DOI:10.17951/h.2026.60.2.117-135

ANNALES
UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA
LUBLIN – POLONIA

VOL. LX, 2 SECTIO H 2026

EWELINA RABIEJ

erabiej@ur.edu.pl
University of Rzeszów. Faculty of Economics and Finance
al. Tadeusza Rejtana 16C, 35-959 Rzeszów, Poland
ORCID ID: https://orcid.org/0000-0003-0420-5217

# *ESG in Healthcare: Recommendations for the Public Sector*

**Keywords:** ESG; healthcare; public finance

**JEL:** M14; I18; G32; G34

**How to quote this paper:** Rabiej, E. (2026). ESG in Healthcare: Recommendations for the Public Sector. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, *60*(2), 117–135.

**Abstract**

**Theoretical background:** Healthcare systems around the world face increasing pressure to expand the accessibility and quality of medical services while simultaneously ensuring financial efficiency and incorporating environmental, social, and governance factors (ESG). Implementing ESG strategies in healthcare companies can be a key component of sustainable resource management, improving transparency in management processes, and building public trust. Integrating ESG with health policy can also support the long-term financial stability of healthcare companies and allow more responsible investment decisions in the healthcare sector.

**Purpose of the article:** The aim of the research is to formulate ESG-related recommendations for the healthcare sector in Poland, considering systemic challenges and financial constraints characteristic of the public sector. The empirical research question posed is whether and which ESG elements can be effectively integrated into the management system of public healthcare entities to enhance their stability, efficiency, and transparency. The research highlights the need to align managerial practices with global trends in sustainable development.

**Research methods:** The methodology is based on a review of the literature, analysis of legal acts, and qualitative analysis of ESG reports for 2024 prepared in accordance with the CSRD by three private healthcare companies – joint-stock companies. This combination of sources enables the formulation of

recommendations for the public sector while indicating potential benefits and barriers to implementing ESG strategies, as well as areas requiring regulatory or organisational support.
**Main findings:** The results contribute to a better understanding of the development of ESG in the healthcare sector and can serve as a valuable guide for policymakers and managers in public healthcare institutions. The findings emphasise the importance of developing ESG reporting standards, strengthening managerial competencies, and incorporating sustainable development objectives into healthcare finance and organisation in Poland.

## Introduction

The issue of sustainable development has for many years held an important place in academic literature and public debate, becoming a key reference point for economic policy. Contemporary societies face serious social and demographic challenges, generating the need to redefine existing solutions and make adequate decisions at both micro- and macroeconomic levels. Particular emphasis is placed on the integrated management of ESG factors – environmental, social and governance – encompassing ecological initiatives, corporate social responsibility, and corporate governance. Growing external pressures, increasing social awareness, legislative changes, increased demand for environmentally-friendly products and services, and many other drivers make ESG strategies an essential element of business strategy. This process is observed throughout the economy, including the healthcare sector, which constitutes a specific area of activity with a profound impact on the global economy – employing 70 million people, with total healthcare expenditures of 10% of global GDP (Sepetis et al., 2024; WHO, 2024a, 2024b).

In the context of sustainable healthcare management, the environmental dimension is of particular importance. The WHO has identified climate change as the greatest challenge of the 21st century, threatening human health and development (WHO, 2025). Healthcare reveals a distinct feedback loop – on the one hand, climate change exacerbates numerous health problems; on the other, healthcare systems, responsible for 5% of global greenhouse gas emissions, can actively contribute to mitigating its effects (United Nations, 2022). Additionally, factors such as technological progress, demographic and social change, and epidemiological threats make healthcare organization and financing an immense systemic challenge. A strong catalyst for the development of ESG concepts in healthcare was the COVID-19 pandemic, which exposed weaknesses in health systems worldwide and drew attention to issues of social responsibility.

The purpose of this research is to formulate ESG-related recommendations for the healthcare sector in Poland, considering systemic challenges and financial constraints typical of the public sector. The empirical research question is whether and which ESG elements can be effectively integrated into the management system of public healthcare companies to improve their stability, efficiency, and transparency. The applied research methods include a review of the literature, legal acts, and qual-

itative analysis of ESG reports for 2024 prepared according to the CSRD by three private healthcare joint-stock companies. The analysis of these documents enables the formulation of recommendations for the public sector while pointing to potential benefits and barriers to the implementation of ESG, as well as areas requiring regulatory or organisational support.

The point of reference for analysing ESG strategies in healthcare is the economics of sustainable development, which assumes that economic processes should balance and integrate three dimensions: economic growth, social justice, and environmental protection, while ensuring the ability to meet the needs of future generations. Access to high-quality healthcare services is one of the foundations of social development, and the functioning of health systems is closely related to both the economy and the environment. The environmental dimension includes, among others, energy efficiency, reducing greenhouse gas emissions, and managing medical waste. The social dimension relates to the equality in access to healthcare services, the working conditions of medical personnel, and the relationships with local communities. The economic dimension encompasses the rational use of public funds and the long-term financial stability of healthcare systems. In 2015, based on the concept of sustainable development, the United Nations launched the global initiative Transforming Our World: The 2030 Agenda for Sustainable Development – Agenda 2030, which defines the sustainable development model in three dimensions – economic, social, and environmental (United Nations, 2015). The healthcare sector plays a crucial role in the achievement of Agenda 2030, directly influencing 13 of 17 Sustainable Development Goals (SDGs). ESG issues such as education and health prevention or coordinated care not only improve the quality of healthcare services, but also support sustainable development (Bosco et al., 2024; Mohankumar, 2024).

Achieving the SDGs requires action at both macro- and micro-levels (Rabiej, 2017; Szadziewska et al., 2024). To strengthen their practical dimension and coherence, the European Securities and Markets Authority (ESMA) developed the European Sustainability Reporting Standards (ESRS), adopted in 2022 by Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Official Journal of the EU L 322, 16 December 2022) – CSRD. According to CSRD, the reporting covers environmental, social, and human rights factors, as well as governance factors. Environmental factors include climate change (mitigation and adaptation), pollution, water and marine resources, biodiversity and ecosystems, resource use, and the circular economy. Social and human rights factors include equal treatment and equal opportunities for all, working conditions (occupational health and safety, working hours, remuneration, social dialogue, freedom of association, right to information, work–life balance), respect for human rights, fundamental freedoms, and democratic principles and norms. Governance factors encompass administrative, management, and supervisory bodies, internal control and risk management systems, business ethics (including anti-corruption and

bribery, whistleblower protection, and animal welfare), lobbying, and relationships with clients, suppliers, and society (including payment practices). The key objective of CSRD is to ensure that companies report relevant, comparable, and reliable information on their environmental and social impacts, thus advancing the concepts of sustainable finance and development. This is crucial for numerous stakeholders: consumers, contractors, investors, and governments (Eccles & Klimenko, 2019). The justification for reporting standardisation highlights the need to direct capital flows towards sustainable investments to achieve sustainable, inclusive growth, manage financial risks associated with climate change, resource depletion, environmental degradation, and social issues, as well as promote transparency and long-term approaches in financial and economic activity. It should be noted, however, that following the adoption of Directive (EU) 2025/794 ("stop-the-clock") and Directive (EU) 2026/470 ("Omnibus"), the scope and timetable for implementing sustainability reporting requirements within the European Union have been partially revised. These changes primarily involve postponing reporting obligations for certain entities, reducing the number of companies subject to mandatory sustainability reporting, and simplifying selected provisions of the ESRS. Nevertheless, these amendments do not undermine the strategic importance of sustainability reporting but rather indicate the need for a more proportionate and phased implementation approach, particularly in sectors characterised by limited organisational and financial resources, such as public healthcare.[1]

