

# National Strategy for Quality of Care and Patient Safety for Greece 2025–2030



Action under the European Union Contribution Agreement  
REFORM/IM2023/001

# Contents

Acknowledgements.....	IV
Abbreviations.....	V
Executive summary.....	VI
<b>1. Introduction: why do we need a strategy?.....</b>	<b>2</b>
1.1 Global policy context.....	2
1.2 An opportunity for Greece.....	5
<b>2. How did we design the Strategy?.....</b>	<b>6</b>
2.1 Inputs: literature review.....	6
2.2 Inputs: situation analysis, semistructured interviews and open online survey.....	7
2.3 Co-creation process.....	8
<b>3. Where do we stand?.....</b>	<b>11</b>
<b>3.1 Situation analysis: Greek health system.....</b>	<b>11</b>
3.1.1 Financing.....	11
3.1.2 Resources and workforce.....	12
3.1.3 Service delivery.....	12
3.1.4 Health outcomes.....	13
<b>3.2 Situation analysis: Greek quality of care and patient safety ecosystem.....</b>	<b>13</b>
3.2.2 Improvement methods and interventions.....	17
3.2.3 Health data systems.....	19
3.2.4 Indicators and quality metrics.....	19
<b>4. What do we need?.....</b>	<b>20</b>
4.1 Vision.....	20
4.2 What do we mean by quality of care?.....	20
4.3 Our approach.....	22

<b>5. How will we implement and sustain our approach?.....</b>	<b>23</b>
<b>5.1 Impactful actions.....</b>	<b>23</b>
<b>5.2 Whole-system approach:     stakeholder engagement and cooperation.....</b>	<b>31</b>
<b>5.3 Strategy alignment.....</b>	<b>31</b>
<b>5.4 Monitoring progress and continuous learning.....</b>	<b>31</b>
<b>References.....</b>	<b>32</b>

## Acknowledgements

This Strategy was jointly developed by the WHO Office on Quality of Care and Patient Safety, Athens,, the Ministry of Health of Greece and the Agency for Quality Assurance in Health (AQAH), *Soci t  anonyme* [limited liability company] (S.A.), as part of outputs 1.1 and 1.3 of the project Development of a National Strategy for Quality of Care, Patient Safety, and Patient Engagement in Health Care Services Provision. This initiative was funded by the European Union (EU) through the Technical Support Instrument.

We are thankful for the great technical support provided by the WHO Regional Office for Europe, through its WHO Athens Office on Quality of Care and Patient Safety,. especially to Jo o Breda, Head, WHO Athens Quality of Care and Patient Safety Office, and Special Representative and Officer in Charge in Greece, WHO Country Office in Greece; Christos Triantafyllou, Project Officer, Constantina Vasileiou, Project Officer, Marie Stridborg, Consultant, and V lter R Fonseca, Technical Officer, WHO Office on Quality of Care and Patient Safety.

We would like to express our heartfelt appreciation to the following colleagues, who provided technical input and feedback for the development of the Strategy and the preparation of this report: Lilian Venetia Vildiridi, Secretary General for Health Services, Ministry of Health of Greece; Aggeliki Karaiskou, Dafni Kaitelidou, Eleftherios Thiraios, Georgia Kourountidou, Kalliopi Panagiotopoulou and Panoraia Rammou, National Agency for Quality Assurance in Health, S.A. (AQAH); Christos Lionis, Professor Emeritus of General Practice and Primary Health Care, University of Crete; Kyriakos Souliotis, Professor of Health Policy, University of the Peloponnese; Ioannis Yfantopoulos, Professor of Social Policy and Health Economics, National and Kapodistrian University of Athens; Vasiliki Kapaki, Professor of Health Policy and Health Economics, Dimocritus University of Thrace; Yannis Tountas, Emeritus Professor of Social & Preventive Medicine, Medical School, National and Kapodistrian University of Athens; and Zoi Tsimtsiou, Associate Professor, MSc Programme Director, Social-Preventive Medicine and Quality of Health Care, School of Medicine, Aristotle University of Thessaloniki.

Special thanks are also extended to the Greek authorities of the seven health regions, to all participants of the Greek health region workshops, to the Greek Patients' Association, and to all patients who contributed to the 1st Athens Patients' Forum.

We express our deep appreciation for the scientific collaboration with the Department of Hygiene, Epidemiology, and Medical Statistics of the School of Medicine, National and Kapodistrian University of Athens; the Department of Nursing, National and Kapodistrian University of Athens; the School of Medicine, Aristotle University of Thessaloniki; and the WHO Collaborating Centre for Education, Research and Evaluation of Safety and Quality in Healthcare, Lisbon, Portugal.

Finally, we would like to acknowledge the invaluable support of Florin Popa, Head of Sector, Labour Market, Social Services and Inclusion at the Directorate-General for Structural Reform Support (DG REFORM), European Commission.



## Abbreviations

AQAH	Agency for Quality Assurance in Health
COVID-19	coronavirus disease
CQPS	commission for quality of care and patient safety
DG REFORM	Directorate-General for Structural Reform Support, European Commission
DQPS	department for quality of care and patient safety
EKAPTY	Εθνικό Κέντρο Αξιολόγησης Ποιότητας και Τεχνολογίας στην Υγεία [National Evaluation Centre of Quality and Technology in Health]
EKEA	Εθνικό Κέντρο Αιμοδοσίας [National Centre for Blood Donation]
EODY	Εθνικός Οργανισμός Δημόσιας Υγείας [National Public Health Organization]
EOF	Εθνικός Οργανισμός Φαρμάκων [National Organization for Medicines]
EOM	Εθνικός Οργανισμός Μεταμοσχεύσεων [National Transplant Organization]
EOPYY	Εθνικός Οργανισμός Παροχής Υπηρεσιών Υγείας [National Organization for the Provision of Health Services]
EU	European Union
EU27	the 27 Member States of the EU from 2020
GRIPP	Greek Infection Prevention Programme
IDIKA	Κέντρο Ηλεκτρονικής Διακυβέρνησης Υπηρεσιών Κοινωνικής Ασφάλισης [e-Government Centre for Social Security Services]
ISO	International Organization for Standardization
KETEKNY	Κέντρο Τεκμηρίωσης και Κοστολόγησης Νοσοκομειακών Υπηρεσιών [Centre for Documentation and Costing of Hospital Services]
NSCQE	national steering committee for quality, patient safety and equity in health care
OECD	Organisation for Economic Co-operation and Development
OQPS	officer for quality of care and patient safety
S.A.	<i>soci�té anonyme</i> [limited liability company]
SNF	Stavros Niarchos Foundation

## Executive summary

### Background

Health care worldwide often faces significant challenges related to quality, resulting in unnecessary suffering, loss of trust and substantial health care costs. The United Nations 2030 Agenda for Sustainable Development emphasizes that universal health coverage is vital for equitable, safe and affordable care. However, persistent challenges – including inequality, ageing populations, multimorbidity and climate change – continue to impede progress.

Achieving universal health coverage requires improvements not just in access to care, but also in the quality of the care provided. WHO defines high-quality care as effective, safe, people-centred, timely, equitable and efficient, with patient safety as a critical element. Unsafe care results in preventable harm and contributes to significant financial burdens, emphasizing the need for a national strategy to enhance both patient safety and quality of care.

The Member States in the WHO European Region are increasingly investing in governance, leadership, workforce development, infrastructure and community engagement to build resilient, high-quality health systems. Greece has made notable progress, including the establishment of the Agency for Quality Assurance in Health (AQAH), as well as investment in hospital upgrades, digital transformation and reforms in public, mental and primary health care.

However, Greece still lacks a comprehensive national strategy for quality care, leading to inefficiencies, unmet medical needs and suboptimal health outcomes. Health literacy remains low, and the level of unmet medical need exceeds the average in the WHO European Region. Public trust in hospital care is also weak, with a widespread belief that patients may deteriorate in the hospital setting.

There is thus a significant opportunity for Greece to address these gaps and enhance governance, accountability and the quality of care through a unified, strategic approach.

### Development of the National Strategy for Quality of Care and Patient Safety 2025–2030

The National Strategy for Quality of Care and Patient Safety provides a comprehensive framework for improving health care outcomes, patient safety and public trust. Developed through collaboration between the WHO Regional Office for Europe, the Ministry of Health of Greece, the AQAH and DG REFORM, under the European Union (EU) project HQC-2-Greece, the strategy is based on a mixed-method approach that includes literature reviews, situation analyses, surveys, interviews and a co-creation process.

The literature review identified best practices in four key areas: national policies for quality of care, patient safety incident reporting systems, training programmes and health literacy. These insights, gathered from both Greek and international experts, informed the design and implementation priorities of the Strategy. A comprehensive situation analysis – including desk reviews, an online survey and interviews with 405 participants from various sectors –



provided valuable input from policy-makers, health care professionals, academics and patient representatives.

A series of seven workshops across Greece, engaging 348 participants, focused on prioritizing actionable recommendations in governance, patient safety, clinical guidelines and health literacy. Discussions facilitated by both Greek and international experts addressed system quality, digital health solutions, patient-centred care, equity and safety. Contributions from the 1st Athens Patients' Forum ensured that the Strategy was patient-centred and reflective of the needs and preferences of the population.

Through this inclusive, evidence-based approach, the Strategy aligns national and regional priorities, establishing a clear path for improving the quality of health care in Greece.

## Vision

**The vision of the Strategy is to build a health care system where quality is a daily commitment, ensuring that all individuals trust that health care will be safe, respectful, equitable and efficient.** This vision emphasizes that quality should not be an aspirational goal, but a universal expectation. The aim is to create an environment where patients can be confident that their care is of the highest standard, that their rights and values are respected, and that care is efficient and effective.

By focusing on equity, the vision acknowledges the diverse needs of patients and highlights the importance of fair access to care for all. It also emphasizes addressing health disparities, ensuring that no one is left behind in receiving the care they need. Respect for human dignity is central to this vision, ensuring that patients' rights, values and preferences are prioritized throughout their care journey. Additionally, the Strategy advocates for proactive harm prevention and the efficient use of resources to achieve optimal health outcomes. This vision imagines a health care system where quality is consistently pursued and upheld by all stakeholders.

## Strategic aims

The Strategy aims to achieve the following key objectives.

1. **To nurture an efficient, accountable and data-driven health system:** strong leadership and governance are essential for ensuring operational efficiency and evidence-based decision-making. Effective governance structures set clear policies, enforce accountability and ensure transparent oversight. By systematically collecting and analysing data, the country can continuously improve health care performance and decision-making. This approach fosters a culture of accountability and enables timely, informed responses to health care challenges.
2. **To foster trust in an effective and safe health system:** building public trust requires a focus on patient safety, clinical outcomes and the reliability of health care services. Evidence-based practices, integrated with innovative solutions, are key to enhancing safety, accessibility and overall patient outcomes. This will help to ensure that the health care

system operates reliably, fairly, and efficiently, increasing trust among patients, health care workers and the wider public.

