


Quality in ophthalmological patient care: A key strategy to combat visual impairment

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Received: 05/28/2025

Accepted: 06/26/2025

Published: 07/06/2025

Abstract: This article highlights the importance of ensuring quality in ophthalmologic care from Primary Health Care (PHC) as a key strategy to prevent visual impairment. **Objective :** To strengthen the early detection of visual disturbances through comprehensive patient-centered care. **Methodology:** A theoretical approach to three dimensions of quality: technical, interpersonal, and managerial. **Results:** PHC should implement continuing education, telemedicine, and coordination between levels of care. It is proposed to train primary care providers for basic visual assessments. **Conclusion:** Investing in quality reduces inequalities and improves quality of life through organizational and educational strategies and intersectoral alliances. **Contribution:** To propose improvements in access, equity, and effectiveness in eye care from the primary care level. **Keywords:** quality; ophthalmologic care; primary health care.

Calidad en la atención del paciente oftalmológico: Una estrategia clave para combatir la discapacidad visual

Resumen: Este artículo destaca la importancia de garantizar calidad en la atención oftalmológica desde la Atención Primaria de la Salud (APS) como estrategia clave para prevenir la discapacidad visual. **Objetivo:** Fortalecer la detección temprana de alteraciones visuales mediante atención integral centrada en el paciente. **Metodología:** Abordaje teórico de tres dimensiones de calidad: técnica, interpersonal y de gestión. **Resultados:** La APS debe implementar formación continua, telemedicina y articulación entre niveles asistenciales. Se propone capacitar al personal de primer contacto para evaluaciones visuales básicas. **Conclusión:** Invertir en calidad reduce desigualdades y mejora la calidad de vida mediante estrategias organizativas, educativas y alianzas intersectoriales. **Aporte:** Plantear mejoras en acceso, equidad y eficacia en salud visual desde la atención primaria.

Palabras clave: calidad; atención oftalmológica; atención primaria sanitaria.

Qualidade dos cuidados oftalmológicos: uma estratégia fundamental para combater a deficiência visual

Resumo: Este artigo destaca a importância de garantir a qualidade na atenção oftalmológica a partir da Atenção Primária de Saúde (APS) como estratégia fundamental para prevenir a deficiência visual. **Objetivo:** Fortalecer a detecção precoce da deficiência visual por meio da atenção integral centrada no paciente. **Metodologia:** Abordagem teórica de três dimensões da qualidade: técnica, interpessoal e de gestão. **Resultados:** Os CSP devem implementar a formação contínua, a telemedicina e a articulação entre níveis de cuidados. Propõe-se a formação do pessoal de primeiro contacto para avaliações visuais básicas. **Conclusão:** O investimento na qualidade reduz as desigualdades e melhora a qualidade de vida através de estratégias organizacionais e educativas e de alianças intersectoriais. **Contributo:** Propor melhorias no acesso, na equidade e na eficiência da saúde visual a partir dos cuidados primários.

Palavras-chave: qualidade; cuidados oftalmológicos; cuidados de saúde primários.

La qualité des soins ophtalmologiques : une stratégie clé pour lutter contre les déficiences visuelles

Résumé : Cet article souligne l'importance de garantir la qualité des soins ophtalmologiques dans le cadre des soins de santé primaires (SSP) en tant que stratégie clé pour prévenir les déficiences visuelles. **Objectif :** Renforcer la détection précoce des déficiences visuelles grâce à des soins complets centrés sur le patient. **Méthodologie :** approche théorique des trois dimensions de la qualité : technique, interpersonnelle et de gestion. **Résultats :** Les SSP doivent mettre en œuvre la formation continue, la télémédecine et l'articulation entre les niveaux de soins. Il est proposé de former le personnel de premier contact aux évaluations visuelles de base. **Conclusion :** investir dans la qualité permet de réduire les inégalités et d'améliorer la qualité de vie grâce à des stratégies organisationnelles et éducatives et à des alliances intersectorielles. **Contribution :** proposer des améliorations en matière d'accès, d'équité et d'efficacité dans le domaine de la santé visuelle à partir des soins primaires.

Mots-clés : qualité ; soins oculaires ; soins de santé primaires.

1. Introduction

Visual health is an essential component of human well-being. Optimal vision is critical for learning, work, mobility, and social participation. Since approximately 80% of the information we receive from the environment comes through our sense of sight, ensuring quality eye care is crucial to maintaining people's connection to the world around them.

In this context, quality in ophthalmologic care is not simply an ideal, but an imperative. It entails providing safe, effective, timely, and patient-centered services. To achieve this, it is essential to continually evaluate the processes involved in ophthalmologic care, from early detection of vision problems to treatment and follow-up.

