

Universidad de Nariño

TENDENCIAS Journal of the Faculty of Economic and Administrative Sciences ISSN-E 2539-0554 Vol. XXVI No. 1 – 1st Semester 2025 January - June - Pages 216-242 **Reflection article**

Public management and policies

Including physical education professionals in the Colombian health care system: a governance approach

Incluir profesionales en educación física en el sistema de salud colombiano: enfoque desde la gobernanza

Inclusão de profissionais da educação física no sistema de saúde colombiano: uma abordagem de governação

Jefferson García Buitrago; Raúl Andrés Tabarquino Muñoz

PhD in Administration with a focus on Governance and Public Policies, Universidad del Valle. Faculty Member at Universidad del Valle. ORCID: 0000-0002-7793-5336. E-mail: jefferson.garcia.buitrago@correounivalle.edu.co. Cali – Colombia.

PhD in Administration, Universidad del Valle. Full Professor at Universidad del Valle. ORCID: 0000-0002-7866-1875. E-mail: raul.tabarquino@correounivalle.edu.co. Cali – Colombia.

 Received: May 9, 2024
 Accepted: November 28, 2024

 DOI: https://doi.org/10.22267/rtend.252601.271

How to cite this article: García, J. & Tabarquino, R. (2025). Including physical education professionals in the Colombian health care system: a governance approach. *Tendencias*, 26(1), 216-242. https://doi.org/10.22267/rtend.252601.271



Abstract

Introduction: The integration of physical education professionals into the Colombian health system emerges as a key strategy for public health promotion. This research article explores the importance of integrating these professionals from a governance approach. **Objective**: The main objective is to examine the integration of physical education professionals within the Colombian health system from the perspective of governance. **Methodology**: A descriptive analysis and a documentary review were employed to explore the existing literature on integrating physical education professionals into the Colombian health system. **Results**: The results highlight the ability of these professionals to provide preventive and therapeutic interventions based on physical exercise, as well as their potential to promote a holistic approach to health. Additionally, the integration of physical education professionals into the health system requires a clear regulatory framework, effective coordination among the involved actors, and continuous evaluation of the impact of their interventions on public health. **Conclusions:** This research emphasizes the importance of addressing this issue from a governance perspective to achieve optimal results in health promotion and disease prevention.

Keywords: public management; public policies; disease prevention; health promotion; health policy.

JEL: I18; I31; I38; M10.

Resumen

Introducción: La integración de los profesionales en educación física en el sistema de salud colombiano, emerge como una estrategia clave de promoción de la salud pública. Este artículo de investigación explora la importancia de la integración de estos profesionales desde un enfoque de gobernanza. Objetivo: El objetivo principal es examinar la integración de profesionales de educación física dentro del sistema de salud colombiano desde la perspectiva de la gobernanza. Metodología: Se empleó un análisis descriptivo y una revisión documental para explorar la literatura existente en la integración de profesionales en educación física en el sistema de salud colombiano. Resultados: Los resultados destacan la capacidad de estos profesionales para ofrecer intervenciones preventivas y terapéuticas basadas en el ejercicio físico, así como su potencial para promover un enfoque holístico de la salud. Además, la integración de profesionales en educación física en el sistema de salud requiere un marco normativo claro, una coordinación

efectiva entre los actores involucrados y una evaluación continua del impacto de sus intervenciones en la salud pública. **Conclusiones:** Esta investigación subraya la importancia de abordar este tema desde la gobernanza para lograr resultados óptimos en términos de promoción de la salud y prevención de enfermedades.

Palabras clave: gestión pública; políticas públicas; prevención de enfermedades; promoción de la salud; política de salud.

JEL: I18; I31; I38; M10.

Resumo

Introdução: A integração dos profissionais de educação física no sistema de saúde colombiano surge como uma estratégia fundamental de promoção da saúde pública. Este artigo de pesquisa explora a importância da integração desses profissionais a partir de uma abordagem de governança. Objetivo: O objetivo principal é examinar a integração dos profissionais de educação física no sistema de saúde colombiano a partir de uma perspectiva de governança. Metodologia: uma análise descritiva e uma revisão de documentos foram usadas para explorar a literatura existente sobre a integração dos profissionais de educação física no sistema de saúde colombiano. Resultados: os resultados destacam a capacidade desses profissionais de oferecer intervenções preventivas e terapêuticas com base no exercício físico, bem como seu potencial para promover uma abordagem holística da saúde. Além disso, a integração dos profissionais de educação física ao sistema de saúde exige uma estrutura regulatória clara, uma coordenação eficaz entre os atores envolvidos e uma avaliação contínua do impacto de suas intervenções na saúde pública. Conclusões: Esta pesquisa destaca a importância de abordar essa questão a partir de uma perspectiva de governança, a fim de obter os melhores resultados em termos de promoção da saúde e prevenção de doenças.

Palavras-chave: gestão pública; política pública; prevenção de doenças; promoção da saúde; política de saúde.

JEL: I18; I31; I38; M10.

Introduction

In the process of designing effective strategies to promote health and well-being, it is essential to explore and understand the guidelines and regulations that govern practices in the health sector. In this regard, this research article will focus on two key documents: Perfiles y Competencias Profesionales en Salud [Professional Profiles and Competencies in Health] (2016) and Resolution 3280 of 2018, issued by the Ministry of Health and Social Protection (MinSalud, 2016; 2018).

These documents provide a detailed overview of the competencies and professional profiles within the health sector, as well as specific guidelines for the promotion and maintenance of health in certain populations. This analysis identifies the direct connection between these regulations and physical activity, intending to gather essential insights to propose the inclusion of physical education professionals within the national health system from a governance perspective to achieve optimal results in health promotion and disease prevention.