Sustainability reporting is commonly referred to as ESG reporting. The acronym was first used in a 2004 UN report, which indicated that including and integrating ESG factors – environmental, social, and governance – in corporate strategies contributes to long-term sustainable socio-economic development (United Nations, 2004). ESG represents the next stage in the evolution of corporate social responsibility (CSR) towards sustainable development (Misztal, 2024; Sikora, 2024). A review of the literature shows that CSR and ESG are complementary approaches – CSR defines corporate responsibility towards the social and environmental context, while ESG introduces a set of measurable indicators to evaluate these activities (Kaźmierczak, 2022).

ESG reporting in the public sector is not regulated by law. The International Public Sector Accounting Standards Board (IPSASB) undertakes the development of standards for the public sector. IPSASB standards are intended for entities that meet three criteria: they are responsible for providing services to society, are financed pri-

[1] Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859 (Official Journal of the EU L, 2024/1760, 5.7.2024); Directive (EU) 2025/794 of the European Parliament and of the Council of 14 April 2025 amending Directives (EU) 2022/2464 and (EU) 2024/1760 as regards the dates from which Member States are to apply certain corporate sustainability reporting and due diligence requirements (Official Journal of the EU L, 2025/794, 16.4.2025, Directive "stop-the-clock"); Directive (EU) 2026/470 of the European Parliament and of the Council of 24 February 2026 amending Directives 2006/43/EC, 2013/34/EU, (EU) 2022/2464 and (EU) 2024/1760 as regards certain corporate sustainability reporting requirements and certain corporate sustainability due diligence requirements (Official Journal of the EU L, 2026/470, 26.2.2026, Directive "Omnibus").

marily from public funds, and do not operate for profit. Strengthening public finance management and sustainable development through the implementation of Sustainability Reporting Standards and International Public Sector Accounting Standards has been adopted as IPSASB's strategic goal for the coming years (IPSASB, 2022).

## Literature review

A review of the literature and research on the implementation of the ESG concept in the healthcare sector over the past five years indicates a considerable diversity of approaches and results. The analyses cover issues of reporting and disclosure, the impact of ESG activities on financial performance, as well as the importance of corporate governance and technological innovation. The literature emphasises, in particular, the environmental aspects and the role of legal and institutional frameworks in the effective implementation of the principles of sustainable development.

One of the key research strands is the quality and scope of ESG reporting in healthcare. Berniak-Woźny and Kwasek (2020) compared the practices of 19 healthcare companies, including 11 European and 8 North American units, from 2018–2019. The analysis revealed significant differences in both scope and quality of the report. The best-rated disclosures concerned the quality of healthcare services, patient data security, and employee issues (with limited reporting on work–life balance), while topics such as education, research, and charitable activities were marginalised. Environmental reporting was assessed at a moderate level, focussing mainly on energy efficiency, reduction of greenhouse gas emissions, and ecological innovations. Interestingly, North American companies, despite a shorter tradition of ESG reporting, achieved higher scores than European ones. The study demonstrates that sustainability reporting practices in healthcare are diverse and inconsistent, determined not only by legal regulations but also by cultural and institutional factors (Berniak-Woźny & Kwasek, 2020). The analyses conducted in the USA in 2021 by the PwC Health Research Institute confirmed that the social dimension of ESG – including initiatives aimed at improving the quality and accessibility of healthcare services and reducing health inequalities – is the most developed in healthcare. The PwC study also showed that for-profit companies are more advanced in implementing ESG than not-for-profit ones, due to investor pressure. In both types of organisations, the key motivators are building public trust, reputation, and transparency. ESG reporting is increasingly treated as a prerequisite for access to financing (PwC, 2021). Research conducted in Europe in 2025 by Pratici et al. (2025) based on reports from four Italian not-for-profit hospitals once again confirmed the dominance of social issues in ESG reporting, while environmental and governance aspects were marginalised. Such an approach increases the risk of non-integration of ESG strategies (Pratici et al., 2025).

Wójtowicz and Wójtowicz (2024), analysing fifty public hospitals in the European Union, developed an ESG Disclosure Index (ESG DI). The average level of disclosure

was 48% out of 36 defined indicators. Governance ranked highest at 59%, followed by social issues at 52%, and environmental issues at the lowest level of 47%. The findings demonstrate the fragmented nature of reporting – hospitals selectively disclose indicators in which they perform well, omitting more challenging areas. The most frequently disclosed items were data protection policies (98%), hospital business profiles (86%), SDG policies (76%), and descriptions of impacts and risks (68%). The least reported indicators included due diligence (6%), stakeholder engagement (8%), equal pay ratios (14%), greenhouse gas emissions (6%), and water consumption (8%). In the social dimension, the most frequently disclosed were occupational health and safety (98%), diversity (44%), and employment (46%), while in the environmental dimension – environmental policies (36%), waste management (28%), and water management (28%). The study highlights the lack of standardization in ESG reporting in public hospitals and the absence of institutional pressure, resulting in low reporting levels (Wójtowicz & Wójtowicz, 2024). Similar conclusions were reached by Szewieczek (2024), who examined the reporting of healthcare companies with respect to the presentation of their business models. The analysis covered 2021 reports of three listed companies: EMC Instytut Medyczny S.A., ENEL-MED S.A., and VOXEL S.A. The author demonstrated that listed companies do not report their business models in a clear, understandable, and comprehensive way, although the information presented in other parts of management reports or non-financial reports contains content that could serve as a valuable supplement (Szewieczek, 2024). The limited cognitive value of these reports results from the dispersion and lack of organization of the information. Analyses of WIG20 companies revealed insufficient preparedness for disclosures aligned with the ESRS requirements, particularly regarding ESG integration into organisational strategy, risk management processes and governance mechanisms. The results indicate that even large listed companies may experience difficulties in adapting to the new sustainability reporting framework, which may also constitute a challenge for public healthcare providers (Próchniak & Płoska, 2022).

