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Sustainability Reporting Practices in the Healthcare Products Sector – the Case of Europe and North America

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Abstract

The Paper's goals: For the last two decades, sustainability reporting has increasingly been gaining the attention of managers, and consequently, academicians, too. This is due to the growing interest of a wide range of stakeholders, such as governments, investors, and customers, in non-financial information disclosed by business and public organisations. However, designing and implementing a sustainability report that fits the needs of these different stakeholder groups is a challenge. The differences between the various sectors make this challenge even greater. The focus of this paper will be on the healthcare products sector. The aim of this paper is to investigate the scope and quality of sustainability reporting practices of companies operating in the European and North American healthcare products sector. Research methods: The study is based on the current literature on sustainability reporting and non-financial (NFI) reporting. The empirical part of the paper will be based on a qualitative descriptive research design. Content analysis will be conducted on sustainability reports issued in 2018 and 2019, by 11 European and 8 North American organisations in the healthcare products sector. The nature of the study will be descriptive and based solely on information from secondary data sources. Expected results of the research: This paper will contribute to the international health management literature and to the existing research of sustainability reporting. Based on the findings, the health sector's sustainability reporting practices will be carefully identified. The authors will also compare the practices of North American and European organisations', and subsequently, they will define the trends and best practices in this field.

Keywords: sustainability reporting, CSR reporting, non-financial reporting, GRI, health sector, content analysis

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Introduction

As reflected by Allen White, founder and co-chair of the Global Initiative for Sustainability Ratings, "in the late 1990s, corporate sustainability reporting was virtually unknown. However, in little more than a decade, it has evolved from the extraordinary to the exceptional to the expected. By the standards of major innovations in business practices, it ranks among the most remarkable in recent years" (White 2013). Sustainability reporting has been gaining in terms of increasing attention among academics and business practitioners, for over two decades. This attention is fuelled by the dynamically growing needs of stakeholders, especially customers, investors, business partners, employees, and local communities. Companies wishing to answer those needs develop a wide range of sustainable activities and report on them, following numerous and standards and guidelines that grow more complex every year. However, the scope of the reported issues and the quality of reporting vary between firms and industries.

Seeing the potential in the sustainability concept and sustainability reporting, Fabrizio Russo (2016) expressed a collective wish to have an interest in healthcare in the future, especially if it is able to improve and diffuse an ethic of work. As highlighted by Senay and Landrigan (2018, e180975), "There is natural synergy between the mission of health care delivery, sustainability, and CSR activities. All seek to improve human well-being, the health care enterprise directly through the provision of medical care, sustainability by improving the environment, and CSR, by including efforts to improve the social welfare of employees, consumers, and communities." However, the advancement of sustainability reporting of the healthcare industry is just beginning to attract the attention of researchers. So far, only a small number of research papers have been published. Thus, the aim of this paper is to investigate the scope and quality of sustainability reporting practices of companies operating in the European and North American healthcare products sector.

Literature review

According to the Global Reporting Initiative (GRI 2018), a sustainability report is a document published from within an organisation about the economic, environmental, and social impacts caused by its everyday operations (whether positive or negative). It aims to help organisations measure, understand, and communicate their economic, environmental, and social performance, and to manage change more effectively. Sustainability reporting is the first, but critical step, in implementing a strategy that reveals an organisation's impact on its stakeholders, and possible ways to mitigate a negative impact on the economy, society, and the environment. In other words, a sustainability report is the link between an organisation's strategy and its commitment to a sustainable global economy. However, reporting on business sustainability

in a way that fits the needs of diverse stakeholder groups is still a challenge (Freundlieb & Teuteberg 2012).

Sustainability reports are published under a number of different names, including social reports, corporate social responsibility reports, social and community reports, corporate social disclosure (CSD), corporate environmental reporting (CER), triple bottom line (TBL) reporting, and many others (see, e.g., Kolk 2010; Owen et al. 2001; Buniamin and Ahmad 2015). Together with the variety of the sustainability report names comes a range palette of reporting standards, which have been developed to provide guidance on what and how to report. Examples include the Global Reporting Initiative (GRI) guidelines, the UN Global Compact Communication on Progress, the AA1000 Standard, ISO 26000 – International Standard for Social Responsibility, OECD Guidelines for Multinational Enterprises, CERES Principles, the ESG Framework, The United Nations Global Compact (UNGC), International Finance Corporation (IFC) principles, and many others. More and more companies are also adopting Sustainable Development Goals (SDGs). From those mentioned above, the GRI Sustainability Reporting Guidelines are currently the set used most by many organisations around the world. According to the GRI (2018), 74% of the world's 250 largest companies report using their standards.