3. **To create patient partnerships in health care provision:** empowering patients to take an active role in managing their own health care is essential for developing a high-performing and cost-effective health care system. This approach leads to better resource allocation, enhanced satisfaction for both patients and providers, greater utilization of preventive services and improved health outcomes. Patients must understand their health conditions, treatment options and care processes if they are to make informed decisions. Health literacy, especially digital health literacy, equips individuals to engage effectively with health care providers. The Strategy aims to ensure that patients, families and providers collaborate to personalize care, respecting individual values and preferences and thereby improving the overall quality of care.

## Implementation and strategic directions

The Strategy is structured using three strategic directions.

1. **Leadership and governance:** this direction focuses on building a strong foundation for the health system through effective leadership, transparent governance and the integration of evidence-based practices. When the system operates efficiently and responsibly, it can better address the needs of the population.
2. **Evidence and innovation:** this direction emphasizes the importance of continuous innovation and the integration of evidence-based practices and focuses on improving safety, effectiveness and equity in health care. By embracing new technologies and approaches, the country can enhance the reliability of its health system.
3. **Literacy and engagement:** this direction emphasizes patient empowerment through improved health literacy and engagement of patients in care decisions. Ensuring that patients are well informed and fully involved in their care leads to better outcomes and strengthens the patient–provider relationship.

The Strategy includes 11 objectives and 47 prioritized actions, which are designed for phased, stepwise implementation. These actions focus on improving patient safety, governance, clinical guidelines and health literacy across all levels of the health care system.

## Conclusion

The National Strategy for Quality of Care and Patient Safety 2025–2030 provides Greece with a comprehensive roadmap to address gaps in its health care system and enhance service delivery. By focusing on leadership, governance, evidence and patient engagement, the Strategy aims to transform the health care landscape into one that consistently delivers high-quality care for all citizens. This approach offers Greece the opportunity to build a more efficient, transparent and trusted health care system, ensuring better health outcomes for the population and building the foundation for long-term success



# 1. Introduction: why do we need a strategy?

## 1.1 Global policy context

Existing evidence shows that health care is often inadequate and of poor-quality for many health conditions and countries, with the most vulnerable populations faring the worst (1). Overall, poor-quality care can lead to adverse outcomes, including unnecessary health-related suffering, persistent symptoms, loss of function and a lack of trust and confidence in health systems. Substandard care also exerts a substantial economic impact and brings side-effects such as catastrophic expenditure and increases in the cost of expanding health coverage.

The United Nations 2030 Agenda for Sustainable Development calls for a bold commitment to ensure healthy lives and promote well-being for all at all ages. Various challenges exist, with inequalities in health care hampering the full achievement of universal health coverage. Universal health coverage plays a vital role in enhancing health outcomes. It is an essential element of sustainable development and poverty alleviation, serving as a foundation for initiatives aimed at diminishing social and gender disparities. Furthermore, it reflects a government's dedication to advancing the welfare of all citizens, while fostering health security and social unity. A commitment to universal health coverage entails tackling the social determinants of health, including education, living conditions and the broader influences that impact individuals' health and their access to health care services.

The pandemic of coronavirus disease (COVID-19) has exposed pre-existing vulnerabilities in health systems, while also spotlighting innovative solutions that could enhance health care delivery in the post-COVID-19 era. Noncommunicable diseases associated with unhealthy lifestyles, environmental hazards and an ageing population impose an unsustainable burden on health care systems.

In order for everyone to be able to trust that they will receive the right care – including preventive and health promotion services – at the right time, in the right place, from the right person, without experiencing financial hardship, WHO has adopted the Framework on Resilient and Sustainable Health Systems for the WHO European Region 2025–2030 (2). Building on the legacy of the Tallinn Charter: Health Systems for Health and Wealth (3), this vision is being realized in the form of high-performing health systems that are available to all people across the life course and are relevant to a rapidly changing world.

Trust plays a pivotal role in the functioning, effectiveness and sustainability of health systems. Trust is integral to meaningful and beneficial relationships between patients and their clinicians and, more broadly, between the public and its health system. Trust is key to building health systems that foster public participation and legitimacy. Trust is essential for better health outcomes and for economies to succeed. Serving as a catalyst for social cohesion, trust underpins cooperation and the equitable sharing of resources within societies. Trust instils confidence among individuals, promoting a sense of unity and a collective commitment to the well-being of all (4).

Recognizing current challenges, it is imperative to increase our efforts to go beyond classic public health measures. Persistent health inequalities, increasing costs and workforce shortages are

well established threats to health system sustainability. Health system resilience needs to be contextualized in relation to broader issues affecting the WHO European Region, including the health impacts of climate change, conflict, social fragmentation, demographic shifts, complex multimorbidities, a volatile social and economic landscape, and rapid digitalization of society. In this challenging context, health systems must transform to meet the physical and mental health needs of individuals and populations, must become more resilient to potential crises, and must be sustainable. To achieve this, the climate of trust between all health system stakeholders must be strengthened.

As defined by WHO, “quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes” (5). A high quality of care is critical for achieving universal health coverage, as recognized in the 2030 Agenda (target 3.8 of the Sustainable Development Goals: “achieve universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all”). Orienting health systems to deliver and improve quality is a fundamental aspect of progress towards meeting the expectations of populations and health care workers, and ultimately towards achieving universal health coverage. In working towards that target, WHO endorses the concept that high-quality health services should be effective, safe and people-centred, as well as timely, equitable and efficient (6).

As countries work towards achieving universal health coverage, there is increasing recognition that better health care and health outcomes cannot be ensured solely through infrastructure, medical resources and health care providers. Even if countries extend health access to their entire populations and provide robust financial protection, health outcomes will still suffer if services lack quality and pose safety risks. Thus, there is no universal health coverage without quality of care.

Quality of care becomes an organizing principle to drive positive transformation and pave the way to universal health coverage. This principle should apply not only to individual health care services, but also to entire health systems, providing a beneficial intersection between individual needs and societal demands (7). Effective responses require governance foresight, characterized by creativity, innovation and collaboration across all sectors.

With the global momentum of universal health coverage as a backdrop, combined with the previous decades of work on health care quality worldwide, the time is now ripe for advancing high-quality health care systems as the ones that optimize health care in a given context by consistently delivering care that improves or maintains health outcomes, by ensuring that they are valued and trusted by all people, and by responding to changing population needs.

The sustainable development agenda will not be achieved without ensuring that health services are safe. Patient harm due to unsafe care is a large and growing global public health challenge and is one of the leading causes of death and disability worldwide (7). Every year, large numbers of patients are harmed or die because of unsafe health care, creating a high burden of death and disability worldwide, especially in low- and middle-income countries. On average, an estimated one in 10 patients is subject to an adverse event while receiving hospital care in high-income countries. The economic cost of unsafe care can be understood in two ways: the direct cost due to resource wastage and the indirect costs in loss of productivity in the population. In high-income countries, up to 15% of hospital expenditure can be attributed to wastage due



to safety failures. Although unsafe care is usually linked with hospital-based care, unsafe care is a systemwide problem. Available evidence estimates that the direct costs of harm, such as additional tests, treatments and health care, in the primary and ambulatory setting amount to around 2.5% of total health expenditure. Harm in primary and ambulatory care often results in hospitalization. Each year, hospitalizations may account for over 6% of hospital bed-days and more than 7 million admissions among member countries of the Organisation for Economic Co-operation and Development (OECD) (8).

Most patient harm is avoidable. The benefits of having a strategic and coordinated approach to patient safety, addressing the common causes of harm and the approaches to preventing it, have been recognized by policy-makers and political and health leaders worldwide.

The World Health Assembly, at its 72nd session in May 2019, adopted resolution WHA72.6 on global action on patient safety (9), giving priority to patient safety as an essential basic step in building, designing, operating and evaluating the performance of all health care systems. To respond to resolution WHA72.6 and move forward from global commitment to tangible action, the Global Patient Safety Action Plan 2021–2030 (10) was developed by WHO, in collaboration with WHO Member States and key stakeholders.

The Action Plan, highlighting patient safety as a foundation, a prerequisite for high-quality care and a human right, envisions a world in which no one is harmed in health care and every patient receives safe and respectful care, every time, everywhere.

With evidence increasingly showing health literacy is critical for quality of care in the broader health system performance assessments (11), WHO calls for a health-literacy-in-all-policies approach for an integrated response by health systems to people's needs in the endeavour to improve health outcomes for all (12).

A growing number of countries in the WHO European Region are investing in high-quality health systems to encourage systemwide efforts for improvement and are therefore making the necessary investment in favourable health system foundations for quality (13). These foundations encompass governance and leadership, intersectoral collaboration, the health workforce, financing, medicines, medical products and technologies, infrastructure, health information systems, community engagement and participation, health promotion and disease prevention, and the research and learning capacity of organizations.

## 1.2 An opportunity for Greece

Greece has made significant strides in health systems, particularly in recent years. Strong foundations exist in the country to pursue quality of care and patient safety. Legal provisions and the establishment of the Agency for Quality Assurance in Health (AQAH) in 2020 aim to steer the protection of patient rights and the governance and improvement of quality of care at the national level. The National Recovery and Resilience Plan of Greece established health care investment as a clear priority, largely through earmarked funds for the renovation and upgrading of hospitals, digital transformation, public health promotion and prevention measures, modernization of primary health care infrastructure, rationalization of spending on medicines and reform in the areas of mental health and substance dependence.

The absence of a comprehensive policy framework and a clear national quality of care strategy leads to inconsistent implementation of quality improvement initiatives, with inefficiencies and suboptimal health outcomes, including healthy life years, and unmet medical needs (14). There is still suboptimal access to information for patients on costs and service quality, medical errors, patient satisfaction, hospital clinical outcomes, hospital waiting times and comparative data about the quality of different health care providers (15).

The OECD has reported inappropriate care and wasted resources in Greece (16). The level of self-reported unmet need for medical care due to costs, distance to travel or waiting time is far above the European Union (EU) average (9.0% versus 2.2%) (17). The latest available data from Greece show nearly half of all adults have inadequate or problematic health literacy levels, which also contributes to socioeconomic inequalities (18,19). The 2013 EU Task Force for Greece identified several weaknesses related to quality, including fragmented governance, a lack of routinely used indicators to monitor health care services and a lack of incentives for care providers to improve quality of care (14). The 2014 Eurobarometer survey reported that only 26% of respondents rated the quality of hospital care as good, and 73% thought it was worse than in other EU Member States. With 78% believing that patients could deteriorate in health while under hospital care, Greece ranked second to last among the (then) 28 EU countries (20). In a recent People's Voice Survey, Greek respondents showed some of the lowest levels of support for their current health system (21).

