthcare services. Investment and budget in health are insufficient; in the private sector, there is a health business model¹¹, and conducting prospective SA is challenging due to the complex healthcare system's resistance to functional changes to ensure a better immediate future in health¹². Therefore, the healthcare sector needs to respond quickly to the question: *Who are the global actors identified in the decision-making of strategic objectives, and who are influential and convergent in hospital healthcare?*

Method

Objective

Apply the MACTOR method (Method, Actors, Objectives, Force Results) to identify and analyze the convergence of objectives among actors with strategic power influence maps. Through SA of actors, identify the convergence of objectives and political support, contrasting the deployment and alignment process of objectives and strategies for implementing the health and hospital sector. It is necessary to use methodologies that allow the identification and analysis of actor participation in health processes. In this study, the MACTOR knowledge application is used to design effective strategic means and initiatives aimed at intervening with these actors to increase the feasibility of public health policies.

Analysis of actor strategies

SA begins with the game of actors, defined as individuals who make decisions and take specific positions in the environment, impacting the performance of processes with potential influence on decision-making, leading to analysis to understand the healthcare governance system. Individuals defend their interests, and each actor has justified reasons for their actions. This stance is known as methodological individualism. The actor can be individual or collective and will strive to achieve their goals. If interests align, alliances will form. However, if interests diverge, conflicts may arise due to differing interests. Power emerges relatively from the actors and influences the characteristics that favor alliances or conflicts¹³.

Another perspective is the potential system where actors correspond to their environment, which determines their behavior. Each individual behaves according to their social and cultural upbringing. Thus, their freedom of action is limited, as they depend on social systems. However, in contrast, conflicts arise in the environment, and groups questioning the system emerge. These actors drive changes and evolve reality, avoiding a deterministic approach in the social sphere¹⁴. Therefore, understanding the structure of relationships between elements provides insight into the system's behavior and its constant change, where

Table 1. Information for capturing the health sector stakeholder matrix

Stakeholders*	Code*	Description*	Objectives
A1. Director-General of WHO	WHO Direct	Global-level executive of WHO, dedicated to Sustainable Development Goals and improving health and well-being worldwide.	WHO identifies the health system as a set of fundamental blocks that operate interrelatedly to improve population health, reduce health disparities, and achieve social protection in health. ¹⁷
A2. Director of PAHO	PAHO Leader	Leader in increasing equitable access and strengthening the region's capacity to produce medicines and other health technologies.	Provides technical health cooperation to its member countries, combats communicable diseases, addresses chronic conditions and their causes, strengthens health systems, and responds to emergencies and disasters. ¹⁸
A3. President of CNS	CNS President	Presides over the coordination of health service delivery among federal entities and Mexico City.	Coordinates actions between the Federation, federal entities, and Mexico City to consolidate the National Health System, analyze health planning and budgeting, develop co-financing mechanisms, and evaluate service delivery. ¹⁹
A4. Secretary of Health	CrioSalud	Secretary responsible for establishing state policies to ensure the population's right to health protection. ²⁰	Establishes state policies to guarantee the population's right to health protection. ²⁰
A5. National Regulatory Committee for Medical Specialty Boards CONACEM Councils of specialties and health professionals	CONACEM Committee	Committee that validates knowledge, competency assessment, training, skills, expertise, and qualifications for medical specialty certification.	Validates knowledge, competency assessment, training, skills, expertise, and qualifications required for certification and recertification in various medical specialties recognized by CONACEM. ²⁰
A6. Public Sector Institution Officials: Director-General of IMSS	PublicSec Off	Official responsible for organizing and managing Social Security guaranteed by the State.	Organizes and manages Social Security to ensure the right to health, medical care, livelihood protection, and social services necessary for individual and collective well-being, including pensions guaranteed by the State when legal requirements are met. ²¹
Director-General of IMSS-Bienestar	Funcio IMSS-Bien	Official responsible for leading health services for the Mexican population without IMSS-BIENESTAR social security coverage. ²¹	Provides health services to the entire Mexican population without social security through the IMSS-BIENESTAR program.
Director-General of Health at ISSSTE	Funcio ISSSTE	Official responsible for transforming ISSSTE to guarantee medical service.	Leads ISSSTE's transformation with a focus on humanizing care, motivating personnel, providing necessary tools for service delivery, updating infrastructure, eliminating corruption, and ensuring medical supplies. ²²
Director-General of Health at PEMEX	Funcio PEMEX	Official responsible for ensuring early, appropriate, and complete treatment to promote patient well-being.	Ensures effective early, appropriate, and complete treatment contributing to patient well-being by optimizing administrative processes for medicine and medical supply distribution and innovating the medication catalog. ²³
Director General of Health, SEDENA	Funcio SEDENA	Official contributing to the well-being of personnel by strengthening the provision of their health benefits with equality, transparency, and efficiency.	Contribute to the well-being of the personnel of the three armed forces and their families through actions that enhance the provision of their health, economic, and social benefits under principles of equality, transparency, and efficiency. ²⁴
Director General of Naval Health, SEMAR	Funcio SEMAR	Official managing the Naval Health System, ensuring efficient resource management for health promotion and comprehensive medical care for naval personnel and their beneficiaries.	Manage the Naval Health System through policies and regulations that guarantee efficient resource management for health promotion and comprehensive medical care, meeting the needs and expectations of naval personnel and their beneficiaries. ²⁵