According to José and Lee's (2007) research on sustainability, reporting can be divided into four different streams. The first stream of research addresses the content of the sustainability reports (e.g. José and Lee 2007). The second stream investigates the corporate characteristics of the reporting companies (e.g. Wanderley et al. 2008). The third stream analyses the reporting medium (e.g. Tench & Jones 2015). The fourth stream considers the relationship between sustainability performance and sustainability reporting (e.g. Clarkson et al. 2008). This paper can be placed in the first stream, as the content of sustainability reports is examined by focusing on the reporting scope and quality.

The health care industry is one of the largest and fastest-growing economic sectors, both in Europe and the United States. The European healthcare market is expected to exceed more than US$ 224 billion by 2022. The USA market represented 17.7% of GDP in 2015, with projections to reach 20% by 2025. Global healthcare spending is projected to increase at an annual rate of 5.4% in the period 2018–2022, a considerable rise from 2.9% in the years 2013–2017 (MRE 2018). This growth dynamic reflects the expansion of healthcare coverage in developing markets, the growing care needs of elderly populations, advances in treatments and health technologies, and rising health care labour costs (Deloitte 2018). It also reflects the potential of the sector in reaching the SDGs.

Healthcare organisations are now among the largest corporations, and they generate enormous revenues. For example, the Hospital Corporation of America Holdings, the largest for-profit health system in the United States, had more than $44 billion in revenue in 2016 and was ranked 63rd on the Fortune 500. Kaiser Permanente, the nation's largest non-profit health system, generated more than $64 billion in rev-

enue in 2016. If the organisation had been eligible for the Fortune 500 list, it would have ranked 39th, ahead of Pepsi and Disney (Senay and Landrigan 2018). This scale of business situates them as key actors of the global sustainability strategy development and implementation. The last two decades proved that it is not the legal acts, but voluntary practices that are the most successful in making individual companies and whole industries more sustainable.

The healthcare products' sector represents a part of healthcare that is focused on the development and implementation of innovative medical products. Companies in the sector are pharmaceutical, medical device, and diagnostic device producers. The medical device and diagnostic part of the sector includes more than 20,000 companies worldwide. The biopharmaceutical part of the sector is much more consolidated, with 200 pharmaceutical companies, 400 publicly traded biotechnology companies, and 1,400 privately held biotechnology companies worldwide. As stated by Peter Juhn (2009), the healthcare product sector, as the supplier of healthcare products, can add far more value to healthcare delivery, and the appropriate use of medications and devices, than has yet been realised. The sector has demonstrated broad experience in the development of evidence on the safety and efficacy of medications and devices, and it has been involved in the promotion of the safe and effective use of therapeutics. However, this experience should be used in a much broader and more effective way.

Having said that, knowledge of the healthcare industry's sustainability practices is very limited and fragmented (Blowfield and Frynas 2005; Hopkins 2007; Russo 2016). A number of papers focused on pharmaceutical companies and their respect for human rights (Gruskin and Raad 2010; Ritter 2010). Others focused on evaluating specific sustainability activities (Leisinger 2005), and the creation of economic opportunity (Mahmud and Parkhurst 2007). However, there is a research gap regarding the helicopter view of the sectors' current sustainability practices, from the perspective of scope and quality. Thus, this paper aims to fill this gap and build the foundation for further issue-focused research and research that employs the stakeholders' perspective.

Research methodology

Sample

To develop a fair analysis of the sustainability practices of the healthcare products' sector, the authors have focused on Europe and North America – the two most advanced regions of the world in terms of sustainability reporting. The authors' intention was to present a "snapshot" of the current sustainability reporting practices of the healthcare products' sector. The sample includes 11 European and 8 North American companies that registered sustainability reports in the GRI database in 2018 and 2019 (for the period 1st of January, 2017, to 31st of December, 2018), as the sample should be comparable to allow for a fair assessment of the disclosed information. The GRI database

was chosen as GRI is the most commonly used sustainability reporting framework (Ernst & Young 2016). The sample company reports had to meet the following criteria to be included in the further study: (1) the report must be provided in English or Polish (as both researchers are Polish native speakers), and (2) the report must be for the period 1st January 2017 to 31st December 2018.

Among the registered reports of the sample organisations, the year of the first report's publication varies. In the case of the North American sample, the earliest date of publication is 2014 (Biogen Idec and Johnson & Johnson), and in the case of the European sample, it is 2004 (Novartis). It suggests that for the analysed sector, sustainability reporting is a relatively new practice. Over 70% of the sample companies explicitly referred to the UN's Sustainable Development Goals (SDGs) in the report, while over 40% referred to the UNGDC and CDP standards, and 24% to ISO 26000 and the OECD standards. One sample company referred to the IFC standard. More than half (52%) of the sample reports contained External Assurance.