This situation provides a unique opportunity to strengthen governance, efficiency and accountability at all levels of the Greek health system, as well as care effectiveness, safety and people engagement through a common vision and collaborative framework endorsed by the first-ever National Strategy for Quality of Care and Patient Safety (2025–2030).

## 2. How did we design the Strategy?

The National Strategy for Quality of Care and Patient Safety was developed under the EU Technical Support Instrument project HQC-2-Greece. This project was a joint venture between the WHO Regional Office for Europe, through the WHO Office on Quality of Care and Patient Safety in Athens, the Ministry of Health of Greece, the AQAH and DG REFORM.

A mixed-method approach inspired by the WHO planning guide for quality health services (22) was applied to develop the Strategy, using four inputs and a co-creation process through stakeholder engagement (Fig. 1).

**Fig. 1. Methodology for the development of the Strategy**

Steps	Activities
Inputs	<ul style="list-style-type: none"> <li>• Literature review of best international practices</li> <li>• Situation analysis of current practices in Greece</li> <li>• Semistructured interviews with opinion leaders</li> <li>• Open online survey to capture needs and priorities</li> </ul>
Co-creation process	<ul style="list-style-type: none"> <li>• Greek health region workshops</li> <li>• Iterative design, alignment and drafting</li> </ul>

### 2.1 Inputs: literature review

A comprehensive literature review identified the international best practices and best buys informing evidence-based policy development in different areas:

- quality of care and patient safety national policies, conducted by the WHO Collaborating Centre for Education, Research and Evaluation of Safety and Quality in Healthcare, Lisbon, Portugal;
- patient safety incident reporting systems, conducted by the Department of Nursing, National and Kapodistrian University of Athens, Athens, Greece;
- training programmes for quality of care and patient safety, conducted by the School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece; and
- health literacy for quality of care and patient safety, conducted by the Department of Hygiene, Epidemiology and Medical Statistics of the School of Medicine, National and Kapodistrian University of Athens, Athens, Greece.

The first review guided the development and design of the Strategy (Table 1), while the others guided the definition of actions and implementation of specific priority areas of the Strategy.

**Table 1. Summary of evidence-based development of quality of care and patient safety policies, strategies and plans**

Framework	Summary of the evidence
Design and development	A comprehensive stakeholder consultation process involving Government bodies, health care providers, representatives of national and regional organizations/administration and patient partnerships.
Target population	Health workers and patients are the top target populations. Administrators and policy-makers are also targeted.
Priority areas	Patient safety (health-care-associated infections and safety of medicines); continuous quality improvement; quality measurement and transparency; people-centred care; patient and family involvement; workforce safety; transformational continuous learning systems.
Enablers of implementation	Leadership commitment and support; stakeholder collaboration and coordination; workforce well-being.
Barriers to implementation	Lack of resources and resistance to change.
Evaluation and monitoring mechanisms	Data collection and transparent publication of monitoring results; however, few official documents define clear monitoring indicators.

## 2.2 Inputs: situation analysis, semistructured interviews and open online survey

An in-depth situation analysis of the quality of care and patient safety landscape in Greece guided the setting of priorities and leverage of the existing strong foundations. Several desk reviews were conducted in close collaboration with the AQA, covering: (1) current framework for quality assurance and improvement in hospitals in Greece; (2) current framework for quality assurance and improvement in primary health care in Greece; (3) current framework for the development of national clinical guidelines and protocols; and (4) gap analysis of the landscape of patient safety in Greece, based on the WHO Global Patient Safety Action Plan 2021–2030.

The perceptions of challenges, needs, priorities and recommendations in relation to quality of care, patient safety and patient engagement in health care provision in Greece were assessed by a nationwide online survey and semistructured individual interviews with key stakeholders, including Greek policy-makers, health care decision-makers, health care managers, health workers across various sectors and levels of care (both public and private), members of scientific and medical societies, academics and representatives of patient organizations. Data were collected from June to August 2024 from a total of 405 participants in the online survey and 14

interviews with key stakeholders, and analysed by the School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece. Inclusion of a diverse group of health care workers and relevant stakeholders allowed the gathering of a unique set of data to inform the development of the Strategy.

## 2.3 Co-creation process

A broad stakeholder dialogue, through Greek regional workshops, assured co-creation and inclusiveness. From March to May 2024, seven workshops were organized in the seven Greek health regions, in five Greek cities (Athens and Thessaloniki each comprise two health regions), with a total of 348 participants. The workshops aimed to prioritize key recommendations for the development of the Strategy, while assuring the integration of regional specificities in overall strategic planning. A total of 14 experts from Greece and other Member States in the WHO European Region shared country experiences in developing and implementing quality of care and patient safety policies. An in-depth discussion on whole-system quality, digital systems for quality of care, patient-centredness, outcomes measurements, accreditation, health determinants and equity, and patient safety was facilitated by seven duos, each formed by an international and a Greek expert on the topic. (Table 2).

**Table 2. Greek health region workshops overview**

	1st health region	2nd health region	3rd health region	4th health region	5th health region	6th health region	7th health region
<b>City</b>	Athens	Athens (Piraeus)	Thessaloniki	Thessaloniki	Larissa	Patra	Heraklion
<b>Learning topic</b>	Whole-system quality	Digital for quality of care	Patient-centredness	Outcomes that matter to people	Accreditation	Health determinants and equity	Patient safety
<b>Country experiences</b>	France Spain	Finland	Austria Cyprus	Latvia Sweden	Estonia Ireland Romania	Luxembourg North Macedonia	Portugal
<b>Number of participants (N = 348)</b>	49	51	56	48	52	43	49

Using a bottom-up policy design, the participants in all workshops engaged in four group discussions to draft actionable recommendations for the Strategy, with a focus on: (1) quality of care governance and interventions; (2) patient safety and incident reporting; (3) clinical guidelines and protocols; and (4) health literacy and public engagement. Recommendations were drafted and prioritized in each workshop to inform the development of the Strategy. A total of 178 participants voted, anonymously, during the workshops (Table 3).

**Table 3. Top-ranked recommendations for the Strategy from the Greek health region workshops**

<b>Recommendations for quality of care governance and interventions</b>
<ul style="list-style-type: none"><li>• Establish governance models which enhance collaboration and coordination at the national, regional and local level.</li><li>• Allocate funds and staff to quality of care, patient safety and public health.</li><li>• Implement continuing professional development programmes.</li><li>• Provide training for health care facility leadership in quality of care and patient safety.</li></ul>
<b>Recommendations for patient safety and incident reporting</b>
<ul style="list-style-type: none"><li>• Provide training in identifying, reporting and managing patient safety incidents.</li><li>• Develop a system for self-reporting of incidents and adverse events and reactions in a culture of safety and learning.</li><li>• Create a national (digital) system for reporting patient safety incidents.</li><li>• Promote a culture of transparency and continuous improvement and learning.</li></ul>
<b>Recommendations for clinical guidelines and protocols</b>
<ul style="list-style-type: none"><li>• Develop a standardized framework to foster compliance with national protocols and guidelines.</li><li>• Introduce protocols and guidelines in undergraduate training.</li><li>• Adopt unified guidelines and reduce fragmentation of care.</li><li>• Implement a digital infrastructure to support the development of national protocols and guidelines.</li><li>• Prioritize cardiovascular diseases, cancer, mental health, autoimmune diseases.</li></ul>
<b>Recommendations for health literacy and public engagement</b>
<ul style="list-style-type: none"><li>• Implement comprehensive health literacy training for patients, caregivers and communities.</li><li>• Establish intercultural mediation practices in health care settings for vulnerable populations.</li><li>• Provide self-management educational programmes tailored to educational attainment and age demographics.</li><li>• Create information offices in health care settings to guide patient navigation within the health care system.</li></ul>



As part of the co-creation process, in search of a local, meaningful definition of quality of care, patients participating at the 1st Athens Patients' Forum, a joint venture between the WHO Office on Quality of Care and Patient Safety, the Ministry of Health and the Greek Patients' Association, were invited to express what quality of care meant to them in a single word. The votes from 73 patients highlighted safety, efficiency and dignity as the most common words (Fig. 2). This was used to inform the draft of the vision statement of the Strategy.

**Fig. 2. Quality of care meaning, in one word, through patient voices (word cloud).**



### 3. Where do we stand?

The mixed-method approach informed a thorough situation analysis to: (1) situate the Strategy in the broader context of the Greek health system, assuring alignment between key actions and improvement goals for specific health system functions and health outcomes; and (2) advance two streams of work for the Greek quality of care and patient safety ecosystem, one to consolidate the strong foundations already in place and the other to tackle gaps and areas for improvement.

The information depicted herein is a very concise selection of data and key examples to shape the Strategy, and is far from being exhaustive. Further details are easily found in the accompanying documents delivered under the HQC-2-Greece project and are available in published data and literature.

#### 3.1 Situation analysis: Greek health system

This section describes the Greek health system in terms of financing, resources and workforce, service delivery and health outcomes. (15,23).

##### 3.1.1 Financing

The Εθνικός Οργανισμός Παροχής Υπηρεσιών Υγείας [National Organization for the Provision of Health Services] (EOPYY) and the Government budget finance the National Health System and provide almost universal health coverage. Health spending is lower than the EU average (in 2022, 8.5% of gross domestic product, compared with the average of the 27 EU Member States (EU27) of 10.4%). The share of public financing for health care increased slightly to 62% in 2022, but still ranks the lowest among EU Member States. Underinvestment in the health sector is considered a contributing factor for barriers in access to care, declining health outcomes, overburdened health services and workforce, risk of financial hardship and a limited focus on prevention and health promotion.

Inpatient care accounts for the largest category of health spending, with over two thirds of health spending used for inpatient care (42% in 2022), one of the highest shares in the EU. Greece spends less on outpatient care (21% in 2022) prevention (4.5% in 2022) and long-term care (1.7% in 2022) compared with the EU average.

Out-of-pocket payments by households represent 34% of health spending, one of the highest figures in the EU (an average of 15%) in 2022, comprising mainly copayments for medicines and direct payments for private (inpatient and outpatient) services, including dental care. The heavy reliance on out-of-pocket payments also means that a large proportion of Greek households experience catastrophic health spending (9.8% in 2022); over half of all catastrophic spending is concentrated among the poorest 20% of households (17,23).