(Continues)

Table 1. Information for capturing the health sector stakeholder matrix (continued)

Stakeholders*	Code*	Description*	Objectives
A7. Directors of Private HAE Institutions	DirsHAEPriv	-	-
Hospitales Ángeles Director	DirecHAng	Director working to drive internal changes and improvements within the hospital, achieving a high level of quality. ²³	Continue working to generate changes and advancements within the hospital, elevating it to a high level of quality.
Centro Médico ABC Director	DirecABC	Director leading medical care with the highest quality, warmth, and ethical principles.	Ensure that institutional objectives related to medical care maintain the highest quality, warmth, and adherence to ethical principles. ²⁷
A8. Public health sector beneficiaries	Derech/clie	Individuals entitled to healthcare services through worker benefits, allowing universal and free access to healthcare.	Gain universal and free access to healthcare services and medications for various population sectors.
A9. Patients (clients, users, interested parties)	Pacient	The patient experiences health issues and requires medical care. Clients pay for services, users utilize healthcare facilities, and interested parties may seek medical care at their discretion.	Patients require medical care, while clients pay for services, users utilize healthcare, and interested parties may opt for medical attention as preferred.
A10. Health insurance providers	Asegura	Companies providing health prevention services either: a) directly within their own facilities, b) through a network of medical service providers, or c) via a combination of both for the insured's benefit.	It consists of providing health prevention services, either: a) directly with its own resources at its facilities; b) through third parties, that is, via a network of physicians providing these services; or c) a combination of both, for the benefit of the insured. ²⁸
A11. Suppliers of infrastructure, medical equipment, pharmaceuticals, and technology	Provee	Companies responding to supply demands, offering high-quality, cost-effective, and innovative products.	Meet demand by supplying high-quality, cost-effective, and innovative products to address diverse and multiple healthcare needs.

The information captured in the Lipsor Epita-MACTOR software integrates the Stakeholder Matrix, listing stakeholders along with their respective codes, descriptions, and strategic objectives for input into the MACTOR software. The goals include short-term objectives, long-term objectives, and targets.

CNS: Consejo Nacional de Salud; CONACEM: Corporación Nacional Autónoma de Certificación de Especialidades Médicas; HAE: High Specialty Hospitals; IMSS: Instituto Mexicano del Seguro Social; ISSSTE: Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado; MACTOR method (Method, Actors, Objectives, Force Results; WHO: World Health Organization; PAHO: Pan American Health Organization; PEMEX: Petróleos Mexicanos; SEDENA: Secretaría de la Defensa Nacional.

Table 2. Strategic Objectives in Relation to Key Variables of MICMAC Influence

Key Variables in MICMAC	Short-Term Objective	Long-Term Objective	Goals
Vision and planning for regional and global strategy development	O5 Vis-estr	Achieve the highest level of health with equity and well-being for all people throughout their lives, ensuring universal access to healthcare, resilient health systems, and quality health services.	Prepare hospitals to operate at 100% capacity to serve the general population with universal access to healthcare.
Quality in better medical care	Quality	Address the lack of cooperative and high-quality healthcare processes to align them with coherent global policies.	Design process models and KPI dashboards to achieve 80% efficiency in public policies for hospital care.
Technology and research for public health policies	O1 Tec-inv	Secure financial support for efficiency and innovation, enhancing the use of ICT to facilitate rights, responsibilities, and knowledge management within the health sector.	Interconnect all three levels of hospitals by 2030 to optimize resources for specialized hospital care that could be handled at primary and secondary levels.
Essential healthcare	Saludesenc	Prioritize transparency in processes and information management for healthcare financing and encourage local government involvement in supporting essential health services.	Strengthen healthcare systems and allocate 8% of GDP to guarantee access to all public health interventions and services within the current administration.
Healthcare system reforms toward universal health coverage	Reforauniv	Integrate key health system dimensions to identify and assess various R&D processes for health system transformation.	Prioritize needs and evaluate implementation efficiency at 80% within local and municipal frameworks over the next six years.