Process evaluation in ophthalmology encompasses multiple dimensions. It includes technical quality, which refers to the use of scientific evidence and clinical experience to provide accurate diagnoses and effective treatments. It also encompasses interpersonal quality, which focuses on effective communication between healthcare personnel and patients, as well as shared decision-making. It also considers management quality, which involves the efficient organization of services and the optimization of resources.

Primary care plays a crucial role in the timely detection of vision problems, as primary care physicians, such as general practitioners and family medicine specialists, are the ones who most frequently interact with patients. Therefore, it is essential that these professionals be trained to perform an initial visual health assessment, which includes evaluation of visual acuity, pupillary reflexes, and fundus examination. The evaluation of ophthalmology processes should also consider the sustainability of services, coordination with other academic and government entities, recognition of healthcare personnel, and ongoing research to improve the quality of care.

This essay explores in detail the importance of quality in ophthalmologic care and the need to evaluate processes. It analyzes strategies that can be implemented to improve the quality of care, from the organization of services to the training of healthcare personnel. It also examines the role of primary care in the early detection of visual problems and the importance of coordination between different levels of care. Therefore, its primary objective is to analyze the quality of ophthalmologic patient care as a key strategy for preventing visual impairment through primary health care.

2. Development of the theme

2.1 Primary health care and the quality of health services

In the field of public health, much is said about primary health care. This constitutes an essential pillar of the health system, as well as of the social development of the community (International Conference on Primary Health Care, 1978). It represents the initial level of interaction between individuals, families, and communities with the national health system, bridging the gap between health care and the places where people live and work, and constitutes the first element of the continuum of health care. The latter consists of essential health services based on clinical practice, scientific evidence, and the use of socially acceptable technologies and methods. These services must be accessible to all individuals and families within the community, actively involving them and offering economically sustainable value (Starfield, 1998).

Primary health care addresses the main public health problems and provides preventive, curative, and rehabilitative services to address them. It includes education on prevalent health problems, promotion of adequate nutrition, safe access to drinking water, maternal and child care, family planning, immunizations, prevention of endemic diseases, treatment of common illnesses, and provision of essential medicines. The epidemiological transition has shifted attention toward chronic degenerative diseases, requiring intersectoral approaches involving agriculture, education, infrastructure, and the economy (Ávalos-García, 2010).

The concept of primary care has evolved toward a continuum of care at the first level of contact, focused on the person and addressing their health needs (Gulliford et al., 2006). It only refers cases that exceed its capacity to resolve the problem to higher levels, ensuring care coordination. Primary care leads to better health outcomes, lower costs, and greater equity (Starfield , 1998).

Person-centered primary care focuses on health needs through long-term relationships, assuming a commitment to caring for health at all stages of life. It also involves actively addressing factors that negatively affect health, promoting engagement in self-care (Stiggelbout et al., 2015).

Key strategies for strengthening PHC include: an integrated health system strengthened by leadership, financing, and human resources; a people-based approach; multidisciplinary teams; continuity of care; and quality in all its dimensions. The latter includes technical quality (evidence-based process), interpersonal quality (health-person relationship), and management quality (efficient organization) (Hogg et al., 2007).

Strengthening technical quality requires integrating scientific evidence with clinical experience, taking into account patient needs, through interactive workshops, continuous training, and telemedicine (Sackett et al., 1996). Strengthening interpersonal quality leads to shared decision-making, a participatory process that considers patient values and preferences through effective communication (Stiggelbout et al., 2015).

2.2 Quality management in health

Quality management in healthcare represents a profound organizational commitment that transcends administrative protocols to become a cultural value rooted in institutional identity. As Ávalos-García (2010) explains, this entails developing collaborative strategies where "healthcare personnel, patients, families, and institutions co-construct tangible improvements through participatory processes that demonstrate optimized results." This multidimensional approach is structured around five interconnected pillars:

To guarantee people-centered health services, it is essential to ensure safe, timely, and equitable services that respect cultural and gender diversity, implementing effective communication channels such as real-time feedback systems and language adaptations for indigenous populations. Likewise, human resource development must be fostered by promoting an ethical culture through continuous improvement groups, clinical mentoring, and interdisciplinary collaborative work that breaks down professional silos. Regarding the management of healthcare units, effective stewardship will be exercised through periodic clinical supervision, resource optimization with a focus on social determinants, and interregional coordination to avoid fragmentation. Furthermore, active social participation will be promoted by creating citizen oversight committees with decision-making capacity that

monitor quality standards using indicators understandable to non-specialists. All of this must be framed within a cross-cutting state policy that establishes quality as the cornerstone of national public health policies with binding budget allocations and mandatory legal frameworks.