The second important research on ESG in healthcare care concerns the relationship between ESG activities undertaken by healthcare care providers and their profitability. Carataș et al. (2021), analysing 335 healthcare companies in 28 countries, found that the impact of ESG on financial results is ambiguous. Environmental actions and governance elements supported profitability and financial stability, while the social component was associated with decreased profitability and liquidity indicators (Carataș et al., 2021). These results indicate that the importance of individual ESG pillars for the financial condition of healthcare companies is varied, which is particularly important for public institutions operating under financial constraints.

ESG can serve as a tool for risk reduction and stabilisation during crises. Hoang et al. (2021) examined the relationship between ESG activities and financial resilience of companies in various industries during the COVID-19 pandemic. They analysed 344 companies listed on the STOXX Europe 600 (data 2019–2020). Companies incorporating ESG into their business strategies exhibited significantly lower volatility

of stock prices, although they did not achieve higher returns compared to others. The findings suggest that the implementation of sustainable development principles in healthcare can enhance the resilience of the public sector to potential systemic shocks (Hoang et al., 2021).

Further research shows that the impact of ESG on financial results depends on the market and industry in which a company operates, as well as on the intensity of ESG activities. Kalia and Aggarwal (2023), analysing 468 healthcare companies (data 2020, Thomson Reuters), found that ESG activities positively influence the performance of healthcare firms in developed economies, but in developing economies, the relationship is negative or insignificant (Kalia & Aggarwal, 2023). In 2023, Gkliatis (2023) analysed 124 Chinese companies in the financial and healthcare sectors (data 2016–2021) and found that in an emerging market context, ESG significantly reduced profitability in healthcare, while in the financial sector it was insignificant (Gkliatis, 2023). Meanwhile, Lääts and Lukason (2022), analysing 421 Estonian non-listed companies of diverse sizes and sectors, demonstrated that the number of sustainable development initiatives was positively correlated with bankruptcy risk in the short term (long-term consequences were not studied). This effect was particularly evident for environmental initiatives and affected locally operating firms (Lääts & Lukason, 2022). The results confirm that at an early stage, the implementation of ESG can burden financial results and increase the risk of insolvency, which is crucial for public healthcare providers operating under financial constraints. Cross-country studies indicate that ESG maturity and its relationship with financial performance may depend on country-specific sustainability conditions and institutional environments. National sustainability frameworks, regulatory settings and stakeholder expectations can significantly influence both the development of ESG practices and their economic implications. Therefore, the transferability of ESG solutions between countries and sectors should be approached with caution (Gawęda, 2024). Candio's (2024) research on listed healthcare companies (data 2012–2022) showed that among the three ESG pillars, only governance was consistently correlated with improved financial performance, while the effects of environmental and social activities were ambiguous and limited. Governance may therefore play a key role in the efficiency of large healthcare companies (Candio, 2024).

In the context of governance, research also addresses the presence of women in top management. Many countries are introducing gender equality regulations, leading to a systematic increase in female representation on boards. In 2024, Alkayed et al. (2024) analysed 57 healthcare companies listed in the S&P 500 between 2010 and 2021 and demonstrated that gender diversity on boards, measured among others by the share of women, significantly improved the quality and intensity of sustainability reporting. Companies with women on boards achieved higher ESG scores, confirming that involving women in decision-making processes promotes greater transparency and social responsibility (Alkayed et al., 2024).

The quality of management in healthcare organisations was also the subject of research by Bosco et al. (2024). They indicated that, given the significant environmental,

social, and economic impact, the implementation and integration of ESG activities in public healthcare organizations is essential for sustainable development. The analysis of links with the goals of Agenda 2030 showed that the activities of hospitals and other public healthcare organizations directly affect 13 of 17 SDGs, particularly those relating to health, innovation, employment, and climate. They proposed an implementation tool called the ESG Processing Map, which outlines 13 areas and 27 topics relevant to sustainable development in healthcare organisations. The authors emphasise that public healthcare units are rarely subject to reporting requirements; therefore, the ESG Processing Map may serve as a compass that facilitates the implementation of the ESG strategy (Bosco et al., 2024). Studies conducted in Polish hospitals indicate that the maturity of management systems supporting sustainable development may still be limited. Despite the widespread implementation of ISO 9001 standards and accreditation mechanisms, organisational deficiencies have been identified, particularly in the areas of process orientation, employee involvement and performance measurement. These findings suggest that public healthcare entities may encounter substantial barriers in implementing broader sustainability management frameworks, including ESG-related practices (Chojnacka, 2023).

In recent years, more analyses have focused on the use of advanced technologies in healthcare. They point to the beneficial impact of implementing modern solutions on both healthcare quality and the environment (Majumder, 2024). In 2025, Ulucayli and Cek (2025) studied the relationship between environmental innovations and the assessment of ESG components. They analysed 100 companies operating in the broadly defined healthcare industry (health services, biotechnology and research, medical products, and equipment), located in European countries with high GDP. Their findings indicated that environmental innovation has a positive and significant effect on company performance in the environmental and social dimensions of ESG (Ulucayli & Cek, 2025). In 2025, Ward et al. (2025) proposed an interesting concept of integrating ESG issues into conventional health technology assessment methods (VBHC – value-based healthcare). Traditionally focused on the relationship between health outcomes and costs, VBHC, when expanded to include environmental, social, and governance perspectives, allows for a broader definition of value in healthcare systems. Incorporating ESG not only enables minimisation of the negative environmental impact of healthcare, but also supports greater social equity, transparency, and ethical practices. Integrating ESG with VBHC expands the patient-centred approach by adding social and environmental dimensions, creating a foundation for health policy (Ward et al., 2025). Grzymała-Kazłowski (2024) highlights that ESG considerations should be taken into account already at the hospital design stage. Environmental aspects (energy efficiency, renewable energy sources, water and waste management), social aspects (patient comfort, privacy, access to nature) and governance aspects (stakeholder participation, ethical construction practices, telemedicine) should be integrated – this not only improves hospital efficiency and functionality, but also improves patient well-being and builds social acceptance (Grzymała-Kazłowski, 2024).