The focus of the analysis will be on promoting physical activity as a key component of health and disease prevention. Furthermore, from the governance perspective of physical activity, the effective integration of physical education professionals into the Colombian health system is proposed. These professionals would be responsible for guiding all matters related to physical activity. This approach aims not only to enrich the work of health professionals but also to optimize the implementation of physical activity promotion strategies for the entire population, thus contributing to a significant improvement in the overall well-being of the country.

Methodology

The methodology employed is qualitative in nature, and the main techniques used were document review and analysis (Creswell, 2013) related to governance for physical activity and physical activity within the health system, based on institutional documents. The analysis is characterized as descriptive-analytical (Hernández, 2014), to construct a coherent argument that supports the integration of physical education professionals within the Colombian health system.

The operationalization of the methodological analysis addressed challenges and strategies related to inclusion and formalization, enhancing the effectiveness of the document analysis

process (Alamilla et al., 2023; Moreno et al., 2021). This approach aims to shed light on the complexities of governance and the importance of physical activity in social policies, emphasizing the need for a well-structured and technically sound justification for the integration of professionals into Colombia's health system (Forberger et al., 2022).

To address the integration of physical education professionals into the Colombian health system, the qualitative methodology was enriched with an exhaustive documentary review approach. This analysis includes public policies, local and international regulations, and guidelines from health organizations, providing a theoretical framework that supports the understanding of governance in physical activity and its relevance in the healthcare field (Forberger et al., 2022).

The review of institutional documents, such as Resolution 3280 of 2018, was key in identifying gaps and opportunities that could benefit from greater inclusion of physical activity in public health. The analysis was structured through thematic categories, allowing the examination of specific aspects of governance and the implementation of policies within the context of health and physical activity, contributing to a robust interpretation of the strategies needed to strengthen the health system.

The operationalization of the analysis included the identification of challenges and specific strategies related to the implementation and formalization of these professionals within the healthcare field, focusing on the necessary competencies and potential areas of intervention. Factors such as resource availability, social and professional perceptions of physical activity, and regulatory barriers were considered in order to construct a viable proposal for integration into the health system.

Additionally, a comparative analysis was conducted with international reference models that have implemented similar strategies on governance in physical activity, allowing for the extraction of lessons applicable to the Colombian context (Alamilla et al., 2023). This methodological approach aims not only to theoretically ground the proposal but also to provide a practical analysis of the necessary changes to optimize public health through a well-structured intervention in physical activity.

Results

This research examines governance in the field of physical activity, focusing on the profiles and competencies required in the health sector in Colombia. Through the analysis of institutional documents, international references are explored, and the incorporation of a new profession into the national health system is proposed, based on governance principles, aiming to provide significant benefits to the sector and address the challenges involved in innovation within the professional competencies structure.

The results presented below follow the structure shown in Table 1.

Table 1

Structure	Themes	
Theoretical Position	- Governance for physical activity.	
Analysis of	- Profiles and competencies in the Colombian Health Sector.	
Institutional	- Resolution 3280 of 2018.	
Documents		
Proposal	- International references.	
	- Proposal to incorporate a new profession into the national	
	health system from governance.	
	- Benefits.	
	- Challenges.	

Structure of the presented reflections

Source: Prepared by the authors.

As shown in the table, the results presented are the product of a document analysis from the theoretical perspective of governance for physical activity in the context of the Colombian national health system. This is based on a solid conceptual framework of governance in the field of physical activity (Cox et al., 2011; García y Tabarquino, 2024; Mariñez, 2016; Pan American Health Organization [PAHO], 2021). Additionally, the documents Professional Profiles and Competencies in Health and Resolution 3280 of 2018 (MinSalud, 2016; MinSalud, 2018) were analyzed in-depth, identifying provisions related to the promotion of physical activity and healthy lifestyles at different life stages.

Through this analysis, a significant gap in the system is observed: the absence of specialized physical education and physical activity professionals within the health team. The reflections presented propose strategies to integrate these professionals into the national health system, based on international models and the benefits of physical activity for public health. Furthermore, it offers an innovative vision to improve the promotion of physical activity from a public health perspective in Colombia.

Governance for Physical Activity

The proposal to include physical education professionals in the profiles and professional competencies of the Colombian national health system is closely related to the governance of physical activity. The governance of physical activity involves coordinating policies, strategies, and actions to enhance participation in physical activity at the population level (Forberger et al., 2022; Pedersen, 2023). This coordination is crucial for implementing public policies aimed at promoting physical activity (Kamada, 2020). Governance networks and effective collaborations are essential for developing coordination strategies for patient care in physical activity programs by health professionals (Albert et al., 2022).

Furthermore, it is necessary to develop population-based strategies that effectively promote exercise to reduce the burden of physical inactivity (Woods et al., 2022). It is also important to evaluate government policies and actions aimed at creating a healthy environment that encourages exercise, emphasizing governance to promote these activities at the political level (Ministerio de Salud y Protección Social, 2017).

One way to address this issue is through governance, which seeks the participation of different social actors (Aguilar, 2019), fostering collaboration and intersectorality in the solution (Fernández et al., 2020; Mariñez, 2016).

Thus, governance for physical activity, according to García y Tabarquino (2024):

Refers to the way decisions are made and managed regarding the promotion, organization, and development of physical activity and sports in a given community, region, or country. It involves the interaction of various actors from both the public and private sectors, as well as civil society, to create policies, programs, and strategies that encourage the regular and safe practice of physical activity.