The guiding principles are articulated through:

- a) User-centered approach: Adapting services to the specific needs of vulnerable populations (older adults, rural communities, people with disabilities) through universal design.
- b) Transformational Leadership: Implement PDCA (Plan-Do-Check-Act) cycles for continuous process improvement with quantifiable goals and defined deadlines.
- c) Evidence-based decisions: Use clinical, epidemiological and user satisfaction data to optimize protocols, following the postulates of Sackett et al. (1996) on evidence-based medicine.
- d) Staff empowerment: Recognizing that "engaged professionals are drivers of systemic change" (ISO 9001:2000, 2000) through professional recognition and career development programs.

2.3 Quality management in ophthalmology

- a) In the ophthalmology field, quality management faces unique challenges that require contextualized adaptive strategies:
- b) Permanent continuing education: Intensive training in high social impact pathologies such as diabetic retinopathy and glaucoma through practical refraction workshops, emergency simulations with specialized mannequins and telemedicine for timely referral protocols, prioritizing regions with a shortage of specialists (Hogg et al., 2007).
- c) Robust operational sustainability: Implement unified communications systems with interoperable electronic medical records across care levels, predictive maintenance of diagnostic equipment (digital ophthalmoscopes, optical coherence tomographs) through service contracts, and logistics circuits for an uninterrupted supply of surgical supplies.
- d) Strategic intersectoral alliances: Coordinate with education secretariats for annual school visual screenings with standardized protocols, and with local governments in community campaigns against avoidable blindness through equipped mobile units (WHO, 2020).
- e) Recognizing performance with precise metrics: Design incentive systems based on key indicators such as:
 - o Early detection rate of diabetic retinopathy (>85% in diagnosed population)

- Reduction in waiting time for cataract surgery (<30 days in uncomplicated cases)
 - Percentage of postoperative follow-up at 30 days (>90%)
- f) Contextualized applied research: Develop clinical guides adapted to regional realities, such as simplified protocols for cataract management in tropical areas with technical limitations or algorithms for differential diagnosis of endemic conjunctivitis (Ortún , 2005).

2.4 Quality assessment in primary care of ophthalmological patients

The foundation of primary care is the interrelationship between patients and physicians. In ophthalmology, the primary care physician (general practitioner, family physician, or pediatrician) should perform initial assessments that include visual acuity, pupillary reflexes, and fundus examination, essential skills for identifying low vision early (Gulliford et al., 2006). Recognizing visual complications in premature newborns, developing children, or patients with chronic diseases such as diabetes allows for proactive care. This approach is valuable considering that "half of the conditions that cause visual impairment are preventable" (WHO, 2020), requiring timely referral to a specialist when necessary.

Ophthalmological primary care is constantly undergoing changes in organization, complexity, and timeliness. Numerous diagnostic and therapeutic interventions have been relegated to the primary care level. Starting with appropriate examinations at this level would be key to controlling visual impairment as a public health problem (Starfield , 1998).

The complexity of ophthalmic processes requires precise approaches to assessing quality at every level. Technological progress demands greater capacity to assimilate innovations, increasing the importance of continuous improvement (Chow Mak , 2005). The expansion of roles and change in the locations where care is provided reflects innovation in ophthalmic PHC. The quality agenda must prioritize policy evaluation, resource effectiveness, and services geared toward concrete outcomes (Donabedian, 2003).

2.5. Instruments for assessing the quality of health care

The most widely used and available techniques and instruments that facilitate quality assessment in healthcare are: Standards as benchmarks against which the processes, interventions, actions, programs, or tasks being assessed are compared, expressed as indicators, policies, clinical criteria, guidelines, conventions, or common practices (Carnota, 2005). Analysis instruments designed by quality specialists, which provide an organized and logical way to study phenomena and generate accurate conclusions, include techniques such as Pareto and Ishikawa charts, process maps, and participatory techniques (Olivera, 2013). Evaluations by external organizations such as accreditations determine compliance with established standards, serving as an institutional endorsement of performance. Audits, conducted by third parties (usually peers), analyze whether medical practice is consistent with clinical standards or accepted criteria. Internal auditing (or internal control), performed by specialized personnel within the organization, acts as an advisor to management to capture information, analyze processes, evaluate actions, and issue objective recommendations for continuous improvement (ISO 9001:2000, 2000). The ISO 9000 standards, developed by the International Organization for Standardization, offer guidelines for quality management in any organization. ISO 9001:2000 (the only certifiable standard) is structured into four logical blocks based on the PDCA (Plan-Do-Check-Act) cycle, applicable even to integrating diverse