Analyses of attestations to ESG reports prepared under previous regulations show considerable discretion, both qualitative and quantitative, which negatively affects the cognitive value and comparability of data (Czaja-Cieszyńska, 2024; Krasodomska & Zieniuk, 2021). The diversity of practices in the implementation of sustainable development suggests the need to develop comprehensive systemic tools.Pereno& Eriksson took a strategic approach. Using foresight workshops with 165 stakeholders from the healthcare sector in Nordic countries, including healthcare providers, universities, national and regional authorities, NGOs, industry organisations, and clusters, they developed three transformation scenarios for sustainable healthcare beyond 2030. The first, fragmented green healthcare, reflects the evolutionary development of current trends, fragmented and highly dependent on national policy; the second, transitional dynamic healthcare, involves innovation implementation (e-health), local strategy development, and cross-sectoral cooperation; the third, collaborative and regenerative healthcare, is the most desirable scenario, involving radical transformation, a patient-centred system, distributed networks of cooperation and co-management, and a circular economy. Cooperation, education, and innovation appear to be key to achieving sustainable development goals (Pereno & Eriksson, 2020). An important issue, beyond the implementation and integration of ESG actions, is the method of implementation of the ESG strategy. Rajagopalan et al. (2023) proposed a framework approach to implementing sustainability in healthcare organisations, the three-lens framework. The authors argue that effective transformation requires simultaneous action in three dimensions: strategic – goals and procedures, political – stakeholder mapping and gaining support for ESG initiatives, and cultural – changing attitudes, values, and behaviours (Rajagopalan et al., 2023).

Current research on ESG in the healthcare sector can be broadly grouped into four main streams. The first focuses on the quality, scope and comparability of ESG disclosures. The second investigates the relationship between ESG implementation, financial performance and organisational resilience of healthcare providers. The third stream examines governance mechanisms as determinants of transparency, stability and sustainable organisational development. The fourth encompasses studies addressing technological and systemic innovations supporting the sustainable transformation of healthcare systems. Despite the growing body of literature, studies devoted to the practical implementation of ESG-related solutions in public healthcare entities operating under financial and organisational constraints, particularly in Central and Eastern European countries, remain limited. This research gap provides a rationale for the present study.

## Research methods

As part of the research, a review was conducted of the legal framework and relevant guidelines on sustainability reporting in Poland, as well as ESG initiatives undertaken by private healthcare companies. The study was designed as an exploratory qualitative investigation aimed at identifying ESG-related good practices po-

tentially transferable to public healthcare entities. A four-stage analytical framework was adopted, comprising: (1) an analysis of the regulatory environment and literature review, (2) identification of healthcare entities subject to ESG reporting requirements in Poland, (3) qualitative analysis of ESG reports prepared by selected healthcare companies, and (4) development of recommendations for public healthcare providers based on the identified practices and organisational solutions.

The CSRD was incorporated into the Polish legal system through the Act of 6 December 2024 amending the Accounting Act, the Act on Statutory Auditors, Audit Firms and Public Oversight, and certain other acts (Journal of Laws 2024, item 1863), by adding Chapter 6c on sustainability reporting and simultaneously repealing Article 49b, which had regulated non-financial reporting since 2017. The obligation to prepare sustainability reports applies to large enterprises in specific legal forms and to small and medium enterprises listed on regulated markets (except for microenterprises).[2] The Act of 9 July 2025 amending the Act amending the Accounting Act, the Act on Statutory Auditors, Audit Firms and Public Oversight, and certain other acts (Journal of Laws 2025, item 1020)provides for a phased implementation of the CSRD guidelines. Moreover, Directive (EU) 2025/794 ("stop-the-clock") and Directive (EU) 2026/470 ("Omnibus") further revised the implementation schedule and scope of sustainability reporting obligations within the European Union by postponing reporting requirements for certain entities, reducing the number of companies subject to mandatory sustainability reporting, and simplifying selected ESRS provisions. Consequently, the timetable for the application of sustainability reporting requirements is currently subject to ongoing adjustments aimed at ensuring a more proportionate and gradual transition towards the full implementation of the CSRD framework.

The ESG report should contain the information necessary to understand the impact of the company on sustainable development, as well as the information necessary to understand how sustainability issues affect the company, including a description of the business model and business strategy and the sustainability strategy, opportunities and risks, goals, actions taken, metrics and results. As with non-financial reporting, sustainability reporting forms a separate section of the management report. The Act introduced the requirement of an ESG report assurance by a statutory auditor, aimed at preventing greenwashing[3] (ESMA, 2024). ESG misstatements are defined as dif-

[2] According Act of 29 September 1994 on Accounting (Journal of Laws 2023, item 120, as amended), a large companies is defined as one which, in the financial year for which the financial statements are prepared and in the preceding financial year, has exceeded at least two out of the following three thresholds: balance sheet total – PLN 110 million; net revenue from sales of goods and products – PLN 220 million; employment – 250 persons. The organisational and legal forms that oblige large enterprises to report on ESG are: a capital company; a limited joint-stock partnership; a registered partnership; a limited partnership in which all general partners with unlimited liability are capital companies, limited joint-stock partnerships, or companies from other countries with a legal form comparable to these; an insurance undertaking; a reinsurance undertaking; and a domestic bank.

[3] Greenwashing – to mislead (the public) by falsely representing a person, company, product, etc., as being environmentally responsible (*Concise Oxford English Dictionary*, 2025); in a broader sense,

ferences between the disclosure presented (or omitted) and the disclosure required by sustainability reporting standards. Misstatements may be quantitative or qualitative and may result from errors or fraud. Assurance includes, among others, an assessment of the financial materiality of ESG activities, which is considered high if such activities have caused, or can reasonably be expected to cause, significant financial effects on the company, its financial position, performance, cash flows, access to financing, or cost of capital. Another criterion is the materiality of the impact, which is considered high if the company's activities in a given area cause significant actual or potential, positive or negative impacts on people, the environment, or society. Potential areas of risk of ESG misstatement include, among others: sector specifics; organisational complexity; complexity of business activities; company sustainability declarations, particularly those made public; sustainability criteria used to determine variable executive remuneration; and the existence of financing conditional upon meeting ESG criteria (Polska Agencja Nadzoru Audytowego, 2025).

Based on the solutions adopted in the Act of 29 September 1994 on Accounting (Journal of Laws 2023, item 120, as amended), attempts are being made to standardise reporting in the healthcare sector. The report prepared in 2024 by the Polish Hospital Federation emphasised guidelines in the following areas: environmental – optimal resource management, reduction of $CO_2$ emissions and medical waste management; social responsibility – ensuring availability and high quality of healthcare services and patient satisfaction, HR policy (including working conditions and occupational safety) and relations with the community (preventive and educational programmes for local communities, inter-institutional cooperation); governance – transparency, ethics, patient data security and risk control (Healthcare Poland & Polska Federacja Szpitali, 2024). A new concept of Green Hospitals has emerged that promotes the sustainable transformation of healthcare. The main challenges identified include reducing greenhouse gas emissions, improving hospital energy efficiency, hospital digitalisation (including the use of cloud databases and artificial intelligence), new approaches to hospital construction and development, sustainable supply chains, and waste disposal and recycling. These are strong foundations of the ESG concept: a sustainable hospital means sustainable workflows and cooperation, logistics, architecture and supply, and infrastructure (United Nations, 2022).