In other words, governance for physical activity is a useful management tool and a valuable theoretical framework for including physical education professionals in the Colombian national health system, based on the approaches presented in Table 2.

Table 2

Approaches to	Governance for	Physical Activity
---------------	----------------	-------------------

Approach	Description
Intersectoral	Governance promotes collaboration between different sectors, allowing
Approach	physical education professionals to integrate with the health, education, and
	sports sectors.
Evidence-	Provides a framework to develop public health policies based on scientific
based Policies	evidence regarding the benefits of physical activity, supporting the inclusion
	of experts in the field.
Participation of	Encourages the participation of diverse stakeholder groups. Physical
Multiple	education educators could have a voice in decision-making regarding health
Actors	and wellness programs.
Capacity	Governance emphasizes the importance of strengthening the system's
Building	capacities. This would justify the training and hiring of physical education
	professionals within the health system.
Prevention	Aligns with the competencies of physical educators in promoting active and
Focus	healthy lifestyles by prioritizing prevention and health promotion
Resource	Provides a framework for the equitable distribution of resources, which could
Allocation	include allocating funds for physical activity programs and hiring
	professionals.
Monitoring and	Establishes mechanisms to assess the impact of interventions, allowing the
Evaluation	measurement of the effectiveness of physical activity programs led by these
	professionals.
Local	Allows strategies to be tailored to specific contexts, facilitating the
Adaptation	implementation of physical activity programs suitable for different Colombian
	communities.

Integration into	Provides a framework for integrating the promotion of physical activity into
Primary Care	primary health care, where physical educators could play a crucial role.
Addressing	By considering the social determinants of health, it justifies the inclusion of
Social	professionals capable of addressing sociocultural barriers to physical activity.
Determinants	

Source: Prepared by the authors based on Antonio (2023), Ramirez et al. (2019), and Sallis et al. (2015).

As seen in the table above, each of the approaches provides a justification for including physical education professionals in the health system through governance-based management for physical activity.

Profiles and Competencies of Health Professionals

The health sector in Colombia is supported by the work of various professions that play a key role in the comprehensive care of the population. In the context of continuous improvement of the quality of health services, it is essential to define the specific profiles and competencies of each of these professions to ensure optimal care that meets the needs of society. In this context, the document aims to present the profiles and specific competencies of fifteen professions that address the health of Colombians (MinSalud, 2016).

These professions span a wide range of disciplines, each with its own set of skills and responsibilities in the health field. The professions, according to MinSalud [Colombian Ministry of Health] (2016), are as follows:

- 1) Bacteriology
- 2) Nursing
- 3) Physical Therapy
- 4) Speech Therapy
- 5) Gerontology
- 6) Surgical Instrumentation
- 7) Medicine
- 8) Nutrition
- 9) Dentistry

- 10) Optometry
- 11) Psychology
- 12) Pharmaceutical Chemistry
- 13) Occupational Therapy
- 14) Respiratory Therapy
- 15) Social Work

Each of these professions plays a key role in different stages of the health system (promotion, prevention, diagnosis, treatment, and rehabilitation), making a significant contribution to the well-being of the Colombian population. Through the clear definition of the profiles and specific competencies of these professions, the goal is to strengthen training, professional practice, and the provision of health services in line with the needs and demands of the health system in Colombia (MinSalud, 2016).

In addition to the specific competencies for each profession, transversal competencies are also mentioned. The analysis performed focused only on the relationship between transversal and specific professions that include physical activity or sport.

In the transversal competencies, there is no direct link with physical activity or sport; the main focus is on transversal competencies such as ethics, teamwork, effective communication, and others, which are generally applicable to all professions in the health sector in Colombia (MinSalud, 2016).

On the other hand, of the 15 specific professions, three have a direct role in the orientation, guidance, and development of physical activity. In Table 3, each of them is described according to MinSalud (2016):

Table 3

Profession	Specific Competencies in Physical Activity
Physical	Specific competencies in physical activity and sport: Design, evaluate, control,
Therapy	and promote physical activity, exercise, and sports programs aimed at improving
	health, performance, and building self-care capacity in individuals and communities (p. 93).
Nutrition	Specific competencies in physical activity and sport: Promote healthy habits and
	lifestyles from the perspective of nutrition and physical activity throughout the
	life course (p. 152).
Medicine	Specific competencies in physical activity and sport: Understand the determinants
	of the individual's and community's overall health. As a performance criterion,
	understanding the basic principles of prescribing physical activity (p. 281).

Professions and Specific Competencies Related to Physical Activity

Source: MinSalud (2016).

As shown in Table 3, Physical Therapy, Nutrition, and Medicine are the three professions responsible for physical activity in the Colombian national health system. However, a question for future research is whether the curriculum of these professions includes in-depth teaching of all aspects related to physical activity. This includes exercise prescription, and the development of plans and physical activity programs, based on physical training paradigms, while considering different population groups, objectives, and approaches for health and well-being as strategies for disease prevention.

On the other hand, physical education professionals, such as physical education teachers or sports professionals with an emphasis on physical activity, have a broader approach to physical activity in their curricula. They are trained in exercise prescription, planning training sessions according to the needs or goals of population groups, and a stronger focus on physical activity for health and well-being (Congress of the Republic of Colombia, 1995; Congress of the Republic of Colombia, 2004; Law 181 of 2004; Law 934 of 2004; The Commonwealth & Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [UNESCO], 2019; UNESCO, 2015a, 2015b).

However, the document does not specifically mention the profession of Physical Education Teacher or Sports Professional with an emphasis on Physical Activity, because currently, these professions are not directly related to the health sector in Colombia. The document focuses on the professions that play a direct role in health care, such as prevention, diagnosis, treatment, and rehabilitation of diseases and injuries.