Methodology

The paper is based on content analysis, which is regarded as "the research method that is most commonly used to assess organisations' social and environmental disclosures" (Milne and Adler 1999, p. 237). According to Krippendorff (2013, p. 24), *content analysis* is "a research technique for making replicable and valid inferences from *texts* (or *other* meaningful matter) to the contexts of their *use*." The authors have chosen this methodology as it allows one to analyse data qualitatively, and at the same time, quantify the data (Gbrich 2007). The primary aim of content analysis is to describe the phenomenon in a conceptual form (Elo & Kyngäs 2008); thus, it requires a well-defined process of data analysis that includes the following stages (Elo & Kyngäs 2008, p. 110):

– Preparation: Being immersed in the data and obtaining the sense of the whole, selecting the unit of analysis, and deciding on the analysis of manifest or latent content.

– Organising: Open coding and creating categories, grouping codes under higher-order headings, formulating a general description of the research topic through the generation of categories and sub-categories as abstracting.

– Reporting: Reporting the analysing process and the results through models, conceptual systems, conceptual maps or categories, and a storyline.

In the case of our research, the data analysis process was performed by two researchers. In the Preparation stage, all sustainability reports of the sample companies registered in the GRI database were collected. Further, the researchers immersed themselves in the collected data, and the major categories of analysis were decided. As noted by Gray et al. (1995), there are four major categories for CSR: marketplace (consumers, creditors); workplace, (employees); community, and environment. At the preparation stage, those basic categories were redefined to become the following categories: customers/patients, employees, community, and environment.

As noticed by Beattie et al. (2004), content analysis offers researchers the choice between the "index" studies (to check for the presence or absence of specific items of information, but it may also incorporate ordinal measures to allow for the quality of the specific disclosure to be assessed) and "amount-volume" studies (to check for the overall volume of the disclosure, most frequently by counting words, sentences, or proportions of an A4 page). In the case of this paper, the index approach was much more suitable from the perspective of the research aim.

In index studies, a simple binary coding scheme is frequently used (where a score of 1 or 0 in the presence or absence of the item is respectively attributed). However, other coding schemes incorporate ordinal measures to allow for the quality of the specific disclosure to be assessed (Beattie et al. 2004). This research adapts Wiseman's (1982) four-level index:
   – a score of three (3) is given if a particular item is disclosed and described in monetary or quantitative terms,
   – a score of two (2) is assigned to disclosed items with specific information but in non-quantitative terms,
   – a score of one (1) is given for items mentioned in general terms only, and,
   – a score zero (0) is given if the item is not disclosed.

At the organising stage, the list of issues under each of the four major categories was defined. The researchers read the reports, independently, several times, and listed all themes covered by each previously defined category. The themes were then clustered into issues. The differences in the coding were discussed systematically in order to deliver one final result for analysis. Finally, 25 issues grouped into four major categories, were used to measure the scope and quality of sustainability reporting of the sample of companies. The assessment of each company from the perspective of the defined issues and major categories was conducted. The quality of reporting on the defined issues and categories in the sector was also assessed. All discrepancies between the researchers were discussed, and the agreed assessments are presented in the next section of the paper (the reporting stage).

Results and discussion

During the preparation stage, four basic sustainability reporting categories were developed, namely: customers/patients, employees, community, and environment. The presentation of the results and the subsequent discussion will also be structured that way.

Reporting of customer issues by the healthcare products' sector

When studying the reporting of customer issues in the healthcare products sector, it should be noted that the quality was high, and the scope of the reporting was wide (Tables 1a and 1b). In the case of the European sample, most of the analysed reports

presented in detail, and in high quality on the high standards of products, customer data safety, and compliance (all with a score of 2.4). Also, customer satisfaction and dialogue on customer issues were well presented (2.2 and 2.3, respectively). Only reporting on access to healthcare products by disadvantaged customers was assessed poorly. This severely weakens the reports as access to the medicine, medical technologies, and other healthcare products is a basic human right, but severely limited by the economic conditions and other demographic factors of the current global society. From the reporting organisations' perspective, the average scores ranged from 0.8 to 3.0.