The statutory obligation and scope of ESG reporting for healthcare companies in Poland depend on their legal form and scale of activity. According to the Act of 15 April 2011 on Medical Activity (Journal of Laws 2025, item 450, as amended), such activity can be conducted in many forms, and healthcare organizations can be classified into two groups: public and private. Public organizations include independent public healthcare institutions (SPZOZ), budgetary units, and military units. Private healthcare organizations can operate in all forms permitted for conducting

greenwashing refers not only to environmental issues but also to other areas of social responsibility (De Freitas Netto et al., 2020).

business activity by the Act of 6 March 2018 – Entrepreneurs' Law (Journal of Laws 2018, item 646, as amended), i.e., sole proprietorships, civil partnerships, limited liability companies, joint-stock companies, organisational units without legal personality but with legal capacity (general partnerships, professional partnerships, limited partnerships, limited joint-stock partnerships), and additionally: research institutes, foundations, associations, as well as legal persons and organisational units operating under laws on the relationship between the State and the Catholic Church, other churches, and religious associations. According to the Act of 29 September 1994 on Accounting (Journal of Laws 2023, item 120, as amended), healthcare companies required to prepare ESG reports are those operating as large capital companies and small and medium-sized companies listed on regulated markets. As of 23 August 2025, the Register of Healthcare Companies[4] contained 28,450 units, including 1,744 public organizations: 1,184 SPZOZ and 560 budgetary units, and 26,706 private companies, including 8,825 capital companies: 8,677 limited liability companies and 148 joint-stock companies. The scale of the operations of these organizations' varies significantly, with small and medium companies dominating among limited liability companies. Due to the structure and transitional provisions of the sector, only a small number of healthcare companies are required to prepare ESG reports according to CSRD.

Entity selection was based on purposive sampling. The study included healthcare companies that had prepared ESG or sustainability reports for 2024 and represented the most advanced reporting practices within the Polish healthcare sector. All healthcare service providers listed on the Warsaw Stock Exchange and subject to ESG reporting obligations under the CSRD were included, together with LUXMED Sp. z o.o., which is recognised as a leader in voluntary sustainability reporting practices in Poland. The objective of the study was not to compare private and public healthcare sectors but rather to identify good practices potentially transferable to public healthcare entities. A comparative analysis involving public healthcare providers was not feasible due to the lack of publicly available ESG reports prepared by public healthcare institutions. In 2025, 27 broadly defined healthcare sector companies were listed on the Warsaw Stock Exchange (WIGmed index), including only three companies whose predominant activity is healthcare services: Diagnostyka S.A. and ENEL-MED S.A. – required to prepare CSRD-compliant ESG reports for 2024, and a smaller company, VOXEL S.A.[5]

ESG reports were analysed using qualitative thematic content analysis. The study covered ESG reports, sustainability reports and management reports prepared for 2024. Identified activities were classified into the three main ESG dimensions (en-

[4] Rejestr Podmiotów Wykonujących Działalność Leczniczą (https://rpwdl2.ezdrowie.gov.pl/).

[5] It should be noted that none of mentioned companies were included in the WIG-ESG index, which comprised socially responsible companies and operated on the Warsaw Stock Exchange in the years 2019–2024 (GPW, 2019, 2024).

vironmental, social and governance) in accordance with the ESG conceptualisation adopted in the CSRD/ESRS framework and previous healthcare studies. The study was exploratory and conceptual in nature. Its objective was not to provide statistically generalisable conclusions for the entire healthcare sector but rather to identify practical ESG-related solutions and good practices that may serve as reference points for developing sustainability strategies in public healthcare entities.

## Results and discussion

The analysis of ESG activities undertaken in 2024 by healthcare organizations was conducted based on reports from two listed companies – Diagnostyka and ENEL-MED, and one non-listed company – LUXMED Sp. z o.o. The choice of LUXMED was due to its involvement in developing non-financial reporting. In the Deloitte ESG Ranking, LUXMED scored a high 71% overall, with individual categories: environment – 88%, society – 53%, governance – 83% (Ranking ESG 2025, 2025). The LUXMED report for 2024 was prepared in accordance with the Global Reporting Initiative standards, with partial inclusion of ESRS (mandatory from 2028). The results of the report review are presented in Table 1.

Table 1. Sustainable development activities reported in ESG statements of healthcare companies in Poland for 2024

| Area | Activities |
|---|---|
| Environmental | • implementation of solutions reducing energy consumption: thermal modernisation of premises, automation of diagnostic processes, replacement of lighting with LED systems, installation of motion sensors controlling lighting<br>• increased use of renewable energy sources, installation of photovoltaic systems<br>• introduction of procedures for segregation and disposal of medical and chemical waste, cooperation with certified specialised entities engaged in disposal<br>• progressive replacement of vehicle fleets with hybrid cars to reduce $CO_2$ emissions and fuel consumption<br>• implementation of solutions enabling direct transfer of files from diagnostic devices to systems (eliminating the need for printing) |
| Social | • compliance with the labour law, elimination of discrimination and ensuring equal treatment of employees, prevention of workplace bullying<br>• development of flexible work systems, including regulation of remote work<br>• development of employee competencies and professional qualifications, along with education in quality and patient safety<br>• implementation of onboarding training for new employees<br>• introduction of standards for the protection of minors, defining safety rules for underage persons, recruitment and employment procedures, and protection of their image and personal data<br>• provision of free medical and sports subscription packages for employees<br>• improvement of patient service quality, training in communication skills<br>• implementing digital innovations, development of online services such as appointment scheduling, teleconsultations, access to visit recommendations and e-prescriptions, access to test results and referrals, visit reminders, notifications of available appointments, doctor–patient chat |

| Area | Activities |
|---|---|
| | • implementation of complaint-handling procedures<br>• support for social, sports, health-related, and ESG initiatives<br>• training in first aid<br>• implementation of free preventive programmes and mental health support programmes for the local community, free psychological helpline |
| Governance | • identification of corporate risks, with particular attention to cybersecurity<br>• implementation of information security management systems and personal data protection policies<br>• building a compliance culture<br>• transparent communication with investors and shareholders – publication of key information on websites and in current/periodic reports<br>• changes in supervisory boards in accordance with corporate governance principles<br>• implementation of whistleblowing procedures enabling open or anonymous reporting of adverse events<br>• adoption of anti-corruption policies<br>• digital transformation, use of cloud-based and artificial intelligence solutions<br>• implementation of sustainable supply chain principles<br>• participation/membership/partnership in various institutions and projects promoting ESG and healthcare issues, e.g., Forum for Responsible Business<br>• cooperation with schools and universities in education, research and development, consultancy, co-organisation of events<br>• communication with stakeholders via website, social networks (LinkedIn, X, Facebook, Instagram, YouTube), helplines, and dedicated applications |

Source: Author's own study based on: (*Sprawozdanie Zarządu z działalności Centrum Medyczne ENEL-MED S.A. za 2024 r.*; *Sprawozdanie Zarządu z działalności Diagnostyka S.A. oraz Grupy Diagnostyka za 2024 rok*; *Sprawozdanie Zrównoważonego Rozwoju za 2024 LUXMED Sp. z o.o.*).