This gap was identified in the research and is presented as a result of this article, which supports the proposal to include these professions within Colombia's health system.

Resolution 3280 of 2018 (Ruta Integral de Atención en Salud [Comprehensive Health Care Pathway])

First, it is important to clarify that there are different resolutions (Resolution 3202 of 2016, Resolution 276 of 2019, and Resolution 2626 of 2019) in the national health system that address care pathways and policies for comprehensive health care, which have now been modified by the Modelo de Acción Integral Territorial [Comprehensive Territorial Action Model] (MAITE). However, these do not have a direct relationship with physical activity; therefore, they were not considered in this analysis.

Only Resolution 3280 of 2018 was analyzed, as it has a direct relationship with physical activity in some of its sections. It also mentions physical activity within the technical and operational guidelines of the Ruta Integral de Atención en Salud.

In Table 4, the most relevant technical and operational guidelines of the Ruta Integral de Atención en Salud, as established by the resolution, that are related to physical activity are presented.

Table 4

Technical and	Description	Responsible	Purpose
Operational		Entities	
Guideline			
Implementation	The Ruta Integral de Atención	Health institutions,	Ensure access to health care at
at all levels of	en Salud must be applied from	health	all levels, promoting
healthcare	primary care to specialized	professionals,	continuity and coordination
	care.	territorial entities	of services.
Promotion of	Include in healthcare the	Health institutions,	Foster a culture of prevention
healthy habits	promotion of habits such as	health staff,	and health promotion to
and disease	physical activity, disease	territorial entities,	reduce the incidence of
prevention	prevention, and early detection	Health Promotion	diseases.
	of risk factors.	Entities (HPEs)	
Coordination	Implementation should be	Health institutions,	Improve the effectiveness of
and articulation	coordinated among service-	HPEs, territorial	health services through
with health	providing institutions,	entities	cooperation among different
system actors	territorial entities, and health		health system actors.
	promotion entities.		
Differential	Care should be adapted to the	Health institutions,	Ensure that all population
approach in	needs and characteristics of the	HPEs, territorial	groups receive health care
healthcare	population, including	entities	appropriate to their specific
	vulnerable groups such as		characteristics and needs.
	children, adolescents, adults,		
	and elderly people.		
Continuous	The effectiveness and	Ministry of Health,	Ensure continuous
evaluation and	efficiency of the Ruta Integral	territorial entities,	improvement in care
monitoring	de Atención en Salud must be	health institutions	processes and maintain a high
	evaluated and monitored		standard of quality in health
	constantly.		service delivery.

Description, Responsibilities, and Purpose of Technical and Operational Guidelines

Source: Prepared by the author based on MinSalud (2018).

As seen in the table above, the technical and operational guidelines of Resolution 3280 of 2018 establish different types of interventions to promote and maintain the health of individuals, families, and communities.

The interventions are classified into three categories: population-based, from the Plan de Intervenciones Colectivas [Plan of Collective Interventions] (PIC), and individual interventions from MinSalud.

Regarding physical activity, Resolution 3280 of 2018 emphasizes the importance of population-based interventions, which are structural and require the collaboration and joint work of multiple sectors for their implementation and execution. This means a multisectoral approach that involves different actors and entities to achieve the proposed objectives. Population-based interventions are directed and coordinated by the national government and regional and local authorities, according to their respective responsibilities and jurisdictions.

The scope of these interventions may vary, ranging from the national level to the departmental or municipal level, depending on the capacities and powers of each entity. Additionally, it is essential that these interventions be integrated into and reflected in territorial planning instruments, such as development plans, as well as other programs and strategies related to public health, to ensure their proper implementation and sustainability (MinSalud, 2018).

In addition to public policies, population-based interventions also aim to create or transform environments that promote health, well-being, and the holistic development of individuals (MinSalud, 2018). This involves the implementation of strategies focused on building infrastructure and generating conditions that are conducive to recreational, sports, physical, and leisure activities. Creating healthy environments is fundamental to promoting active lifestyles and preventing non-communicable diseases (Organización Panamericana de la Salud [OPS] y Organización Mundial de la Salud [OMS], 2019; OMS, 2020).

On the other hand, Resolution 3280 of 2018 emphasizes the importance of addressing healthy habits and practices, including physical activity, in health care across different stages of life (childhood, adolescence, youth, adulthood, and old age). The promotion of healthy lifestyles is considered a key element in primary care and disease prevention.

In Table 5, the approach to physical activity at each stage of life is shown.

Table 5

Life Stage	Approach to Physical Activity
Childhood	- Investigate and promote physical activity habits.
	- Encourage play and other activities that promote physical activity.
	- Promote personal hygiene.
Adolescence	- Emphasize meeting the minimum physical activity recommendations by WHO.
	- Include physical activity as an integral part of physical and psychosocial
	development in health promotion content.
Youth	- Provide information on regular physical activity.
	- Link physical activity with healthy eating practices.
	- Connect physical activity with the prevention of diseases associated with this
	stage.
Adulthood	- Investigate physical activity practices.
	- Promote an active and healthy lifestyle.
	- Relate physical activity to the prevention of lifestyle-related diseases.
	- Address physical activity in relation to other habits such as tobacco or alcohol
	use.
Old age	- Investigate physical activity considering the fragility of this stage.
	- Promote physical activity as a means of preventing conditions that limit
	functionality.
	- Integrate physical activity with other healthy habits suitable for this stage of
	life.

Approach to Physical Activity at Different Stages of Life

Source: Prepared by the authors.