Since 2019, the Κέντρο Τεκμηρίωσης και Κοστολόγησης Νοσοκομειακών Υπηρεσιών [Centre for Documentation and Costing of Hospital Services] (KETEKNY) has steered important health financing reform through the introduction of the Greek diagnosis-related group system.

### 3.1.2 Resources and workforce

The number of medical doctors (6.6 per 1000 population in 2022) has grown and is higher than the EU average. However, fewer than 10% of medical doctors are general practitioners (6% compared with the EU27 average of 21% in 2022), far lower than the EU average, and the number of nurses (3.9 per 1000 population compared with the EU27 average of 8.4 per 1000 population in 2022) is also far lower than the EU average. Additionally, a key challenge is the shortage of health personnel to staff public facilities, especially primary health care facilities. New measures have been introduced to overcome these challenges, but it is still unclear whether they will succeed, as wide variations in the geographical distribution of doctors persist in Greece, resulting in medical “deserts” (24).

The overall number of beds for acute and non-acute care is lower than the EU average.

A National Telemedicine Network is in place to improve the accessibility of health services, particularly on far-flung islands and in remote and underserved areas. The remote e-prescription system was also shown to strengthen primary health care delivery (25).

### 3.1.3 Service delivery

Despite efforts to strengthen community-level primary care, health promotion and preventive services, the system remains centred on hospitals.

The level of self-reported unmet need for medical care due to costs, distance to travel or waiting time is well above the EU average (9.0% versus 2.2%). Greek regions, particularly those including remote and island areas, face significant challenges related to low accessibility of health care within their communities. Socioeconomic status, income in particular, is the main contributor to overall income-related health inequalities, followed by barriers to health care access, adverse family background and hazardous working conditions (26). Unpublished data suggest consistent regional inequalities and an urban-versus-rural divide in Greece, with areas such as East Macedonia and Thrace exhibiting lower life expectancy due to socioeconomic deprivation and quality of life.

Primary health care reforms are under way under the frame of the National Recovery and Resilience Plan. To strengthen efforts towards health promotion and prevention, a National Action Plan for Public Health 2021–2025 was launched, tackling risk factors and health determinants such as smoking, cancer and mental health disorders. No current systematic population-based cancer screening programmes are in place, highlighting the lack of a formal national cancer strategy or plan. Current screening rates for breast cancer and cervical cancer are above the EU average, but the rates for colorectal screening are below the EU average. These rates are further affected by inequality, since screening rates vary with income and education levels, as they do in most EU countries. A national cancer registry was recently created to advance cancer prevention and care. A national preventive screening programme was launched in 2024 as the first comprehensive prevention initiative, offering free diagnostic tests for early detection of chronic diseases such as cancer, with digital tools as a key enabler. Rates for selected immunizations are varied, and the current seasonal influenza vaccination rate among people aged 65 and over is below the WHO-recommended target of 75%.

More recently, a law entitled “Reforming the Institution of the Personal Doctor – Establishment of University Health Centres and Other Provisions of Ministry of Health” was enacted in 2024, focusing on preventive health, restructuring of primary care services and renovation of health infrastructure, including establishing a personal-doctor system and modernizing hospitals and health centres. As part of these provisions, financial incentives are being introduced for young doctors to increase the number of personal doctors for all citizens.

While delivery of mental health services has been steadily moving from inpatient facilities to community-based structures, a substantial number of people report unmet need for mental health care. In 2023, the National Mental Health Action Plan 2021–2030 was approved, aiming to ensure universal access to mental health services and eradicate stigma and social exclusion. The Plan emphasizes community based services and the deinstitutionalization of mental health care, in compliance with international human rights standards.

### 3.1.4 Health outcomes

In 2022, life expectancy in Greece was lower than in most southern and western European countries. There is a gender gap in healthy life years, as women live more of their lives after the age of 65 with disabilities (almost 50% of Greek women aged 65 and over reported having more than one chronic condition in 2020, compared with only 30% of men in the that age group).

Avoidable mortality from preventable and treatable causes is around the EU average. Lung cancer and ischaemic heart disease are the leading causes of preventable deaths. Some 22% of all deaths could be attributed to tobacco smoking in 2019, which is above the EU average. Overweight and obesity among adolescents are a particular public health concern; more than one in four 15-year-olds were overweight or obese in 2022, a higher proportion than in most other EU countries. Cardiovascular diseases (ischaemic heart disease and stroke) and cancer (colorectal and breast) are the leading causes of treatable deaths.

Greece has one of the highest burdens of mental health issues in the EU, with nearly one in five people reporting a mental health issue in 2019, including depression, anxiety and alcohol and drug use. As in other countries, several behavioural risk factors are more common among people with lower levels of education or income.

Antimicrobial resistance is an important public health concern, as patients with bloodstream infections show some of the highest levels of selected antibiotic-resistant bacteria in the EU. A national action plan for tackling antimicrobial resistance in Greece in the context of One Health for the period 2019–2023 (27) was implemented as a collaboration between the Ministry of Health, the Ministry of Rural Development and Food and the Ministry of Environment and Energy.

## 3.2 Situation analysis: Greek quality of care and patient safety ecosystem

In the open online survey, health services in Greece were overall perceived to have a moderate quality of care and patient safety, with inadequate patient-to-staff ratios, lack of funding and insufficient training of health workers being pointed out as the main barriers to improving quality of care and patient safety (Table 4).

**Table 4. Summary of the Greek quality of care and patient safety ecosystem**

	<b>Existing strong foundations</b>	<b>Gaps and areas for improvement</b>
<b>Governance and organizational structure</b>	<ul style="list-style-type: none"> <li>• Legal provisions for quality of care and patient safety in the health system</li> <li>• AQAH and other institutions for specific aspects of quality of care</li> <li>• Reforms to strengthen primary health care</li> <li>• Greek Patients' Association</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and common definition of quality of care and patient safety</li> <li>• Funds and human resource allocation to quality of care</li> <li>• Regional and local structures for quality of care and patient safety</li> <li>• Implementation of formal frameworks for quality assurance at the national levels for all levels of care</li> <li>• Protection of health workers involved in incident reporting and second-victim policies</li> <li>• Formal mechanisms for patient engagement at the national and local level</li> <li>• Health literacy for quality of care and patient safety</li> <li>• Promotion of sustainability and environmental sensitivity</li> </ul>
<b>Improvement methods and interventions</b>	<ul style="list-style-type: none"> <li>• EU regulations for medicines, medical devices, blood, organs and substances of human origin</li> <li>• National diagnostic and therapeutic prescription protocols</li> <li>• Greek Infection Prevention Programme (GRIPP)</li> <li>• Public awareness campaigns for patient safety</li> <li>• Occupational health for workplace safety</li> </ul>	<ul style="list-style-type: none"> <li>• Standardized and regular clinical auditing with transparent public reporting</li> <li>• Dissemination, implementation and monitoring of national diagnostic and therapeutic prescription protocols</li> <li>• Standardized and regular training for health workers</li> <li>• Patient safety culture (Just Culture)</li> <li>• Promotion of innovation</li> </ul>
<b>Health data systems</b>	<ul style="list-style-type: none"> <li>• Outpatient e-prescription systems</li> <li>• Pharmacovigilance, haemovigilance and biovigilance systems</li> </ul>	<ul style="list-style-type: none"> <li>• Digitalization of inpatient prescriptions</li> <li>• National electronic health records and system integration and interoperability</li> <li>• National patient registries</li> <li>• Patient safety incident reporting systems</li> </ul>
<b>Indicators and quality metrics</b>	<ul style="list-style-type: none"> <li>• Health-care-associated infections due to resistant microorganisms – monitoring and reporting</li> </ul>	<ul style="list-style-type: none"> <li>• National quality of care and patient safety indicators, including patient-reported measurements</li> <li>• Transparency and benchmarking</li> </ul>



### 3.2.1 Governance and organizational structure

Law No. 4715/2020, entitled “Arrangements to ensure access to quality health services establishment and statute of the Organization for Quality Assurance in Health, S.A. (ODIPY S.A.), other urgent provisions under the competence of the Ministry of Health and other provisions”, forms the basis for the quality of care and patient safety framework in Greece. It includes provision for ensuring access to quality health services, namely to enhance the quality of health services, improve patient safety and systematically reorganize the country health services. These principles are further enforced by communication with patients in care planning and by informed consent provisions (Law No. 3418/2005, entitled “Code of Medical Ethics”).

Diagnostic laboratories are accredited for quality and validity of laboratory tests (International Organization for Standardization (ISO) standard 15189) by the Hellenic Accreditation System. Health inspections are conducted by the Inspectors Body for Health and Welfare Services at the National Transparency Authority.

Additionally, Law No. 4715/2020 established the AQAH, which aims to improve the quality of health care services and enhance patient safety through close collaboration with other actors in the quality of care and patient safety ecosystem: Εθνικός Οργανισμός Φαρμάκων [National Organization for Medicines], Εθνικό Κέντρο Αιμοδοσίας [National Centre for Blood Donation] (ΕΚΕΑ), Εθνικός Οργανισμός Μεταμοσχεύσεων [National Transplant Organization] and Εθνικός Οργανισμός Δημόσιας Υγείας [National Public Health Organization] (ΕΟΔΥ), among others (Table 5).

Among other things, the responsibilities of the AQAH include: the development of procedures and quality standards for health services, the formation of indicators for evaluating the quality of the services provided, the preparation and maintenance of a register of external experts for the evaluation, the formulation of proposals for the provision that incentivizes health service providers to comply with service quality assurance procedures, as well as providing rewards for health service providers who adhere to appropriate service quality assurance procedures and achieve outstanding performance, the implementation and support of independent education and training services for health service providers regarding the quality assurance procedures of the health services provided, and the development of national standards for assurance of the quality of care.

The Greek Patients’ Association plays a pivotal role in promoting patient engagement in decision-making processes. The latest available data from Greece shows nearly half of all adults have inadequate or problematic health literacy levels, which also contributes to socioeconomic inequalities (16,17). No legal provisions assure mechanisms for patient engagement at the national or facility level, apart from local structures with a narrow scope of activities (see below).

At the facility level, a department of quality control research and continuing education is a legal requirement for hospitals with over 400 beds, submitting reports to the hospital manager (Law No. 2889/2001). There is a provision that it should be complemented by a quality committee to oversee the department of quality control (Law No. 3329/2005). For hospitals under 400 beds, there is no framework in place.

An office for the protection of the rights of health care recipients is also in place in hospitals to enable a human rights approach to health (Law No. 4368/2016), by assuring, among others, information on inpatient procedures and the rights of health service recipients, and the collection and processing of complaints. No specific structures for quality of care and patient safety are in place in primary health care facilities.