management systems. The guidelines of the IWA17 standard (in force since 2001) contain improvement plans for healthcare organizations, based on ISO 9004:2000. The requirements of these standards are applicable to any organization, public or private, and are not mandatory. Special studies include scientific research designed to diagnose the quality of healthcare processes or institutions, requiring highly qualified professionals. Social control linked to community empowerment, according to Werner (1988), is "the process by which disadvantaged people work together to increase control over events that determine their lives." This empowerment involves providing information and training so that the community exercises its right to express an opinion, criticize, or accept actions of health authorities, actively participating in decision-making regarding services received, with access to scientific and technological education, respect, interaction, and co-participation. Benchmarking compares products, services, or work processes with models of excellence to learn from best practices, measure performance, and design improvement strategies. Process management is a technology for managing activities in complex health organizations (hospitals, clinics), seeking continuous improvement and excellence by defining tasks, responsibilities, sequences, and linked operations (Olivera, 2013). These instruments show that countries with a greater orientation toward primary care achieve better health at a lower cost, improving procedures and the quality of medical services (Starfield, 1998).

2.6. Approaches to assessing quality that can be applied to ophthalmological patient care

The dimensions established by A. Donabedian (2003) are still valid, based on structure, process and results, however in primary care the term performance has gained a lot of strength, and this is how the "performance evaluation" emerges, integrating itself into the culture of the health system today as a current practice inherent to any organization that seeks to improve, whether it has a scientific, teaching, research, healthcare or business interest; the dimensions to evaluate the quality defined by B. Starfield (1998) are: Capacity (both of the staff, the facilities, organization of processes and services, the financial resource and its management), Performance (symbolized precisely by the first contact of attention, continuity, comprehensiveness and coordination of attention which are characteristics of primary care and which in the case of ophthalmology would mean the management from the first level of care or first contact in first level units up to the specialty and the management and follow-up, resolving or rehabilitating or subspecialty, if applicable, that is given to a patient with visual disability, also considering essential characteristics such as referral references, clinical histories and the development of skills and competencies of the staff), Health status (the degree of well-being and quality of life of patients who have been treated for ophthalmology would mean that there are also patients who undergo ophthalmological management); to evaluate quality in primary care, the individual or collective perspective is also considered, where in the individual perspective the orientation of quality can go in two dimensions: accessibility and effectiveness, evaluable from clinical care and interpersonal relationships, while the collective perspective underlies equity and efficiency; there are other proposals such as that of Hogg et al. (2007) that contemplate structure and performance, the structural aspect being constituted by: a) the health care system (continuous quality improvement, remuneration, financing, information systems and human resources), b) the practical environment (medical and social services, demographic characteristics and community integration), c) the organization of the practice of medicine (group composition, human training, technologies, innovation, space design, team functioning, clinical management and organizational culture); the scope of performance related to 1) the characteristics of the health care service (accessibility, doctor-patient relationship, continuity, integration, services offered

and provider satisfaction) and 2) the technical quality of the service (health promotion, primary/secondary prevention, follow-up of acute/chronic conditions); This integrative approach applicable to all levels of ophthalmological care allows reinventing processes that prevent avoidable visual impairment through early detection and healthcare innovation, jointly involving managers, healthcare personnel, patients and the community according to Ávalos-García (2010), adapting to available resources to raise system performance standards (Ortún 2005) prioritizing vulnerable groups (WHO 2020).

3. Final considerations

Quality in ophthalmologic care is a fundamental pillar for preventing visual impairments that significantly affect people's daily lives. Effective integration between levels of care, along with evidence-based strategies, strong interpersonal communication, and efficient management, guarantees positive outcomes for both patients and the healthcare system.

In this context, it is essential to strengthen the competencies of medical personnel from the primary care level. Initial assessment of visual status (visual acuity, pupillary reflexes, and fundus examination) should be an integral part of the clinical process to identify early visual problems that can lead to severe disabilities if not treated appropriately.

In conclusion, investing in continuing medical education, applied research, and the implementation of sustainable systems not only improves the technical and interpersonal quality of ophthalmologic services, but also strengthens their positive impact at the community level. Patient-centered care directly contributes to reducing inequities in eye health and significantly improving their quality of life.

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

Blanca Ivonné Salinas Escudero (50% of the work): Conceptualization, Data curation, Formal analysis, Resources.

María Isabel Avalos-García (25% of the work): Methodology, Software, Supervision, Validation, Visualization.

Heberto Romeo Priego-Álvarez (25% of the work): Writing – original draft, Writing – review and editing

Research funding: With own resources.

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

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

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