Therefore, Resolution 3280 of 2018 proposes population-based and informational interventions aimed at promoting healthy lifestyles, including physical activity, as a fundamental part of health promotion and maintenance within the population. Furthermore, it highlights the importance of intersectoral governance to address the social and environmental determinants of health and emphasizes the need to encourage healthy habits at all stages of life.

International References

Additionally, the cases of professionals in sports sciences and physical activity, who are recognized and play significant roles in health promotion in various countries around the world, can also be considered as a reference.

Some countries where professionals in physical education, sports sciences, and physical activity are recognized and have significant roles in the national health system, playing a key role in promoting health and physical well-being, are shown in Table 6.

Table 6

Countries with Professionals in Physical Education, Sports Sciences, and Physical Activity

Country	Role of Professionals in Physical Education, Sports Sciences, and
	Physical Activity
Spain (Simón y López,	- Work in various areas of health.
2020)	- Participate in physical activity promotion.
	- Involved in disease prevention.
United Kingdom	- Work in the health system as advisors.
(Sport England, 2024)	- Participate in physical exercise programs.
	- Work with different population groups.
Australia (Australian	- Play an important role in health and well-being promotion.
Government, 2020;	- Work in community programs.
Australian Sports	- Participate in exercise clinics and health centers.
Commission, 2024)	
United States (U.S.	- Play a key role in physical activity and health promotion.
Department of Health	- Work in clinical, community, and sports settings.
and Human Services,	- Include roles such as physiotherapists and certified personal trainers.
2024)	
Canada (OPS, 2021b)	- Work in health centers.
	- Participate in rehabilitation programs.
	- Collaborate with community organizations to promote healthy
	lifestyles.

Source: Prepared by the authors.

These are just a few examples of countries where professionals in physical education, sports sciences, and physical activity are more recognized and have more established roles in promoting health and well-being through physical activity. Acceptance and recognition vary depending on the country and its health system, as well as specific policies and regulations related to this area of study and profession.

Including a New Profession in the National Health System from the Governance Perspective

Considering the gap identified in the analysis of institutional documents and the international models presented, as part of the discussion in this research article, it is proposed to include professionals in physical education in Colombia's national health system, from the perspective of governance for physical activity. This would involve the following strategies, as presented in Table 7.

Table 7

Proposal	Description
Creation of	Propose the creation of a committee that includes representatives from health,
an	education, sports, recreation, and other relevant areas. This committee would
Intersectoral	design and implement strategies to integrate physical activity into the health
Committee	system, with the participation of physical education professionals (OPS, 2021a).
Development	Propose the creation of specialized training programs for physical education
of	professionals, focused on promoting physical activity as a key element in
Specialized	comprehensive health care. These programs would include disease prevention,
Training	rehabilitation through exercise, and the promotion of active and healthy
Programs	lifestyles (Magnusson, 2007).
Integration	Propose the integration of physical activity services in health centers, with
of Physical	physical education professionals providing advice, exercise prescription, and
Activity	patient follow-up as part of comprehensive care (Pedersen, 2023).
Services in	
Health	
Centers	

Governance Proposal for Physical Activity

Use ofPropose the development of digital platforms for the remote prescription andTechnologiesmonitoring of physical activity programs by physical education professionals,
Technologies monitoring of physical activity programs by physical education professionals,
and Digital facilitating access to these services for the population (Antonio, 2023).
Platforms
Partnerships Propose the creation of partnerships with the community, sports organizations,
with the private companies, and other stakeholders to promote physical activity as part
Community of a comprehensive health approach, involving physical education professionals
and Private in community initiatives and corporate social responsibility programs (Klijn &
Sector Koppenjan, 2015).
Impact and Propose the implementation of evaluation mechanisms to measure the impact of
Outcome including physical education professionals in the health system, collecting data
Evaluation on improvements in population health, reduction of healthcare costs, and other
relevant indicators.

Source: Prepared by the authors.

The previous table presents the proposal from the governance perspective for physical activity, aiming to include physical education professionals within Colombia's national health system. It highlights intersectorality, specialized training, service integration, the use of technologies, strategic partnerships, and impact evaluation as key elements for its effective implementation.

Benefits of Including Professionals in the National Health System in Colombia

The integration of physical education professionals into Colombia's national health system is crucial for several reasons. Firstly, they can design programs to prevent chronic diseases such as obesity and cardiovascular problems, which would improve health promotion efforts (Molano et al., 2023; Ribeiro et al., 2023).

Secondly, their inclusion ensures comprehensive care by addressing not only diseases but also promoting healthy lifestyles (Demydenko & Obeziuk, 2023). These professionals can assist in the rehabilitation and prevention of injuries through personalized exercise programs, which complement existing services (Soares & Damaceno, 2023). Moreover, their expertise encourages

an interdisciplinary approach, fostering collaboration between different professions for comprehensive patient care (Rybalko, 2023).

Finally, promoting physical activity through expert professionals can yield significant public health benefits by reducing chronic diseases and improving overall quality of life (Karpiuk et al., 2023).

Therefore, integrating physical education specialists into the health system is vital to strengthen health promotion, disease prevention, rehabilitation, and comprehensive health care in Colombia.

Challenges of Including a New Profession in the National Health System

It is important to anticipate some challenges that may arise when trying to implement these provisions into constitutional regulations or laws that ensure the mandatory implementation of this proposal in Colombia. Table 8 presents the challenges and their respective descriptions to provide a comprehensive view.