**Table 5. Key stakeholders in the Greek quality of care and patient safety ecosystem**

<b>Governmental and national</b>	<ul style="list-style-type: none"> <li>• AQAH</li> <li>• Central Board of Health</li> <li>• EKAPTY</li> <li>• EKEA</li> <li>• EODY</li> <li>• EOF</li> <li>• EOM</li> <li>• EOPY</li> <li>• Hellenic Accreditation System</li> <li>• IDIKA</li> <li>• KETEKNY</li> <li>• Ministry of Digital Governance</li> <li>• Ministry of Education</li> <li>• Ministry of Health</li> <li>• National Transparency Agency</li> </ul>
<b>Governmental and regional</b>	<ul style="list-style-type: none"> <li>• Regional health authorities</li> </ul>
<b>Health care providers</b>	<ul style="list-style-type: none"> <li>• Hospitals (secondary and tertiary)</li> <li>• Primary health care units and local primary care teams</li> </ul>
<b>Scientific bodies</b>	<ul style="list-style-type: none"> <li>• Hellenic Medical Association</li> <li>• Hellenic Nurses' Association</li> <li>• Panhellenic Association of Pharmacists</li> <li>• Scientific societies</li> <li>• Universities</li> </ul>
<b>Civil society</b>	<ul style="list-style-type: none"> <li>• Greek Patients' Association</li> <li>• Nongovernmental organizations (e.g. Hellenic Red Cross, Médecins Sans Frontières)</li> <li>• Patient associations</li> </ul>

### 3.2.2 Improvement methods and interventions

Regulations are in place for medicines, medical devices, blood transfusion and transplantation of organs and substances of human origin, following EU regulations. A health technology assessment was organized within the remit of the EKAPTY (Law No. 4512/2018) and is currently being strengthened under the EU Technical Support Instrument.

The National Antimicrobial Resistance Plan within the Framework of One Health 2019–2023 aimed to preserve the effectiveness of antimicrobials in medical and veterinary practices. No infection prevention and control programme is implemented at the national level.

National protocols are developed in the country. National diagnostic and therapeutic prescription protocols are developed under the authority of the Independent Department of Therapeutic Protocols and Patient Registries of the Ministry of Health (Law No. 4693/2020). These protocols, which are compulsory for outpatient e-prescriptions (Law No. 4950/2022), cover most of the high-burden clinical conditions and are integrated in the national e-prescription platform.

Patient safety protocols are issued by different institutions: those for health-care-associated infections by the EODY; and those for other patient safety issues, such as falls and preventions of pressure ulcers in inpatient care, by the AQAH. However, national protocols are perceived as being of moderate quality, and the importance of having a centralized and unique institution responsible for issuing national clinical protocols was highlighted during stakeholder consultations. Additional suggested areas to be covered are antibiotic prescription and referral criteria across different levels of care. The digital dissemination of national protocols and mechanisms to foster their local implementation were highlighted as enablers of clinical effectiveness. On the other hand, resistance to change was pointed out as the main barrier.

The Greek Infection Prevention Programme (GRIPP) is an innovative national initiative aimed at preventing and controlling hospital-acquired infections and antimicrobial resistance. It is funded exclusively by a grant from the Stavros Niarchos Foundation (SNF) as part of the SNF's International Health Initiative, which was approved in Law No. 4566/2020.

The programme's primary components include systematic surveillance of specific infection categories that significantly contribute to the overall burden of infection. This surveillance is facilitated through a digital platform that allows for online and real-time recording of indicators and data.

Additionally, the GRIPP focuses on training health care professionals through a certified curriculum. It enhances the capacity of infections committees by hiring dedicated infection control nurses. Interventions are implemented based on the findings gathered, guided by the Institute for Healthcare Improvement and employing multimodal strategies recommended by WHO.

According to the law, the ultimate goal of the programme after its five-year implementation period (2021–2026) is integration in all hospitals within the National Health System. This integration will be overseen by the AQAH and the Greek State.

Additionally, the National and Kapodistrian University of Athens is the national partner of the EU-funded project REVERSE (pREvention and management tools for rEducing antibiotic Resistance in high prevalence SEttings). This project addresses the growing challenge of antibiotic resistance





by developing and implementing cost-effective strategies to prevent and manage health-care-associated infections caused by multidrug-resistant pathogens. The project evaluates the real-world effectiveness of infection prevention and control programmes combined with antibiotic stewardship, provides tailored implementation strategies for participating hospitals, and studies the impact of external implementation support through a hybrid trial. Additionally, REVERSE creates a novel health economics framework to analyse the long-term population effects and cost-effectiveness of prevention strategies, with an emphasis on applicability in lower-resource settings. The project runs from 1 July 2021 to 30 June 2026.

Quality control mechanisms do not work uniformly across health care facilities. Only hospitals with over 200 beds have a department (see above) mandated to conduct internal (quality) auditing. Clinical auditing to assess compliance with national protocols and reported patient safety incidents is perceived as being conducted rarely, or not at all.

Quality assurance mechanisms are stipulated in Law No. 4715/2020, including provisions on penalties, giving the AQAH the mandate to assess health care providers (external auditing), specifically hospitals, but also primary health care and other providers, for their compliance with quality of care and patient safety standards. As part of the quality assurance mechanisms, the AQAH conducts the Patient Safety Friendly Hospital Assessment, aiming at improving patient safety and compliance with patient safety standards. This initiative is part of a series of mapping exercises to assess the implementation of quality of care and patient safety assurance measures in hospitals.

No public-owned accreditation programme for health care provision is in place. Current certification processes for medical devices and quality management systems are undertaken by the EKAPTY.

Health workers are covered by occupational health programmes for workplace safety, namely occupational risk prevention, immunization, provision of personal protective equipment and management of staff injuries. No legal provisions ensure the protection of health workers involved in reporting patient safety incidents or of second victims. While no formal assessments of patient safety culture are conducted, a culture of blame is still perceived as one of the main barriers to reporting of patient safety incidents, followed by the belief that reporting will not drive change.

Some initiatives at the national level have been implemented to strengthen training of health workers in quality of care and patient safety, conducted by the AQAH, some academic centres and other institutions. However, these training programmes are not standardized or compulsory, with insufficient leadership commitment and support being pointed out as the main barrier to training. While continuing professional development is compulsory for health workers (medical doctors), quality of care and patient safety is not considered one of the core competences covered, and estimates suggest that fewer than half of health workers have attended a training programme covering topics related to quality of care or patient safety. No compulsory quality of care or patient safety education is delivered at undergraduate level for health sciences students.

Public awareness campaigns, particularly for World Patient Safety Day, are implemented with the support of the WHO Country Office in Greece. Other initiatives to foster networking in quality of care and patient safety are implemented by the AQAH, but no formal national patient safety network has been established so far.

### 3.2.3 Health data systems

Health data systems are being progressively implemented at the national level to support data-driven health decisions, such as the Ministry of Health business intelligence forms and other datasets (e.g. Hellenic Statistical Authority, Eurostat Statistical Atlas).

An e-prescription system under the authority of the IDIKA covers insured citizens for outpatient prescriptions. This experience is informing the current development of a national electronic health record. In inpatient care, prescriptions and clinical records are handwritten and non-standardized.

National electronic health records are gradually being introduced as a unique (for all levels of care) platform for health data collection and integration, assuring privacy, security, quality and secondary use, following the EU European Health Data Space regulations.

Surveillance systems are in place for adverse reactions to medicines and medical devices (pharmacovigilance system under the supervision of the EOF), and to blood and other substances of human origin (haemovigilance system, under the supervision of the Coordinating Centre for Haemovigilance and Surveillance of Transfusion).

### 3.2.4 Indicators and quality metrics

Common internationally comparable indicators to gauge the quality of primary and hospital care are not systematically collected. However, some quality of care and patient safety indicators have been adopted by the AQA. Together, the indicators cover almost the full spectrum of patient and workforce safety. These indicators are being piloted in 11 hospitals across the country and the results of the pilot are expected to become publicly available in due course.

Even assuming underreporting, the pharmacovigilance, haemovigilance and biovigilance systems provide data on adverse reactions to medicines, medical devices, blood, organs and substances of human origin. Health-care-associated infections due to resistant microorganisms are also routinely monitored and reported by the EODY. Other patient safety incidents are managed at the facility level, with no standardized procedures or feedback mechanisms. Hospitals involved in the GRIPP programme collect and analyse outcome and process indicators related to device-associated infections, ensuring adherence to best practices in infection prevention and control. Reporting of patient safety incidents is perceived as informal or non-existent in most of the cases. The AQA has developed forms (handwritten) for reporting patient safety incidents, but no data on these metrics have been made publicly available.

Some initiatives have been piloted to assess patient satisfaction in health care facilities, but no data or analysis informed the follow-up measures. In primary health care, patients overall report a positive experience with the general practice they visited. Several gaps were identified in terms of waiting times for appointments, general practitioner access to patients' medical history, delivery of preventive services and patient involvement in decision-making (28). No patient-reported experience or outcome measures are formally or routinely used. The AQA is involved in the OECD Patient-recorded Indicator Surveys project to measure outcomes that matter to patients, caregivers and families, as well as their experiences in health care.



## 4. What do we need?

### 4.1 Vision

The vision is a health care system where quality is a daily commitment, ensuring that all individuals trust health care to be safe, respectful, equitable and efficient.

This vision underscores the aspiration to build a health care system where quality is a universal expectation, fostering trust and confidence among all individuals. It emphasizes a daily commitment to ensuring care is safe, respectful, equitable and efficient, embodying the core pillars of a trustworthy and inclusive health care system. By ensuring that health care is equitable, the vision recognizes the diversity of patient needs and affirms the importance of fair access to quality care for everyone, regardless of background or circumstance. This commitment to equity ensures that disparities are addressed and that no one is left behind in receiving safe, effective and compassionate care.

The vision also stresses respect for human dignity by prioritizing patients' rights, values and preferences throughout their care journey. Safety is reinforced through a proactive approach to harm prevention, while efficiency reflects the importance of using resources wisely to achieve optimal health outcomes. Together, these elements create a health care environment where quality is not just an occasional goal, but a consistent mindset, upheld by all stakeholders. Culturally safe health care shows respect for culture and identity by incorporating people's needs and rights in a non-discriminatory environment. This vision ensures that the health care system works not only consistently and reliably, but also fairly and inclusively, truly serving the needs of every individual.

### 4.2 What do we mean by quality of care?

Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes. It is based on evidence-based professional knowledge and is critical for achieving universal health coverage. As countries commit to achieving Health for All, it is imperative to carefully consider the quality of care and health services.