The analysis of ESG reports of the three largest private healthcare companies in Poland – Diagnostyka S.A., ENEL-MED S.A. and LUXMED Sp. z o.o. – indicates a wide range of activities undertaken across environmental, social and governance areas, with a clear emphasis on social initiatives. This confirms the trend observed earlier in the literature review. The observed dominance of social initiatives is consistent with previous findings reported by PwC (2021), Pratici et al. (2025) and Wójtowicz and Wójtowicz (2024).

In the environmental dimension, there is a strong focus on reducing carbon footprints and improving energy efficiency. Companies invest in thermal modernisation of buildings, modernisation of lighting systems, and automation of diagnostic processes, which reduces resource consumption. Increasing importance is placed on renewable energy-based solutions, such as photovoltaic installations. At the same time, companies implement responsible management of medical and chemical waste, in cooperation with certified partners. Attention is also paid to reducing emissions from transport by gradual fleet replacement with hybrid cars and digitisation of processes to eliminate the need for printed medical documentation.

In the social dimension, healthcare providers focus on ensuring safe, equal, and inclusive working environments. Priorities include compliance with labour law, preventing discrimination and bullying, and offering flexible forms of employment, including remote work. Considerable importance is given to the development of

employee competencies through training in quality and patient safety, onboarding programmes, and development initiatives. Notable is the introduction of standards for the protection of minors, as part of building a culture of social responsibility. Employers also offer additional benefits, such as free medical and sports subscriptions, while investing in improving patient service quality through communication training. Digital innovations in patient interaction are increasingly important, such as teleconsultations, online registration systems, electronic access to test results, prescriptions, and visit reminders. At the same time, companies engage in proactive community involvement, supporting local initiatives, preventive programmes, mental health services, and free helplines.

In the governance dimension, all companies implement measures to build a culture of compliance and transparency. They introduce information security management systems, data protection policies, and risk minimisation mechanisms, particularly in the field of cybersecurity. Companies emphasise transparent communication with stakeholders through reports, disclosures, and corporate updates. Mechanisms to counteract misconduct include whistleblowing procedures, anti-corruption policies, and codes of ethics. Governance also extends to digital transformation by cloud tools and artificial intelligence, as well as the implementation of sustainable supply chain principles. The companies analysed participate in initiatives promoting sustainable development and public health, cooperate with universities and schools, and maintain multi-channel communication with stakeholders – from social media and helplines to dedicated mobile apps.

The evidence compiled shows that private healthcare providers in Poland consistently develop ESG strategies, treating them not merely as a branding tool but as a key factor of long-term stability, efficiency and responsibility towards patients, employees, and society at large.

## Conclusions

The research carried out allows us to conclude that the implementation of ESG concepts in the healthcare sector, including public healthcare organizations, is not merely an image-building exercise or an additional reporting requirement, but a necessary condition to transform the entire healthcare system towards sustainable social development. Addressing the research question posed: all three ESG dimensions may be progressively integrated into the management systems of public healthcare organisations, provided that appropriate organisational, financial and managerial instruments are adopted. Although implementing environmental, social, and governance measures is not a prerequisite for healthcare providers to continue their operations, it affects their long-term stability, efficiency, and transparency.

The implementation of CSRD sets a new direction in non-financial reporting within the European Union, and, in the Polish healthcare sector, may serve as an

impulse to increase transparency and accountability. The analysis highlights the need to standardise and adapt ESG reporting to the specific context of public healthcare institutions, enabling a reliable assessment of their activities, and allowing governments to shape policies supporting sustainable development. Strengthening managerial competencies in risk management and the implementation of sustainability principles is essential. Transforming healthcare requires the digitalisation and automation of many processes (telemedicine, electronic prescriptions, electronic medical documentation), which will improve efficiency and reduce system-wide costs. At the same time, it is necessary to modernise infrastructure based on sustainable development principles, including energy efficiency and the circular economy. Cross-sectoral cooperation that brings together public institutions, private companies, and international organisations, as well as the implementation of monitoring and evaluation mechanisms for ESG activities, is also crucial. From the perspective of the management practice of public healthcare entities, there is a need to develop sector-specific guidelines for ESG implementation that reflect the particular characteristics of healthcare activities and the financial limitations of public healthcare providers.

The study has certain limitations that should be considered when interpreting the findings. The analysis covered a limited number of healthcare entities preparing ESG reports for 2024, reflecting the relatively small number of sustainability reports published by organisations operating in the Polish healthcare sector. Public healthcare providers were not included in the study because independent public healthcare institutions are currently not required to prepare ESG reports, and the available information remains fragmented. Therefore, the findings should be regarded as exploratory evidence aimed at identifying potential pathways for ESG implementation. Future research could extend the analysis to a larger number of entities, apply quantitative methods, and assess the level of ESG implementation in public healthcare providers as additional sustainability reporting data gradually become available. Currently, high ESG implementation costs remain one of the most significant challenges. Nevertheless, the potential benefits are considerable and include improvements in energy and operational efficiency, enhanced access to external financing sources (such as grants and preferential loans), and improvements in the quality and accessibility of healthcare services. ESG reporting contributes to improving management quality and increasing information transparency. It requires a more comprehensive and informed approach to organisational management and risk oversight, thereby enhancing resilience to potential adverse events (Ministerstwo Finansów, 2025).

In summary, the implementation of ESG promotes transparency in management processes, strengthens the financial stability of healthcare organizations and their resilience to crises, and most importantly, enables better utilisation of resources and improvement in the quality of healthcare services. ESG should therefore be viewed as a strategic tool that, in the long term, contributes to building public trust, achieving the goals of Agenda 2030, and ensuring the well-being of present and future generations.