Table 8

Challenges

Challenge	Description
Legal and Regulatory	One of the main challenges is adapting the legal and regulatory
Framework	framework to recognize and define the role of physical education
	professionals in the health system.
Institutional Resistance	There may be resistance from established health institutions and
	professionals due to rigid institutional structures.
Funding	Allocating resources for new professionals in an already
	financially pressured system is a significant challenge.
Role and Competency	It is necessary to clearly define the roles and competencies of
Definition	physical education professionals within the health system.
Training and Education	Adapting the training of physical education professionals to the
	public health and primary care context.

Integration in	Achieving effective integration into existing health teams.
Multidisciplinary Teams	
Cultural and Perception	Overcoming the perception that physical education is not an
Barriers	integral part of healthcare, i.e., changing perceptions about
	health promotion in Colombia.
Geographic Inequalities	Ensuring an equitable distribution of these professionals in both
	urban and rural areas, considering geographic disparities in
	access to healthcare services in Colombia.
Impact Evaluation	Developing mechanisms to measure the impact of including
	physical education professionals on health outcomes.
Long-Term Sustainability	Ensuring the long-term sustainability of the inclusion of these
	professionals.

Source: Prepared by the authors.

In the previous table, the challenges related to legal and regulatory aspects, funding issues, professional integration, training, and long-term sustainability are shown. It is essential to effectively address these challenges to successfully implement physical education professionals into Colombia's national health system.

Conclusions

This study has thoroughly examined the feasibility and potential benefits of incorporating physical education professionals into Colombia's national health system, using a governance approach for physical activity.

Through rigorous document analysis, a significant gap has been identified in the Colombian health system: the absence of professionals specialized in physical education within the health team. While some professions such as physiotherapy, nutrition, and medicine possess competencies related to physical activity, it has been noted that there is a lack of a profession specifically dedicated to this crucial aspect of public health.

The inclusion of physical education professionals in the health system has great potential to significantly improve the promotion of physical activity and healthy lifestyles. This integration

could substantially contribute to the prevention of chronic diseases and improve the quality of life of the Colombian population.

The proposal to include these professionals closely aligns with the principles of governance for physical activity, promoting intersectoral collaboration, the involvement of multiple stakeholders, and the development of policies based on scientific evidence.

The study has identified several countries where physical education and sports science professionals play significant roles in the health system, providing potential models for implementation in Colombia. The integration of these professionals could lead to more comprehensive care, better prevention and rehabilitation programs, and a more holistic approach to public health.

However, various challenges have been identified for their implementation, including legal and regulatory aspects, funding, integration into existing teams, and the need to transform perceptions about health promotion.

In light of the findings, it is recommended to develop a legal and regulatory framework that recognizes and defines the role of physical education professionals in the health system. Additionally, the implementation of pilot programs is suggested to evaluate the impact of including these professionals in different healthcare contexts.

It is imperative to foster collaboration between health, education, and sports institutions to develop specialized training programs that address the needs of the health system. Furthermore, awareness campaigns should be created to promote the importance of physical activity in public health, to facilitate the acceptance and understanding of this new professional inclusion.

It is important to acknowledge the limitations of this study. The research was primarily based on document analysis and did not include empirical data on the implementation of the proposal. Furthermore, given its focus on the Colombian context, the generalization of the findings to other countries may be limited. These limitations open the door for future lines of research that could significantly enrich the field.

In this regard, pilot studies are proposed to evaluate the impact of including physical education professionals at different levels of the Colombian health system. It is also suggested to

investigate the perceptions of existing healthcare professionals about the integration of physical education teachers into their teams, which could provide valuable information to facilitate a smooth implementation.

An in-depth analysis of the identified international models could extract lessons applicable to the Colombian context, adapting best practices to the specificities of the national health system.

It is recommended to explore the economic and human resource implications of the largescale implementation of this proposal, which is essential to ensure its feasibility and long-term sustainability.

Therefore, this study provides a solid foundation for considering the inclusion of physical education professionals in Colombia's national health system. Despite the significant challenges identified, the potential public health benefits justify further exploration and gradual implementation of this proposal. The integration of these professionals could represent a significant step towards a more holistic and preventive approach to health in Colombia, thus contributing to improving the quality of life of the population and reducing the burden of chronic diseases in the country.

Ethical Considerations

This research did not require ethical approval, as it was based on documents from government agencies and a document review. Additionally, it did not require approval from an Ethics or Bioethics Committee since it did not involve any living resources, agents, biological samples, or personal data that pose any risks to life, the environment, or human rights.

Conflict of Interest

All authors made significant contributions to the document and declare that there is no conflict of interest related to this article.

Author Contribution Statement

Jefferson García Buitrago: Conceptualization, Methodology, Validation, Formal Analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization, Supervision. Raúl Andrés Tabarquino Muñoz: Conceptualization, Methodology, Validation, Formal Analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization, Supervision.

Funding Source

This article is a result of the doctoral thesis "Modelo de Gobernanza para la Actividad Física en el Distrito Especial de Santiago de Cali – Colombia [Governance Model for Physical Activity in the Special District of Santiago de Cali – Colombia]" funded using the authors' personal resources.