The information is captured in the Lipsor Epita-MACTOR software, including the long-term objective, its code, and goals, which quantify the objective over time.

KPI: Key Performance Indicator; GDP: Gross Domestic Product; ICT: Information and Communication Technologies

Table 3. Categorization of actor influence

Value	Relationship
0	Assigned when there is no influence of one actor over another, meaning their interaction does not lead to changes in decision-making, actions, or consequences.
1	Indicates a weak relationship, where the influencing actor modifies certain activities or processes of the affected actor.
2	Represents an intermediate-strength relationship, where the influencing actor can alter specific projects or even complete initiatives of the affected actor.
3	Denotes a strong influence, where the first actor radically impacts the second, potentially negating the latter's purpose. The consequences are high-impact, and the affected actor's role becomes significantly compromised.
4	Reflects categorical influence, to the extent that it threatens the existence of the affected actor, even posing risks to their integrity.

This categorization was established using the DELPHI method, based on voluntary expert opinions and predictive assessments from executives and mid-level managers to refine the knowledge application in this research.

Adapted from Godet, 1993.

the interconnection or network of relationships is crucial for understanding¹⁵.

- Stages in the analysis of intervention and participation of actors for their potential effects and consequences in systems¹⁶:
 - Identify and descriptively characterize external and internal actors participating in the system or its environment.
 - Describe the objectives, motivations, and intentions of each actor, generating a table where each actor recognizes their goals and strategies in terms of maximizing their benefit or developing their motivations (Table 1).

Regarding the variables obtained in the quadrant of greatest influence in the cross-impact matrix and multiplication applied to a classification (MICMAC) resulting from structural analysis with 17 global and health factors, Cronbach's alpha coefficient was applied to evaluate the reliability and consistency of 1,314 questionnaires, obtaining 0.9265 (high reliability). Priority variables³⁰ were identified: determinant variables, including vision and planning for regional-global strategy development and quality in better healthcare, which condition the dynamics of the set. Key or critical variables included technology and research for public health policies, essential health, and health system reforms toward universal health,

Table 4. Positive (+) and negative (–) evaluations of actor performance toward objectives

Positive Value (+)	Objective	Negative Value (–)
+1	Essential for the development of the actor's processes	Risk to the actor's processes –1
+2	Critical for achieving the expected processes and programs of the actor	Risk to the success of the actor's processes and programs –2
+3	Indispensable for fulfilling the actor's mission	Risk to the fulfillment of the actor's mission –3
+4	Indispensable for the actor's existence and continuity	Risk to the very existence of the actor –4

These scales are applied to assess influence, forming a positioning matrix of actors for each strategic objective. This information aids decision-making for healthcare managers, identifies alliances or opposition, and ultimately guides strategies to align actors in addressing key variables and associated strategic goals.

significant challenges, instability in globalization, and the health sector, which disrupt the normal function of the healthcare sector. Around these, an effective health management strategy for hospitals can be organized, considering the global and regional relevance of hospital dynamics as a starting point (Table 2).

- Evaluate and weigh the relationships between actors, i.e., the influence each actor (individual or collective) can exert over others.

This is done through the Direct Influence Matrix of Actors (DIMA). The result allows understanding the role and interrelations of actors in the performance of the management and governance process. Weighted by experts, it is recorded in the Actor Influence Matrix (Table 3 and Fig. 1).

- Understand the positioning of actors regarding objectives. Describe the current attitude of each actor toward each objective (opposed, neutral, indifferent, or favorable). Matrix representation: Actors x Objectives.