Quality health care can be defined in many ways, but there is a growing acknowledgement that quality health services should be:

- **effective:** providing evidence-based health care services for those who need them;
- **safe:** avoiding harm to people for whom the care is intended; and
- **people-centred:** providing care that responds to individual preferences, needs and values.



To realize the benefits of quality health care, health services must be:

- **timely:** reducing waiting times and sometimes harmful delays;
- **equitable:** providing care that does not vary in quality on account of gender, ethnicity, geographical location or socioeconomic status;
- **integrated:** providing interdisciplinary-based care that makes available the full range of health services throughout the life course; and
- **efficient:** maximizing the benefit of available resources and avoiding waste.

### 4.3 Our approach

Quality of care improvements demand a systemwide effort, including clear and integrated policies; legislation and regulation; capacity-building and skilled health workers; leadership commitment and competencies; safety and learning culture; appropriate information systems and indicators to be used for planning and measuring improvement; evidence-based and integrated care practices; reduction of the health risks to patients during their diagnostic and treatment pathways; efficient engagement of patients; and the design and evaluation of services.

Our approach aims to:

- nurture an efficient, accountable and data-driven health system
- foster trust in an effective and safety health system
- create patients partnerships in health care provision

By recognizing the vital role of leadership and organizational culture in the delivery of high-quality health care alongside the importance of working in partnership with people who need, use and deliver services in order to design and implement change, the three strategic directions steer the achievement of these goals and their progress by using tracer indicators (Fig. 3).

- **Leadership and governance focus on building the structural and operational foundation of the health system, ensuring efficiency, accountability and data-driven performance.**

Strong leadership and governance provide the framework and direction necessary to build an effective health system. By setting clear policies, enforcing accountability and ensuring transparent oversight, leaders can align priorities and allocate resources wisely. Governance structures ensure that data are systematically collected, analysed and utilized to guide decisions and improve performance. These efforts lead to a health system that operates efficiently, maintains high accountability and makes adaptations based on evidence, providing a sustainable foundation for quality care.

- **Evidence and innovation emphasize the processes and tools that enhance the reliability, safety and fairness of the system, which will foster trust.**

The integration of evidence-based practices and innovative solutions enhances the



effectiveness, safety and equity of care delivery. Evidence ensures that decisions and treatments are rooted in proven approaches, minimizing errors and variability in outcomes. Innovation brings forward new technologies, processes and models that address emerging challenges and improve accessibility. Together, these elements ensure a health care system that is reliable, adaptive and fair, building public confidence and trust in its capabilities.

- **Literacy and engagement concentrate on the relational and communicative aspects, empowering patients and the broader community to become active participants in their own care.**

Enhancing health literacy, including digital health literacy, equips patients with the knowledge and skills to understand their health conditions, treatment options and care processes. Engagement goes further by involving patients, families, caregivers and the wider community as active participants in decision-making and care planning. Together, literacy and engagement empower individuals to become informed partners, strengthening the patient-provider relationship and ensuring that care is personalized, respectful and responsive to individual needs and preferences. This collaboration fosters shared responsibility and leads to improved experiences and outcomes.

**Fig. 3. Goals, strategic directions and tracer indicators**

Goal	Strategic direction	Tracer indicators
To nurture an efficient, accountable, transparent and data-driven health system	Leadership and governance	<ul style="list-style-type: none"> <li>• Quality of care structures established at the regional and local level</li> <li>• Data are digitally collected to inform national quality of care indicators</li> </ul>
To foster trust in an effective, safe and equitable health system	Evidence and innovation	<ul style="list-style-type: none"> <li>• Increase compliance with national protocols</li> <li>• Reduce avoidable harm at all levels of care</li> <li>• Train health workers in a high quality of care</li> </ul>
To create partnerships with patients in health care provision	Literacy and engagement	<ul style="list-style-type: none"> <li>• Publish results of patient experience surveys</li> <li>• Include patient representatives in governance structures</li> <li>• Promote the use of massive online open courses by the public</li> </ul>



## 5. How will we implement and sustain our approach?

### 5.1 Impactful actions

The three strategic directions cover a total of 11 objectives and 47 impactful actions (Table 6). The actions are prioritized to guide their step-by-step timewise implementation.

**Table 6. Objectives and actions under the three strategic directions**

Objectives	Actions	Responsible agency
<b>1. Leadership and governance</b>	<b>Goal</b>	To nurture an efficient, accountable, transparent and data-driven health system
	<b>Tracer indicators</b>	<ul style="list-style-type: none"> <li>Quality of care structures established at the regional and local level</li> <li>Data are digitally collected to inform national quality of care indicators</li> </ul>
1.1. Strengthen the legal provisions for quality of care and patient safety	1.1.1. Develop and adopt legislative changes to ensure the protection of health workers involved in patient safety reporting and the support of second victims.	Ministry of Health
	1.1.2. Enforce legislative changes to support the three-level governance model for quality of care and patient safety.	Ministry of Health
	1.1.3. Enforce legislative changes to foster development, dissemination and implementation of and compliance with national protocols.	Ministry of Health
1.2. Implement a three-level governance model for quality of care and patient safety	1.2.1. Create a national steering committee for quality, patient safety and equity in health care (NSCQE).	Central Board of Health Ministry of Health
	1.2.2. Build the capacity of the AQAH.	Ministry of Health
	1.2.3. Establish and strengthen a department for quality of care and patient safety (DQPS) in every regional health authority to support cooperation between the national and local level and assure regional contextualization.	Ministry of Health Regional health authorities
	1.2.4. Standardize the local structures for quality of care by establishing a commission for quality of care and patient safety (CQPS) in every hospital and an officer for quality of care and patient safety (OQPS) in every health care centre.	Health managers Ministry of Health

Objectives	Actions	Responsible agency
1.3. Enhance efficiency, quality of care and workforce well-being	1.3.1. Scale-up the National Telemedicine Network to the national level with a focus on difficult-to-reach populations and remote and rural areas.	IDIKA Ministry of Health
	1.3.2. Strengthen national health technology assessment mechanisms.	EKAPTY Ministry of Health
	1.3.3. Increase the share of generic drug usage by favouring e-prescriptions as the default.	EOF IDIKA
	1.3.4. Develop and implement a system for health manager evaluation based on performance in quality matters.	Ministry of Health Universities
	1.3.5. Extend the e-prescription system to inpatient care.	Hospital managers IDIKA Ministry of Health
	1.3.6. Adopt and implement an internationally validated emergency-room triage system.	Hospital managers Ministry of Health Professional societies
	1.3.7. Develop and implement national evidence-based programmes for outpatient surgeries and hospitalization at home.	AQAH Hospital managers Ministry of Health
	1.3.8. Create a referral network covering all levels of care for chronic complex and rare diseases to concentrate resources and expertise.	Ministry of Health Professional societies
	1.3.9. Pilot initiatives in pay-for-quality to foster care integration across all levels of care for noncommunicable diseases, based on the WHO publication Purchasing for quality chronic care (29).	AQAH EOPYY KETEKNY Universities
	1.3.10. Pilot initiatives of multidisciplinary hospital services/clinics to provide integrated, outcome-oriented and patient-centred care in high-burden areas such as oncology, geriatric care, palliative care, mental health.	Hospital managers Ministry of Health
	1.3.11. Pilot initiatives for staff rotations for hospital and primary health care facilities based on a comprehensive health workforce mapping.	Health managers Ministry of Health
	1.3.12. Create a national quality of care and patient safety award.	AQAH Universities

Objectives	Actions	Responsible agency
1.4. Orient health system towards data-driven decision-making processes	1.4.1. Expand the implementation of electronic health records to all citizens, ensuring good practices for data standardization, protection and interoperability.	IDIKA
	1.4.2. Adopt a core set of quality of care and patient safety indicators to assess performance at the national level, assuring international and national benchmarking.	AQAH Ministry of Health
	1.4.3. Develop and deploy a national digital and business intelligence system to collect, analyse and publish the results of quality of care and patient safety indicators, assuring interoperability with existing systems and availability of data for research and health worker feedback.	AQAH IDIKA Ministry of Health

Goal		To foster trust in an effective, safe and equitable health system
2. Evidence and innovation	<b>Tracer indicators</b>	<ul style="list-style-type: none"> <li>• Increase compliance with national protocols.</li> <li>• Reduce avoidable harm at all care levels.</li> <li>• Train health workers in quality of care.</li> </ul>

Objectives	Actions	Responsible agency
2.1. Adopt standards for health care providers	2.1.1. Implement quality management systems in health care facilities, based on ISO standard 7101:2023, Healthcare organization management.	AQAH DQPS/CQPS EKAPTY
	2.1.2. Develop and adopt an internationally recognized voluntary and public-owned accreditation programme for health care providers, including hospitals and primary health care facilities.	AQAH





Objectives	Actions	Responsible agency
2.2. Consolidate evidence-based and safe clinical practices	2.2.1. Develop and adopt an evidence-based process to develop and update national protocols, based on the WHO publication Strengthening countries' capacities to adopt and adapt evidence-based guidelines: a handbook for guideline contextualization (30), comprising a lay-person's summary, clear standards, recommendations and referral criteria (between primary and secondary/tertiary levels), instructions for local implementation and indicators for monitoring and improvement.	AQAH Ministry of Health Professional societies Universities
	2.2.2. Develop and deploy a digital mechanism for the publication and dissemination of national protocols, integrated with e-prescription systems to support clinical decisions, and enhanced with feedback mechanisms for health workers.	AQAH IDIKA Ministry of Health
	2.2.3. Publish an annual plan for development and updating of national protocols, prioritizing high-burden noncommunicable diseases, including mental health and rare diseases.	Ministry of Health*
	2.2.4. Develop and update national protocols for safety of clinical processes, including patient identification, medication safety (including polypharmacy management), safety in surgery, obstetric and perinatal safety, safety communication (including in care transitions), patient transfers, prevention and management of falls and pressure ulcers, thromboembolism prophylaxis, prevention and control of health-care-associated infections and antibiotic prophylaxis and prescription.	AQAH
	2.2.5. Develop and implement a national plan for infection prevention and control, including antimicrobial stewardship, following the WHO Global strategy for infection prevention and control (31), learning from the GRIPP and RESERVE initiatives, and following a One Health approach.	AQAH EODY Ministry of Environment and Energy Ministry of Health Ministry of Rural Development and Food



Objectives	Actions	Responsible agency
2.3. Foster a continuous improvement, safety and learning culture	2.3.1. Assess patient safety culture in all health care facilities based on the Survey on Patient Safety Culture™ (SOPS™) Hospital Survey Version 2.0 (SOPS Hospital Survey 2.0).	AQAH Health managers
	2.3.2. Develop and deploy a national voluntary patient safety incident electronic reporting system.	AQAH IDIKA
	2.3.3. Implement an annual auditing plan in all health care facilities, focusing on feedback, continuous improvement and learning.	CQPS/OQPS Health managers
2.4. Enable health workforce skills in quality of care and patient safety	2.4.1. Implement a compulsory continuing professional development programme in quality of care and patient safety for all health care professionals, including health managers.	AQAH Ministry of Health Universities
	2.4.2. Create a centre of excellence for quality of care, patient safety and health equity education and research.	Universities
	2.4.3. Incorporate mandatory modules or disciplines in quality of care and patient safety in undergraduate curriculums for all health care professionals.	Ministry of Education Ministry of Health Universities

\* Independent Department of Therapeutic Protocols and Patient Registries.