## References

Alkayed, H., Shehadeh, E., Yousef, I., &Hussainey, K. (2024). Does a female director in the boardroom affect sustainability reporting in the U.S. healthcare industry? *Journal of Risk and Financial Management*, *17*(2), 49. **https://doi.org/10.3390/jrfm17020049**

Berniak-Woźny, J., & Kwasek, A. (2020). Sustainability reporting practices in the healthcare products sector – the case of Europe and North America. *Comparative Economic Research. Central and Eastern Europe*, *23*(2), 69–86. **https://doi.org/10.18778/1508-2008.23.13**

Bosco, F., Di Gerio, C., Fiorani, G., & Stola, G. (2024). How to manage sustainability in healthcare organisations? A processing map to include the ESG strategy. *Journal of Public Budgeting, Accounting & Financial Management*, *36*(5), 636–659. **https://doi.org/10.1108/JPBAFM-04-2023-0065**

Candio, P. (2024). The influence of ESG score on financial performance: Evidence from the European health care industry. *Strategic Change*, *33*(5), 417–427. **https://doi.org/10.1002/jsc.2594**

Carataş, M.A., Andreea, R., Iftene, C., Spatariu, E.C., & Gheorghiu, G. (2021). The impact of sustainability disclosure on companies' performance in healthcare industry. *Transformations in Business & Economics,* 20(2a), 42–59.

Chojnacka, M. (2023). The maturity level of quality management and medical service improvement by Wielkopolska district hospitals. *Annales Universitatis Maria Curie-Skłodowska, sectio H – Oeconomia*, *57*(1), 87–101. **http://dx.doi.org/10.17951/h.2023.57.1.87-101**

*Concise Oxford English Dictionary*. (2025). Oxford University Press. https://www.oed.com/search/dictionary/?scope=Entries&q=greenwashing

Czaja-Cieszyńska, H. (2024). The external assurance of ESG reports in Poland on the example of companies from the WIG20 index. *Zeszyty Teoretyczne Rachunkowości*, *48*(3), 33–50. **https://doi.org/10.5604/01.3001.0054.7255**

De Freitas Netto, S.V., Sobral, M.F.F., Ribeiro, A.R.B., & Soares, G.R.D.L. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, *32*(1). **https://doi.org/10.1186/s12302-020-0300-3**

Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (Official Journal of the EUL 322, 16 December 2022).

Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859 (Official Journal of the EU L, 2024/1760, 5.7.2024).

Directive (EU) 2025/794 of the European Parliament and of the Council of 14 April 2025 amending Directives (EU) 2022/2464 and (EU) 2024/1760 as regards the dates from which Member States are to apply certain corporate sustainability reporting and due diligence requirements (Official Journal of the EU L, 2025/794, 16.4.2025, Directive "stop-the-clock").

Directive (EU) 2026/470 of the European Parliament and of the Council of 24 February 2026 amending Directives 2006/43/EC, 2013/34/EU, (EU) 2022/2464 and (EU) 2024/1760 as regards certain corporate sustainability reporting requirements and certain corporate sustainability due diligence requirements (Official Journal of the EU L, 2026/470, 26.2.2026, Directive "Omnibus").

Eccles, R.G., & Klimenko, S. (2019). The investor revolution. Shareholders are getting serious about sustainability. *Harvard Business Review*. https://hbr.org/2019/05/the-investor-revolution

ESMA. (2024). *Final Report on Greenwashing*. https://www.esma.europa.eu/sites/default/files/2024-06/ESMA36-287652198-2699_Final_Report_on_Greenwashing.pdf

Gawęda, A. (2024). Does the sustainability of the country differentiate the ESG of companies and how it affects the relationship between ESG and firm value? Evidence from the European Union. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, *58*(4), 7–23. **http://dx.doi.org/10.17951/h.2024.58.4.7-23**

Gkliatis, I. (2023). The impact of CSR on the financial performance of firms in different industries: An example from the financial industry and the healthcare industry. *European Conference on Management Leadership and Governance*, *19*(1), 566–576. **https://doi.org/10.34190/ecmlg.19.1.1967**

GPW. (2019). https://raportzintegrowany2019.gpw.pl/2019-wig-esg-respect-index

GPW. (2024). *Wytyczne do raportowania ESG. Przewodnik dla spółek*. https://www.gpw.pl/pub/GPW/ESG/Wytyczne_do_raportowania_ESG.pdf

Grzymała-Kazłowski, M. (2024). ESG w projektowaniu szpitali. *Builder*, *322*(5), 50–53. **https://doi.org/10.5604/01.3001.0054.4809**

Healthcare Poland, & Polska Federacja Szpitali. (2024). *GreenBook. Podręcznik do raportowania ESG dla Szpitali 2024*. https://www.pfsz.org/greenbook-wsparcie-esg-dla-szpitali/

Hoang, T.H.V., Segbotangni, E.A., & Lahiani, A. (2021). ESG performance and COVID-19 pandemic: An empirical analysis of European listed firms. *SSRN Electronic Journal*, **https://doi.org/10.2139/ssrn.3855360**

IPSASB. (2022). *Advancing Public Sector Sustainability Reporting*. https://www.ipsasb.org/focus-areas/sustainability-reporting

Kalia, D., & Aggarwal, D. (2023). Examining impact of ESG score on financial performance of healthcare companies. *Journal of Global Responsibility*, *14*(1), 155–176. **https://doi.org/10.1108/JGR-05-2022-0045**

Kaźmierczak, M. (2022). A literature review on the difference between CSR and ESG. *Scientific Papers of Silesian University of Technology. Organization and Management Series*, *2022*(162), 275–289. **https://doi.org/10.29119/1641-3466.2022.162.16**

Krasodomska, J., & Zieniuk, P. (2021). Assurance on non-financial reporting: Theoretical underpinning, standards and practices of companies operating in Western and Eastern Europe. *Zeszyty Teoretyczne Rachunkowości*, *45*(1), 53–74. **https://doi.org/10.5604/01.3001.0014.8350**

Lääts, K., & Lukason, O. (2022). Sustainability initiatives and failure risk of a firm: How are they linked? *Journal of Risk and Financial Management*, *15*(11), 502. **https://doi.org/10.3390/jrfm15110502**

Majumder, S. (2024). Medical equipment engineering in ESG and green sustainable technology. In W.Y. Leong (Ed.), *ESG Innovation for Sustainable Manufacturing Technology: Applications, Designs and Standards* (pp. 91–117). IET. **https://doi.org/10.1049/PBME027E_ch6**

Ministerstwo Finansów. (2025). *Sprawozdawczość ESG – szanse i wyzwania dla przedsiębiorstw*. https://www.gov.pl/web/finanse/sprawozdawczosc-zrownowazonego-rozwoju

Misztal, A. (2024). Zrównoważony rozwój przedsiębiorstw, CSR i ESG w dobie kryzysu makroekonomicznego i geopolitycznego. *Kwartalnik Nauk o Przedsiębiorstwie*, *68*(2), 87–99. **https://doi.org/10.33119/KNoP.2023.68.2.6**

Mohankumar, P. (2024). ESG and SDG in healthcare. In W.Y. Leong (Ed.), *ESG Innovation for Sustainable Manufacturing Technology: Applications, Designs and Standards* (pp. 305–340). IET. **https://doi.org/10.1049/PBME027E_ch18**