This is achieved through the matrix description of potential alliances among actors with coinciding or favorable positions regarding certain strategic objectives. Similarly, divergent and opposing positions among various actors regarding strategic objectives are interpreted as conflicting. Conversely, the weighting of objectives' effects

MID	OMSDirect	OPSLider	CNS Presid	SrioSalud	CONACEMV c	FuncloMSS	Directs Hs	Derec/clie	Pacient	Asegura	Provee
OMSDirect	0	3	3	4	3	3	3	3	3	3	3
OPSLider	3	0	3	4	3	3	3	3	3	3	3
CNS Presid	1	2	0	4	2	2	2	2	1	1	2
SrioSalud	2	2	4	0	4	4	4	3	3	3	3
CONACEMV c	0	0	1	3	0	1	1	1	1	1	1
FuncloMSS	0	0	1	3	1	0	3	0	0	0	3
Directs Hs	2	2	2	3	0	0	0	0	0	0	0
Derec/clie	1	1	1	3	1	1	1	0	3	3	0
Pacient	0	0	0	3	0	0	1	3	0	2	0
Asegura	1	1	0	3	0	0	4	4	4	0	2
Provee	4	3	3	4	3	3	3	3	3	4	0

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Figure 1. Direct Influence Matrix. It is observed that weighting is defined according to the degree of influence, with five levels of relationships between actors: an actor has little or no influence over another (0), an actor can pose a limited risk to the processes of another actor (1), an actor can jeopardize the success of another actor's processes (2), the fulfillment of their missions (3), or their very existence (4). The different actors are placed on a plane of influence and dependency. The analysis of force relationships highlights the strengths and weaknesses of each actor, their ability to freeze a situation and circumstances, among others. In summary, weighting evaluates the direct influences between actors with categorized weighting through a mutual influence box called the Actor x Actor Matrix (AAM).

on actors' intentions is observed inversely or divergently.

The mechanism is through matrix calculation, defined by the application of MACTOR, distinguished in the following phases:

- Associate or correlate the identified preferences between actors and their strategic objectives in the system or process.
- Position actors based on objectives or strategic challenges, perceiving whether they are allies, in conflict, or neutral.
- Quantitatively weigh the relationship using an applicable scale that records different signs in evaluations according to the actor's action regarding the objective or, conversely, the objective's impact on the actor's interests. The distinction of signs in the scales is verified through neutral, positive, and/or negative values, according to²⁹:

Neutral (value 0) and positive (+) and negative (−) evaluations shown in table 4, regarding the actor's action toward objectives and figure 2. It reflects that the actor is indifferent to the objective, and the objectives do not change the actor's interests.

2MAO	O1Tec-inv	O2Met-KPI	O3An-estr	O4Crisis	O5Vis-est
OMSDirect	3	3	3	3	3
OPSLider	2	2	2	2	2
CNS Presid	2	2	2	2	2
SrioSalud	1	1	1	1	1
CONACEMV c	1	1	1	1	1
FuncloMSS	-1	-2	-1	1	-3
Directs Hs	1	1	1	1	1
Derec/clie	2	2	2	2	2
Pacient	3	3	3	3	3
Asegura	-2	-1	-1	-1	-1
Provee	-1	-2	-2	-3	-3

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Figure 2. Valued Position Matrix. These scales are applied to weigh and integrate a table of actor positions for each strategic objective (adapted from Godet, 1993¹⁶ in Lipsor software, Epita-MACTOR).

- Understand the degree of convergence and divergence among actors and the plane of distance between the system's different objectives (Godet, 1990). After matrix calculation of relationships between actors, a graph called a plane or map is obtained, consisting of two axes, ordinates (Y) and abscissas (X), resulting in four quadrants: dominant actors (highly influential and minimally dependent in the process), linking actors (highly influential and highly dependent within the process), conditioned actors (minimally influential and dependent on processes), and autonomous actors (neither influential nor dependent in relation to the analyzed process, presented in results).

Results

Finally, this study visualizes the most important results in figure 3 and the implication of actors (Fig. 4).

Discussion

This study innovates by presenting the development of a specialized methodology for the prospective structural