<b>3. Literacy and engagement</b>	<b>Goal</b>	To create patient partnerships in health care provision
	<b>Tracer indicators</b>	<ul style="list-style-type: none"> <li>• Results from patient experience surveys are published</li> <li>• Patient representatives included in governance structures</li> <li>• Massive online open courses used by the public</li> </ul>

Objectives	Actions	Responsible agency
3.1. Enhance public participation in the health system	3.1.1 Assure patient and people representativeness in the NSCQE, DQPS, CQPS and OQPS.	Health managers Ministry of Health Regional health authorities
	3.1.2. Implement volunteering services in health care facilities.	Health managers
	3.1.3. Launch yearly campaigns for World Patient Safety Day.	AQAH Patient associations
3.2. Empower patients, caregivers and families	3.2.1. Develop and implement a national plan for health literacy and health misinformation.	Ministry of Health
	3.2.2. Adopt and implement at the national, regional and local level the WHO Patient safety rights charter (32).	Health managers Ministry of Health Regional health authorities
	3.2.3 Incorporate a lay-person summary in all national protocols.	AQAH Patient associations
	3.2.4. Reinforce the Office for the Protection of the Rights of Health Care Recipients to enable people navigation in hospitals and to assure intercultural mediation practices in health care provision.	Hospital managers Ministry of Health*
	3.2.5. Integrate health promotion, prevention and self-management recommendations in the myHealthAPP, including for aged populations.	IDIKA Universities
	3.2.6. Develop patient-oriented massive online open courses on the proper use of health system resources, patient rights, health system navigation, medication adherence and safety, home care safety, proper use of antibiotics, good usage of telemedicine, generic medicines, healthy ageing and reporting of patient safety incidents.	Centre of excellence Patient associations

Objectives	Actions	Responsible agency
3.3. Learn from people’s perspectives	3.3.1. Assess and publish results of perceptions of the health system from users and non-users through validated people’s voice surveys.	Centre of excellence
	3.3.2. Develop and implement a national electronic patient experience survey for post-discharge patients, with publication of the results.	AQAH Centre of excellence
	3.3.3. Pilot initiatives of electronic patient-reported experience and outcome measures in high-burden areas such as oncology, geriatric care, palliative care, mental health.	AQAH Centre of excellence

\* Office for the Protection of the Rights of Health Care Recipients.

Colour key

Colour	Implementation	Time frame
High priority	High priority	Two years (2025–2026)
Medium priority	Medium priority	Four years (2025–2028)
Low priority	Low priority	Six years (2025–2030)

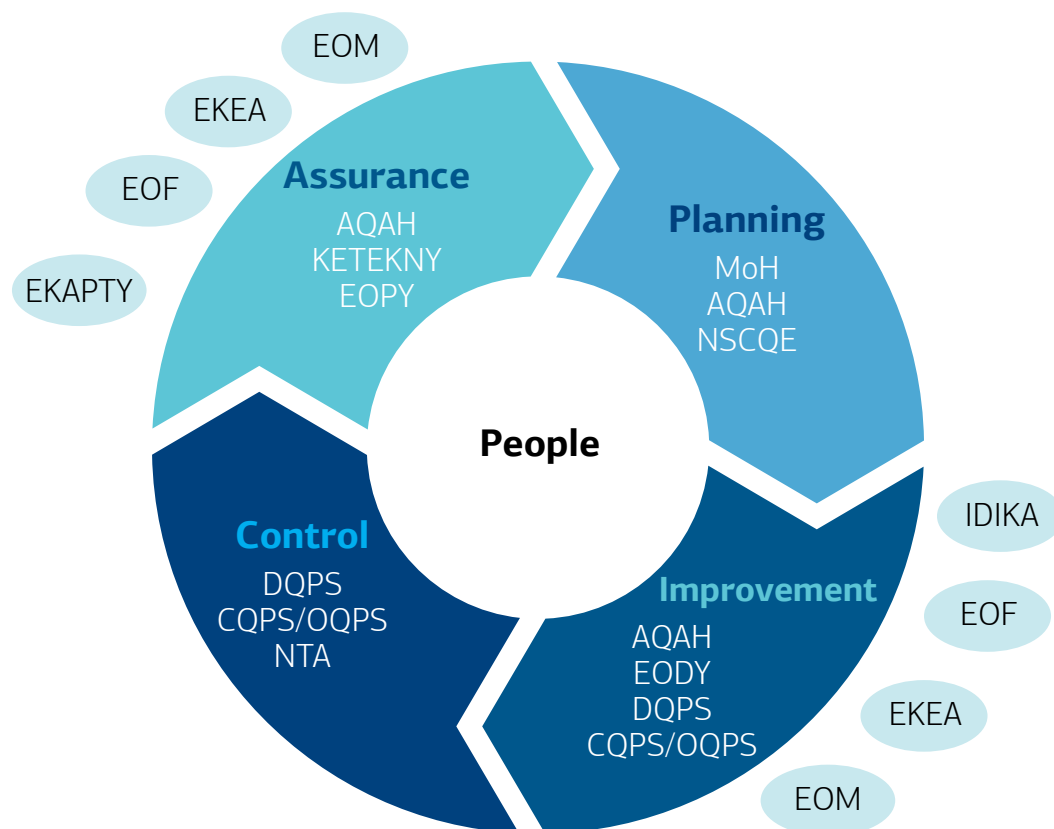
## 5.2 Whole-system approach: stakeholder engagement and cooperation

Taking a whole-system approach, evidence-based insights can be used to devise actions that support the delivery of person-centred, safe and effective health services, through the following measures.

- Quality planning: brings systems thinking to the highest levels of leadership and governance. It responds to the measured gap between what the population needs, and what is currently being delivered in the health system. It then establishes the goals, policies, and strategy to close this gap, and ensures that the resources are allocated to do this effectively.
- Quality improvement: practical implementation of changes to operationalize the quality strategy, which provides the necessary structures and resources to bring performance to a new level to achieve the quality goals.
- Quality control: proportionate routine monitoring of day-to-day services to ensure that they are of adequate quality. Quality control is an activity performed by those doing the work to inform ongoing activity.
- Quality assurance: independent assessment of care and the enablers of care. Quality assurance informs those actors – often situated outside the daily quality production system – who need to know that the work is meeting the quality goals.

Stakeholder engagement enhances accountability, efficiency in decision-making processes and good governance. Government organizations (internal stakeholders) will cooperate across a whole-system quality cycle (Fig. 4). Particularly for high-burden noncommunicable disease, multistakeholder partnerships have been shown to positively impact patient care in Greece (33).

**Fig. 4. Whole-system approach to internal stakeholder cooperation**



### 5.3 Strategy alignment

A cohesive and integrated health system requires a strategic approach that connects individual initiatives to a broader vision of quality of care, even beyond the health sector. Aligning the current Strategy with ongoing national health reforms, policies and projects ensures a unified direction and minimizes fragmentation and duplication. This alignment enables stakeholders to leverage existing resources, share best practices and address systemic challenges more effectively. By harmonizing efforts across sectors and levels of care, the Strategy promotes a holistic and sustainable approach, ensuring that quality improvement initiatives contribute meaningfully to broader goals such as equity, efficiency and universal health coverage. This interconnected approach not only strengthens the impact of individual programmes, but also supports the resilience and adaptability of the health system as a whole.

To illustrate the importance of alignment, the following examples highlight key national initiatives that should be integrated with the vision for quality of care and this Strategy. These examples demonstrate opportunities for collaboration and synergy, ensuring that all efforts collectively contribute to strengthening the health system and improving health outcomes.

- Primary health care as a hub for care continuity, coordination and comprehensiveness is a foundation for quality of care and people-centredness in health systems. The current primary health care reforms and investment in Greece, including the reform of the Institution of the personal doctor, form a solid basis for the success of this Strategy, which pursues a holistic approach integrating all levels of care. Actions 1.2.4 and 1.3.9 aim to establish governance structures for quality of care in primary health care facilities and to incentivize care integration. Action 1.3.11 aims for more efficient human resources management in primary health care based on current initiatives (human resources health map). Action 2.2.1 focuses on the development of national protocols on care integration and referral criteria between different levels of care. Actions 2.3.1 and 2.4.1 establish patient safety culture and training programmes in a cross-level approach.
- The WHO Office on Quality of Care and Patient Safety, in collaboration with the Ministry of Health and health service providers, leads the HEALTH-IQ project “Development and implementation of a framework for quality care”. The project, running from 2023 to 2025, aims to assess the full spectrum of health care services, public health access and prevention procedures for both noncommunicable diseases and mental health. Its key objectives include developing a documented methodological guide to establish permanent procedures for recording and measuring key quality performance indicators; creating a system to collect and evaluate patient feedback; designing an online and human-centred health system to ensure equitable access to quality health services; and disseminating health quality standards among EU Member States facing similar challenges. These efforts seek to standardize quality assurance procedures in health care, enhance the efficiency and effectiveness of national health systems and improve the overall patient experience. This project is the implementation arm for actions 1.4.2 and 1.4.3 of this Strategy.
- The WHO Office on Quality of Care and Patient Safety, in collaboration with the Government of Greece, has set up a WHO European Region programme dedicated to improving the quality of child and adolescent mental health care. In Greece, WHO support for the Ministry of Health includes developing an acceleration plan to further the actions under the National Mental Health Action Plan 2021–2030 to strengthen child and adolescent mental health, with a focus on children with autism, delinquent adolescents and migrants. WHO will also support the Ministry of Health in piloting the WHO European quality standards for child and youth mental health services. This will contribute to mental-health-focused implementation of actions 2.1.2, 2.2.3, 3.3.1 and 3.3.3.
- Recent initiatives to coordinate action across ministries and launch ambitious reforms to improve the accessibility, affordability and quality of the long-term care system in Greece hold enormous potential to transform long-term care delivery in a meaningful way. Several



pilots aim to expand the diversity of services available for people with long-term care needs, while an interministerial group is actively working towards the development of an integrated, cross-sectoral policy strategy for short-, medium- and long-term reform (34). The current Strategy will be aligned with the opportunities to reform and assure continuity of care and support in long-term care across Greece with close cooperation between the health and social sectors.