References

- (1) Aguilar, L. F. (2019). *La Gobernanza del Sector Público*. https://bibliotecas.diputados.gob.mx/cgi-bin/koha/opac-detail.pl?biblionumber=303825
- (2) Alamilla, R. A., Keith, N. R., Hasson, R. E., Welk, G. J., Riebe, D., Wilcox, S. & Pate, R. R. (2023). Future Directions for Transforming Kinesiology Implementation Science Into Society. *Kinesiology Review*, *12*(1), 98–106. https://doi.org/10.1123/kr.2022-0042
- (3) Albert, F. A., Malau, A. E., Crowe, M. J. & Malau, B. S. (2022). Optimising care coordination strategies for physical activity referral scheme patients by Australian health professionals. *PLOS ONE*, *17*(7). https://doi.org/10.1371/journal.pone.0270408
- (4) Antonio, C. A. (2023). Governance for Health: A Critical, but Poorly Understood, Health
 System Component. Acta Medica Philippina, 57(3).
 https://doi.org/10.47895/amp.v57i3.7663
- (5) Australian Government. (2020). Sport Governance Principles. https://www.sportaus.gov.au/governance/principles
- (6) Australian Sports Commission. (2024). Sport Governance and Organisational Enhancement. https://www.sportaus.gov.au/governance
- (7) Cox, L., Berends, V., Sallis, J. F., St John, J. M., McNeil, B., Gonzalez, M. & Agron, P.
 (2011). Engaging school governance leaders to influence physical activity policies. *Journal* of *Physical Activity & amp; Health*, 8(1). https://doi.org/10.1123/jpah.8.s1.s40

- (8) Creswell, J.W. (2013) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 4th Edition.* SAGE Publications, Inc.
- (9) Demydenko, M. & Obeziuk, T. (2023). Features of the methods of conduct of physical education classes in special medical groups for diseases of the cardiovascular system. Scientific Journal of National Pedagogical Dragomanov University. Series 15. Scientific and Pedagogical Problems of Physical Culture (Physical Culture and Sports), 1(159), 68– 72. https://doi.org/10.31392/NPU-nc.series15.2023.1(159).17
- (10) Fernández, Y., Coll, J., López, M., Rodríguez, A. R., Bosque, J. y Mesa, M. (2020). Enfoque intersectorial y responsabilidad social universitaria en la gestión del conocimiento sobre actividad física y salud. *Educación Médica Superior*, 34(2).
- (11) Forberger, S., Reisch, L. A., Meshkovska, B., Lobczowska, K., Scheller, D. A., Wendt, J., Christianson, L., Frense, J., Steinacker, J. M., Woods, C. B., Luszczynska, A. & Zeeb, H. (2022). What we know about the actual implementation process of public physical activity policies: results from a scoping review. *European Journal of Public Health*, 32(4), 59–65. https://doi.org/10.1093/eurpub/ckac089
- (12) García, J. y Tabarquino, R. A. (2024). Fundamentos Teóricos de la Gobernanza en la Promoción de la Actividad Física. *Ciencia Latina Revista Científica Multidisciplinar*, 8(3), 1275–1300. https://doi.org/10.37811/cl_rcm.v8i3.11335
- (13) Hernández, R. (2014). Metodología de la Investigación. In INTERAMERICANA EDITORES (Ed.), *Journal of Visual Languages & Computing*. McGRAW-HILL.
- (14) Kamada, M. (2020). Population strategy for promoting physical activity. *Nutrition Reviews*, 78(3), 86–90. https://doi.org/10.1093/nutrit/nuaa088
- (15) Karpiuk, I., Obeziuk, T. & Kachalov, O. (2023). Features of the implementation of health care competence in physical education classes. Scientific Journal of National Pedagogical Dragomanov University. Series 15. Scientific and Pedagogical Problems of Physical Culture (Physical Culture and Sports), 4(163), 9–12. https://doi.org/10.31392/NPU-nc.series15.2023.04(163).01
- (16) Klijn, E. H. & Koppenjan, J. (2015). *Governance Networks in the Public Sector*. Routledge. https://doi.org/10.4324/9781315887098
- (17) Ley 181 de 1995 [Congreso de Colombia]. Por la cual se dictan disposiciones para el fomento del deporte, la recreación, el aprovechamiento del tiempo libre y la Educación

Física y se crea el Sistema Nacional del Deporte. In Departamento Administrativo de la Función Pública (Ley 181 de 1995). Departamento Administrativo de la Función Pública.

- (18) Ley 934 de 2004 [Congreso de Colombia]. Por la cual se oficializa la Política de Desarrollo Nacional de la Educación Física y se dictan otras disposiciones. In Departamento Administrativo de la Función Pública. Departamento Administrativo de la Función Pública.
- Magnusson, R. S. (2007). Non-communicable diseases and global health governance: Enhancing global processes to improve health development. *Globalization and Health*, 3(2). https://doi.org/10.1186/1744-8603-3-2
- (20) Mariñez, F. (2016). Innovación y gobernanza colaborativa para la gestión de las políticas públicas [Ponencia]. XXI Congreso Internacional Del CLAD Sobre La Reforma Del Estado y de La Administración Pública: La Ética y Los Valores En La Administración Pública. https://www2.congreso.gob.pe/sicr/cendocbib/con4_uibd.nsf/AC61DABDCDA043CB052 58138006C132C/\$FILE/marinnav.pdf
- (21) Ministerio de Salud y Protección Social. (2017). Orientaciones gestión territorial promoción actividad física. https://isbn.cloud/9789585401228/orientaciones-para-lagestion-territorial-de-la-promocion-de-la-actividad-fisica/
- (22) MinSalud. (2016). Perfiles y competencias profesionales en salud. https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/TH/Perfilesprofesionales-salud.pdf
- (23) Molano, N. J., Torres, L. M. y Yanza, P. A. (2023). La investigación formativa en la acreditación de los programas de educación física (Formative research in the accreditation of physical education programs). *Retos, 49, 1068–1073.* https://doi.org/10.47197/retos.v49.99431
- (24) Moreno, S. M., Mendoza, M., Adsuar, J. C., Carlos, J., Rojo, J., Manzano, F. & Pérez, J. (2021). Validation of a Physical Activity and Health Questionnaire Evaluating Knowledge of WHO Recommendations among Colombians. International Journal of Environmental Research and Public Health, 18(7), 3526. https://doi.org/10.3390/ijerph18073526
- (25) Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [UNESCO].
 (2015a). Carta Internacional de la Educación física, la actividad física y el deporte. https://unesdoc.unesco.org/ark:/48223/pf0000235409_spa