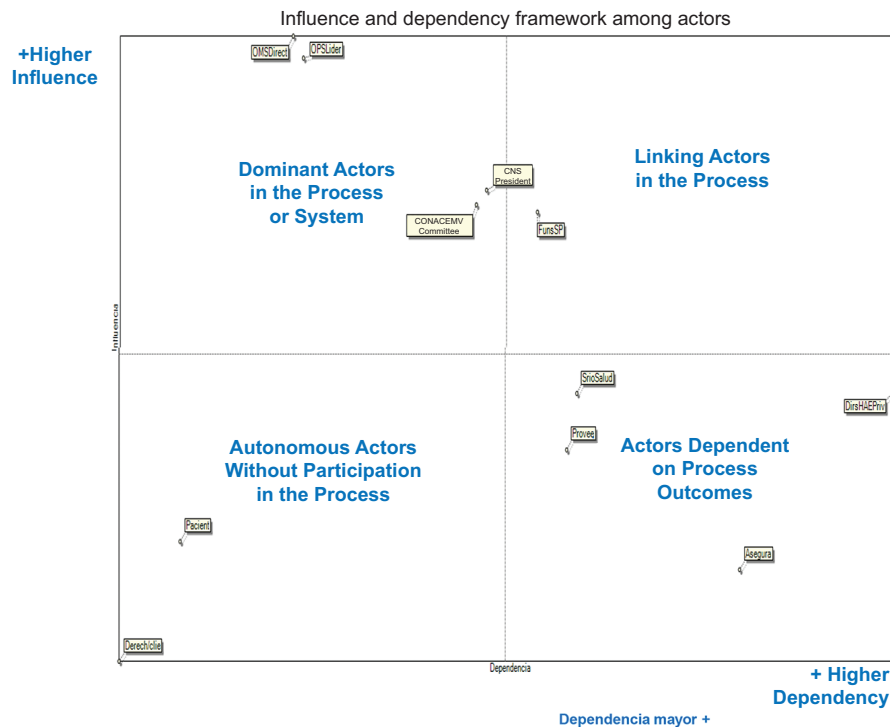


Figure 3. Influence and Dependency Map between Actors. This graph shows the results that prioritize actors in decision-making impacting the correct deployment in the health sector. It is obtained initially as information for decision-making, showing the influence and dependency map of actors. Dominant actors include the WHO, PAHO, CONACEM, and CNS. However, the global variables that concern physicians and specialists in HAE for hospital healthcare, identified in MICMAC³⁰, reveal that the influence and dependency map of actors consists of four types of positions: Dominant Actors: Highly influential and minimally dependent in the healthcare process. These include leaders of the WHO, PAHO, CONACEM, and the President of the Health Council. Linking Actors: Highly influential and highly dependent. These are public sector officials (Director General of IMSS, BIENESTAR, Director General of Health of ISSSTE, Director General of Health of PEMEX, Director General of Military Health - SEDENA, Director General of Naval Health - SEMAR). Conditioned Actors: Dependent on processes. These include the Secretary of Health as a global healthcare executor, medical supply and pharmaceutical providers, directors of private hospitals, and insurers. Autonomous Actors: Neither influential nor dependent in relation to the analyzed process. These are the patients and beneficiaries who receive hospital healthcare from the healthcare system (adapted from Godet, 1993¹⁶ in Lipsor software, Epita-MACTOR).
CNS: Consejo Nacional de Salud; CONACEM: Corporación Nacional Autónoma de Certificación de Especialidades Médicas; HAE: High Specialty Hospitals; IMSS: Instituto Mexicano del Seguro Social; ISSSTE: Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado; WHO: World Health Organization; PAHO: Pan American Health Organization; PEMEX: Petróleos Mexicanos; SEDENA: Secretaría de la Defensa Nacional.

analysis of health care actors. This research continues from MICMAC³⁰ determinant variables and follows the line of research in the analysis and construction of actor maps related to the fulfillment of strategic objectives using MACTOR software. Concerns can be clarified by observing different strategic decisions with histograms of actor implications on objectives, enabling better decision-making in global and regional healthcare scenarios. Additionally, actor implications align strategically globally and regionally, showing who is in favor or against specific and priority objectives. It is evident that HAE (Hospital Actors and Entities) have needs to prioritize and respond to, beyond global demands, complicating their response

capabilities worldwide, according to the histogram of actor behavior regarding the proposed objectives of strategic variables such as leaders' vision, quality, technology, and health system reforms from MICMAC regional variable analysis. The prospective analysis of actors facilitates evaluating health leaders based on their influence for convergence or divergence toward their objectives, the *raison d'être* of their responsibilities in intelligently managing political interest conflicts. MACTOR is relevant in visualizing contributions for or against the achievement of objectives in strategic alignment in health institutions, reaching hospitals, and continuing objectives for the benefit of hospital healthcare.