### **5.4 Monitoring progress and continuous learning**

Effective monitoring and continuous learning are essential to ensure the successful implementation of the National Strategy for Quality of Care and Patient Safety (2025–2030). The Ministry of Health through AQAH, in collaboration with the regional health authorities and the national steering committee for quality, patient safety and equity in health care (NSCQE), will be responsible for overseeing progress, ensuring adherence to objectives and identifying areas for adjustment and improvement.

The Strategy should be seen as flexible, allowing for timely adaptations in response to evolving health system challenges and needs, technological advancements and emerging public health threats. Regular reviews will ensure that the Strategy remains aligned with broader health policies and updated international standards, guaranteeing coherence across the Greek health system.

To promote continuous learning, formal monitoring points will be established every two years, at the end of 2026, 2028 and 2030. These evaluations will assess progress in the impactful actions and identify any necessary adjustments. This dynamic, evidence-based approach will provide the foundation for sustained improvement in quality of care and patient safety and ensure the Strategy's sustainability and long-term success.



## References<sup>1</sup>

1. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *Lancet Glob Health*. 2018; 6 (11): e1196-e1252 ([http://dx.doi.org/10.1016/S2214-109X\(18\)30386-3](http://dx.doi.org/10.1016/S2214-109X(18)30386-3)).
2. Seventy-fourth Regional Committee for Europe, Copenhagen, 29–31 October 2024: framework for resilient and sustainable health systems in the WHO European Region 2025–2030. Copenhagen: WHO Regional Office for Europe; 2024 (EUR/RC74/10; <https://iris.who.int/handle/10665/378418>).
3. The Tallinn Charter: health systems for health and wealth. Copenhagen: WHO Regional Office for Europe; 2008 (<https://iris.who.int/handle/10665/349648>).
4. McKee M, van Schalkwyk MCI, Greenley R, Permanand G. Trust: the foundation of health systems. Copenhagen: European Observatory on Health Systems and Policies, WHO Regional Office for Europe; 2024 (<https://iris.who.int/handle/10665/379318>). Licence: CC BY-NC-SA 3.0 IGO.
5. Quality health services [fact sheet]. Geneva: World Health Organization; 2024 (<https://www.who.int/news-room/fact-sheets/detail/quality-health-services>).
6. World Health Organization, Organisation for Economic Co-operation and Development and International Bank for Reconstruction and Development. Delivering quality health services: a global imperative for universal health coverage. Geneva: World Health Organization; 2018 (<https://iris.who.int/handle/10665/272465>). Licence: CC BY-NC-SA 3.0 IGO.
7. Global patient safety report 2024. Geneva: World Health Organization; 2024 (<https://iris.who.int/handle/10665/376928>). Licence: CC BY-NC-SA 3.0 IGO
8. Slawomirski L, Auraaen A, Klazinga N. The economics of patient safety in primary and ambulatory care: flying blind. Paris: Organisation for Economic Co-operation and Development; 2018 (OECD Health Working Papers No.106; <https://doi.org/10.1787/baf425ad-en>).
9. World Health Assembly, 72. Seventy-second World Health Assembly: Geneva, 20-28 May 2019: resolutions and decisions; annexes. Geneva: World Health Organization; 2019 (WHA72/2019/REC/1; <https://iris.who.int/handle/10665/331821>).
10. Global patient safety action plan 2021–2030: towards eliminating avoidable harm in health care. Geneva: World Health Organization; 2021 (<https://iris.who.int/handle/10665/343477>). Licence: CC BY-NC-SA 3.0 IGO.
11. Busse R, Klazinga N, Panteli D, Quentin W. Improving healthcare quality in Europe: characteristics, effectiveness and implementation of different strategies. Copenhagen: WHO Regional Office for Europe; 2019 (<https://iris.who.int/handle/10665/327356>).

---

<sup>1</sup> All references accessed 10 January 2025.



12. Promoting health in the SDGs: report on the 9th Global conference for health promotion, Shanghai, China, 21–24 November 2016: all for health, health for all. Geneva: World Health Organization; 2017 (<https://iris.who.int/handle/10665/259183>). Licence: CC BY-NC-SA 3.0 IGO.
13. Taking the pulse of quality of care and patient safety in the WHO European Region: multidimensional analysis and future prospects. Copenhagen: WHO Regional Office for Europe; 2024 (<https://iris.who.int/handle/10665/379758>). Licence: CC BY-NC-SA 3.0 IGO.
14. Groenewegen PP, Jurgutis A. A future for primary care for the Greek population. *Qual Prim Care*. 2013;21(6):369–78.
15. Economou C, Kaitelidou D, Karanikolos M, Maresso A. Greece: health system review. *Health Syst Transit*. 2017;19(5):1–192 ([https://iris.who.int/handle/10665/330204?search-result=true&query=Economou+C%2C+Kaitelidou+D%2C+Karanikolos+M%2C+Maresso+A+%282017%29.+Greece%3A+health+system+review.+European+Observatory+on+Health+Systems+and+Policies.+19%3A5.&scope=&rpp=10&sort\\_by=score&order=desc](https://iris.who.int/handle/10665/330204?search-result=true&query=Economou+C%2C+Kaitelidou+D%2C+Karanikolos+M%2C+Maresso+A+%282017%29.+Greece%3A+health+system+review.+European+Observatory+on+Health+Systems+and+Policies.+19%3A5.&scope=&rpp=10&sort_by=score&order=desc)).
16. Tackling wasteful spending on health. Paris: OECD Publishing; 2017 (<https://doi.org/10.1787/9789264266414-en>).
17. Greece: country health profile 2023. Paris; OECD Publishing; 2023 (State of Health in the EU Series; <https://doi.org/10.1787/dd530c3e-en>).
18. Sørensen K, Pelikan JM, Röthlin F, Ganahl K, Slonska Z, Doyle G et al. Health literacy in Europe: comparative results of the European health literacy survey (HLS-EU). *Eur J Public Health*. 2015;25(6):1053–8. doi:10.1093/eurpub/ckv043.
19. Michou M, Panagiotakos DB, Lionis C, Costarelli V. Socioeconomic inequalities in relation to health and nutrition literacy in Greece. *Int J Food Sci Nutr*. 2019;70(8):1007–13. doi:10.1080/09637486.2019.1593951.
20. Patient safety and quality of care. Brussels: European Commission Directorate-General for Health and Consumers; 2014 (Eurobarometer; <https://europa.eu/eurobarometer/surveys/detail/1100>).
21. Kruk ME, Kapoor NR, Lewis TP, Arsenault C, Boutsikari EC, Breda J et al. Population confidence in the health system in 15 countries: results from the first round of the People’s Voice Survey. *Lancet Glob Health*. 2024;12(1):e100–e111 ([https://doi.org/10.1016/S2214-109X\(23\)00499-0](https://doi.org/10.1016/S2214-109X(23)00499-0)).
22. Quality health services: a planning guide. Geneva: World Health Organization; 2020 (<https://iris.who.int/handle/10665/336661>). Licence: CC BY-NC-SA 3.0 IGO.
23. OECD health statistics [online database]. Paris: OECD Publishing; 2024 (<https://www.oecd.org/en/data/datasets/oecd-health-statistics.html>).
24. OECD and European Commission. Health at a glance: Europe 2024: state of health in the EU cycle. Paris: OECD Publishing (<https://doi.org/10.1787/b3704e14-en>).



25. Greece: introducing paperless, remote e-prescription – a gamechanger for primary care services. Copenhagen: WHO Regional Office for Europe; 2022 ([https://www.who.int/europe/publications/m/item/greece-introducing-paperless-remote-eprescription-a-game-changer-for-primary-care-services-\(2021\)](https://www.who.int/europe/publications/m/item/greece-introducing-paperless-remote-eprescription-a-game-changer-for-primary-care-services-(2021))). Licence: CC BY-NC-SA 3.0 IGO.
26. Chantzaras AE, Yfantopoulos JN. Income-related health inequalities among the migrant and native-born populations in Greece during the economic crisis: a decomposition analysis. *Eur J Public Health*. 2018;28(suppl\_5):24–31. doi:10.1093/eurpub/cky203.
27. Εθνικό σχέδιο δράσης για την αντιμετώπιση της μικροβιακής αντοχής στην Ελλάδα στο πλαίσιο της ενιαίας υγείας 2019–2023 [Greece: One Health national action plan for antimicrobial resistance 2019–2023]. Geneva: World Health Organization; 2022 (<https://www.who.int/publications/m/item/greece-one-health-national-action-plan-for-antimicrobial-resistance-2019-2023>) (in Greek).
28. Lionis C, Papadakis S, Tatsi C, Bertsiias A, Duijker G, Mekouris PB et al. Informing primary care reform in Greece: patient expectations and experiences (the QUALICOPC study). *BMC Health Serv Res*. 2017;17(1):255. doi:10.1186/s12913-017-2189-0.
29. WHO and OECD. Purchasing for quality chronic care: policy brief series. Geneva: World Health Organization; 2023 (<https://iris.who.int/handle/10665/373273>). Licence: CC BY-NC-SA 3.0 IGO.
30. Strengthening countries’ capacities to adopt and adapt evidence-based guidelines: a handbook for guideline contextualization. Copenhagen: WHO Regional Office for Europe; 2023 (<https://iris.who.int/bitstream/handle/10665/372275/9789289060028-eng.pdf>). Licence: CC BY-NC-SA 3.0 IGO.
31. Global strategy on infection prevention and control. Geneva: World Health Organization; 2023 (<https://iris.who.int/bitstream/handle/10665/376751/9789240080515-eng.pdf>) Licence: CC BY-NC-SA 3.0 IGO.
32. Patient safety rights charter. Geneva: World Health Organization; 2024 (<https://iris.who.int/handle/10665/376539>). License: CC BY-NC-SA 3.0 IGO.
33. Monaco A, Casteig Blanco A, Cobain M, Costa E, Guldmond N, Hancock C et al. The role of collaborative, multistakeholder partnerships in reshaping the health management of patients with noncommunicable diseases during and after the COVID-19 pandemic. *Aging Clin Exp Res*. 2021;33(10):2899–2907. doi:10.1007/s40520-021-01922-y.
34. State of long-term care in Greece. Copenhagen: WHO Regional Office for Europe; 2024 (<https://iris.who.int/handle/10665/378341>). Licence: CC BY-NC-SA 3.0 IGO.