- (26) Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [UNESCO].
 (2015b). Educación física de calidad (efc) guía para los responsables políticos.
 www.unesco.org/open-access/terms-use-ccbysa-sp
- (27) Organización Mundial de la Salud [OMS]. (2020). Cada movimiento cuenta para mejorar la salud – dice la OMS. https://www.who.int/es/news/item/25-11-2020-every-move-countstowards-better-health-says-who
- (28) Organización Panamericana de la Salud [OPS] y Organización Mundial de la Salud [OMS].
 (2019). Plan de acción mundial sobre actividad física 2018-2030. Más personas activas para un mundo sano. https://doi.org/10.37774/9789275320600
- (29) Organización Panamericana de la Salud [OPS]. (2021a). Gobernanza en salud.
 Https://Hia.Paho.Org/Es/Tema-de-Conocimiento/Gobernanza-En-Salud.
- (30) Organización Panamericana de la Salud [OPS]. (2021b). Perfil de País Canadá. Https://Hia.Paho.Org/Es/Paises-2022/Perfil-Canada.
- (31) Pedersen, K. (2023). Governance of nature-based health promotion: public policy and volunteer organisations' innovations of outdoor activities among urban youth. *Sport, Education and Society*, 1–14. https://doi.org/10.1080/13573322.2023.2209105
- (32) Ramirez, O., Daher, C., Fanjul, G., Gascon, M., Mueller, N., Pajín, L., Plasencia, A., Rojas Rueda, D., Thondoo, M. & Nieuwenhuijsen, M. J. (2019). Urban health: an example of a"health in all policies" approach in the context of SDGs implementation. *Globalization and Health*, 15, 1-21. https://doi.org/https://org/10.1186/s12992-019-0529-z
- (33) Resolución 2626 de 2019 [Ministerio de Salud y Protección Social]. Por la cual se modifica la Política de Atención Integral en Salud - PAIS y se adopta el Modelo de Acción Integral Territorial - MAITE.. República de Colombia.
- (34) Resolución 276 de 2019 [Ministerio de Salud y Protección Social]. Por la cual se modifica la Resolución 3280 de 2018. República de Colombia.
- (35) Resolución 3202 de 2016 [Ministerio de Salud y Protección Social]. Manual Metodológico para la elaboración e implementación de las Rutas Integrales de Atención en Salud RIAS.. República de Colombia.
- (36) Resolución 3280 de 2018 [Ministerio de Salud y Protección Social]. Lineamientos técnicos y operativos de la Ruta Integral de Atención para la Promoción y Mantenimiento de la Salud

y la Ruta Integral de Atención en Salud para la Población Materno Perinatal y se establecen las directrices para su operación. República de Colombia.

- (37) Ribeiro, H. S., Miranda, T. K. de C. R., Dias, C. A. & Rodrigues, S. M. (2023). Inclusion and work process of the physical educator of primary health care in hypertensive assistance. Seven Editora. https://doi.org/10.56238/devopinterscie-100
- (38) Rybalko, L. (2023). Physical and health activities as a guarantee of health care. Scientific Journal of National Pedagogical Dragomanov University. Series 15. Scientific and Pedagogical Problems of Physical Culture (Physical Culture and Sports), 3(162), 343–347. https://doi.org/10.31392/NPU-nc.series15.2023.3K(162).71
- (39) Sallis, R., Franklin, B., Joy, L., Ross, R., Sabgir, D. & Stone, J. (2015). Strategies for Promoting Physical Activity in Clinical Practice. *Progress in Cardiovascular Diseases*, 57(4), 375–386. https://doi.org/10.1016/j.pcad.2014.10.003
- (40) Simón, J. y López, C. (2020). Rol e importancia del profesional en ciencias de la actividad física en la sociedad durante y post-confinamiento por COVID19: una visión general de diferentes profesionales de la salud. *Revista de Comunicación y Salud, 10*(2), 593–606. https://doi.org/10.35669/rcys.2020.10(2).593-606
- (41) Soares, N. & Damaceno, J. (2023). The importance of interdisciplinary work between physiotherapists and physical education professionals in bodybuilding gyms: an integrative literature review. *Dataset Reports*, 2(1). https://doi.org/10.58951/dataset.2023.36
- (42) Sport England. (2024). Tackling inactivity investment guide.
 Https://Www.Sportengland.Org/Funds-and-Campaigns/Tackling-Inactivity-Investment-Guide.
- (43) The Commonwealth. y UNESCO. (2019). Medir la contribución del deporte, la educación física y la actividad física a los Objetivos de Desarrollo Sostenible. Guía práctica e indicadores modelo. www.thecommonwealth.org
- (44) U.S. Department of Health and Human Services. (2024). *Caminar. Correr. Bailar. Jugar. Es tu turno. Tú decides*. Https://Health.Gov/Espanol/Moveyourway.
- (45) Woods, C. B., Kelly, L., Volf, K., Gelius, P., Messing, S., Forberger, S., Lakerveld, J., Braver, N. R., Zukowska, J. & García, E. (2022). The Physical Activity Environment Policy Index for monitoring government policies and actions to improve physical activity. *European Journal of Public Health*, 32, 50–58. https://doi.org/10.1093/eurpub/ckac062