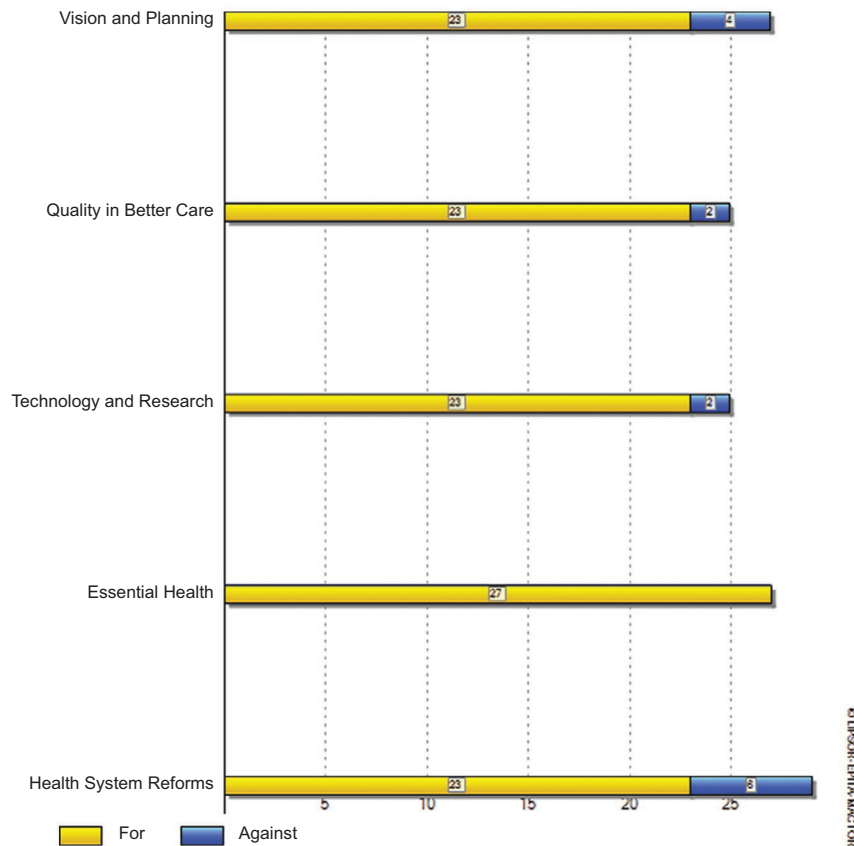


Figure 4. Histogram of stakeholder engagement with MICMAC objectives. It shows the engagement of those in favor and those against. MACTOR also presents a detailed balance of positions by objective assessed in hospital competitiveness, which is important to review in detail to prioritize high-specialty hospitals. It also visualizes how stakeholders behave in relation to the objectives set for the MICMAC strategic variables.

Conclusions

The study, through actor analysis, is a contribution, and its interpretation in MACTOR allows answering the research question, identifying global and regional decision-making actors, as well as strategic alignment reaching hospital executives. The important implication of objective variables is validated using actor analysis methods with MACTOR and MICMAC software, which can be learned in the hospital sector to develop disruptive proposals and strategies with this type of analysis, preparing hospital administrators for the design of future global or regional public policies.

Actor analysis anticipates and visualizes a prioritization map of actors, on the plane according to their importance and strategic power, which will impact hospitals in the future, ensuring a vision of efficient hospital healthcare due to multiple global factors and

leading actors that will impact the health sector and the world in the long term.

Strategic alignment is suggested at corresponding hierarchical levels, with the establishment and implementation of indicators in goals according to priorities and scope of objectives and activities, ensuring the mission, vision of strategic objectives, and, if necessary, implementing corresponding action lines or initiatives in time to reclaim strategic actions toward expected results in the production of hospital medical goods and services.

Through this prospective structural analysis, it is essential to understand global healthcare governance systems and identify which actors support or oppose objectives and requirements, as observed in the histogram of actor implications. It also highlights an influence and dependency map, prioritizing the importance of relationships and interactions among globally integrated subjects until alignment is outlined in sectors, particularly in HAE. Of course, decision-making time permeates slowly until it impacts decision-making and

objective realization through strategic implementation in HAE.

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Conflicts of interest

None declared.

Ethical considerations

Protection of Humans and Animals: The authors declare that no experiments were conducted on humans or animals for this research.

Confidentiality, Informed Consent, and Ethical Approval: This study does not involve patient personal data or require ethical approval. The SAGER guidelines do not apply.

Statement on the Use of Artificial Intelligence: The authors declare that no generative artificial intelligence was used in the drafting of this manuscript.

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