Pereno, A., & Eriksson, D. (2020). A multi-stakeholder perspective on sustainable healthcare: From 2030 onwards. *Futures*, *122*, 102605. **https://doi.org/10.1016/j.futures.2020.102605**

Polska Agencja Nadzoru Audytowego. (2025). *Krajowy Standard Usług Atestacji Sprawozdawczości Zrównoważonego Rozwoju 3002PL – załącznik do uchwały Nr 854/20a/2025 Krajowej Rady Biegłych Rewidentów z dnia 23 stycznia 2025 r.* https://pana.gov.pl/wp-content/uploads/2025/01/Zal-854-20A-2025Krajowy-Standard-Uslug-Atestacji-Sprawozdawczosci-Zrownowazonego-Rozwoju-3002PL.pdf

Pratici, L., Salvatore, F.P., Fanelli, S., Zangrandi, A., & Milone, M. (2025). Using ESG paradigm as a basis for social reporting in nonprofit organizations: Evidence from cases in healthcare. *Management Decision*, *63*(2), 586–609. **https://doi.org/10.1108/MD-10-2023-2012**

Próchniak, J., & Płoska, R. (2022). WIG-20 Warsaw Stock Exchange companies: Are they ready for governance matters disclosures based on EU sustainable reporting standards? *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, *56*(5), 228–246. **http://dx.doi.org/10.17951/h.2022.56.5.227-246**

PwC. (2021). *PwC's Health Research Institute*. https://www.pwc.com/us/en/industries/health-industries/library/assets/pwc-esg-health-insights-health-org.pdf

Rabiej, E. (2017). Transformacja systemu ochrony zdrowia w Polsce – w drodze do zrównoważonego rozwoju. *Studia BAS*, *4*(52), 121–142. https://open.icm.edu.pl/handle/123456789/13959

Rajagopalan, S., Pronovost, P., & Al-Kindi, S. (2023). Implementing a sustainability framework in healthcare: A Three-lens framework. *Healthcare*, *11*(13), 1867. **https://doi.org/10.3390/healthcare11131867**

Ranking ESG 2025. (2025). https://resg.pl/2025/06/ranking-esg-2025-klasyfikacja-generalna/

Rejestr Podmiotów Wykonujących Działalność Leczniczą. https://rpwdl2.ezdrowie.gov.pl/

Sepetis, A., Rizos, F., Pierrakos, G., Karanikas, H., & Schallmo, D. (2024). A Sustainable model for healthcare systems: The innovative approach of ESG and digital transformation. *Healthcare*, *12*(2), 156. **https://doi.org/10.3390/healthcare12020156**

Sikora, J. (2024). Korzyści i ryzyka wdrożenia strategii ESG. In *Wyzwania sprawozdawczości w erze technologicznego i zrównoważonego rozwoju* (pp. 135–146). PWE.

*Sprawozdanie Zarządu z działalności Centrum Medyczne Enel-Med S.A. za 2024 rok.*

*Sprawozdanie Zarządu z działalności Diagnostyka S.A. oraz Grupy Diagnostyka za 2024 rok.*

*Sprawozdanie Zrównoważonego Rozwoju za rok 2024. Grupa LUXMED.* https://www.luxmed.pl/assets/media/Raport_Zr%C3%B3wnowa%C5%BConego_Rozwoju_Grupy_LUXMED_za_2024_rok.pdf

Szadziewska, A., Szychta, A., & Waniak-Michalak, H. (2024). Disclosures on the Sustainable Development Goals in the non-financial reports of companies listed on the Warsaw Stock Exchange. *Zeszyty Teoretyczne Rachunkowości*, *48*(4), 97–131. **https://doi.org/10.5604/01.3001.0054.8691**

Szewieczek, A. (2024). *Implementacja modelu biznesu do sprawozdawczości jednostek ochrony zdrowia – perspektywa wartości poznawczej*. Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach. **https://doi.org/10.22367/uekat.9788378759102**

Ulucayli, S., & Cek, K. (2025). The relationship between environmental innovation and ESG: Case of healthcare organisations. *International Journal of Work Innovation*, *6*(2), 167–185. **https://doi.org/10.1504/IJWI.2025.145764**

United Nations. (2004). *Who Cares Wins: Connecting the Financial Markets to a Changing World?* https://www.unglobalcompact.org/docs/issues_doc/Financial_markets/who_cares_who_wins.pdf

United Nations. (2015). *Przekształcamy nasz świat. Agenda na rzecz zrównoważonego rozwoju 2030*. https://www.un.org.pl/agenda-2030-rezolucja

United Nations. (2022). *Zielone szpitale*. https://ungc.org.pl/raport-un-gcnp-zielone-szpitale/

Ustawa z dnia 15 kwietnia 2011 r. o działalności leczniczej (Dz.U. 2025 poz. 450, ze zm.).

Ustawa z dnia 29 września 1994 r. o rachunkowości (Dz.U. 2023 poz. 120, ze zm.).

Ustawa z dnia 6 grudnia 2024 r. o zmianie ustawy o rachunkowości, ustawy o biegłych rewidentach, firmach audytorskich oraz nadzorze publicznym oraz niektórych innych ustaw (Dz.U. 2024 poz. 1863).

Ustawa z dnia 9 lipca 2025 r. zmieniająca ustawę o zmianie ustawy o rachunkowości, ustawy o biegłych rewidentach, firmach audytorskich oraz nadzorze publicznym oraz niektórych innych ustaw (Dz. U. 2025 poz. 1020).

Ustawa z dnia 6 marca 2018 r. Prawo przedsiębiorców (Dz.U. 2024 poz. 236, ze zm.).

Ward, A., Holmes, M.E., Ward, I., Lokmic-Tomkins, Z., East, L., & Levett-Jones, T. (2025). Environmental, Social and Governance principles in Australian publicly funded healthcare: An extension of value-based care. *Australian Health Review*, *49*(2), AH24296. **https://doi.org/10.1071/AH24296**.

WHO. (2024a). *Global spending on health. Emerging from the pandemic*. https://iris.who.int/bitstream/handle/10665/379750/9789240104495-eng.pdf?sequence=1

WHO. (2024b). *Health and care workforce. Global strategy on human resources for health: Workforce 2030*. https://www.who.int/publications/i/item/9789241511131

WHO. (2025). https://www.who.int/news-room/facts-in-pictures/detail/health-and-climate-change

Wójtowicz, K., & Wójtowicz, J. (2024). Exploring ESG disclosure: What? and Why? A study of leading European public hospitals. *Journal of Finance and Financial Law*, *3*(43), 139–156. **https://doi.org/10.18778/2391-6478.3.43.08**