In the case of the North American sample, the scope and quality of the reporting is also well assessed, and ranges from 2.0 in the case of customer satisfaction issues, to 2.9 in the case of the quality of products. Since many of the chemicals used are classified as hazardous substances and mixtures, companies must ensure that they pose no risk to people or the environment. Thus, they report on compliance with an array of national and international regulatory requirements, statutes, and guidelines, an approach that is crucial to the sectors' business activities. Also, reporting on disadvantaged customers' access to healthcare products is assessed positively. Johnson & Johnson, for example, reported on membership in the Access Accelerated partnership, which brings together a broad group of stakeholders, including the World Bank, the Union for International Cancer Control, and pharmaceutical companies. They have a shared vision of working toward the UN's Sustainable Development Goal target to reduce premature deaths from non-communicable diseases by one third by 2030. The initiative will focus on access to primary healthcare, as well as financing, regulatory, and service barriers. From the reporting organisations' perspective, the average scores ranged from 1.3 to 3.0.

Table 1a. Customer issues reporting by European companies in the healthcare products' sector

Issue	ConvaTec	Drägerwerk AG & Co. KGaA	Fresenius Medical Care	Hovione	Krka	Lonza	Merck	Novartis	OPHARDT Hygiene Group	PCC Exol SA	Sonova	AVERAGE
Dialogue with customers	3	3	3	1	3	2	3	1	1	3	2	**2.3**
Customer satisfaction	2	3	3	1	3	2	3	1	1	3	2	**2.2**
Quality of products	3	3	2	1	3	2	3	3	1	3	2	**2.4**
Customer data safety	3	3	2	1	3	2	3	3	0	3	2	**2.4**
Compliance	2	2	2	2	3	2	3	3	1	3	3	**2.4**

Table 1a. (continued)

Issue	ConvaTec	Drägerwerk AG & Co. KGaA	Fresenius Medical Care	Hovione	Krka	Lonza	Merck	Novartis	OPHARDT Hygiene Group	PCC Exol SA	Sonova	AVERAGE
Access to healthcare products by disadvantaged customers	3	1	1	1	1	1	3	3	1	2	1	**1.6**
AVERAGE	**2.7**	**2.5**	**2.2**	**1.2**	**2.7**	**1.8**	**3.0**	**2.3**	**0.8**	**2.8**	**2.2**	**2.2**

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

Table 1b. Customer issues reporting by North American companies in the healthcare products' sector

Issue	Agilent Techn.	Amgen Inc.	Bayer	Biogen Idec	Boston Scientific	Johnson & Johns.	Mylan	Varex Imaging	AVERAGE
Dialogue with customers	1	2	2	2	1	3	3	3	**2.1**
Customer satisfaction	1	2	2	2	2	2	2	3	**2.0**
Quality of products	2	3	3	3	3	3	3	3	**2.9**
Customer data safety	1	2	3	3	1	3	1	3	**2.1**
Compliance	2	2	3	3	3	3	3	3	**2.7**
Access to healthcare products by disadvantaged customers	1	3	2	2	2	2	2	3	**2.1**
AVERAGE	**1.3**	**2.3**	**2.5**	**2.5**	**2.0**	**2.6**	**2.3**	**3.0**	**2.3**

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

In both samples, customer data safety was presented in a satisfactory way. Companies collect information on patients who participate in clinical trials and those whom they engage through various patient programmes. Thus, companies are very serious about the protection of patients' privacy and safeguard their personal health information, by preventing unauthorised access to, or sharing of their data.

Reporting of employee issues by the healthcare products' sector

In the case of the employee issues reported by the European companies in the sample, the quality should be assessed as satisfactory but diversified (Table 2a), and the scope is wide. Most of the analysed reports covered all defined issues. The highest scores

were awarded to working conditions and occupational health and safety (both 2.6). The lowest scores were given to work-life balance and employee volunteering (both 1.4). From the reporting organisations' perspective, the average scores ranged from 0.7 to 2.9.

Table 2a. Reporting of employee issues by European companies in the healthcare products sector

Issues	ConvaTec	Drägerwerk AG & Co. KGaA	Fresenius Medical Care	Hovione	Krka	Lonza	Merck	Novartis	OPHARDT Hygiene Group	PCC Exol SA	Sonova	AVERAGE
Working conditions	3	3	3	3	3	2	3	3	1	2	3	**2.6**
Occupational health and safety	2	3	2	3	3	3	3	3	1	3	3	**2.6**
Employee development	2	2	2	3	3	2	3	3	1	3	2	**2.4**
Employee satisfaction	2	2	2	3	3	2	3	1	0	2	1	**1.9**
Employee engagement	2	1	3	3	3	2	3	1	1	2	1	**2.0**
Diversity and equal opportunities	1	3	2	3	1	2	3	3	1	2	2	**2.1**
Work-life Balance	1	2	1	3	2	1	2	1	0	1	1	**1.4**
Employee volunteering	1	2	1	1	1	2	3	1	0	3	1	**1.4**
Corruption and unethical behaviour	2	2	3	2	2	2	3	3	1	3	2	**2.3**
AVERAGE	1.8	2.2	2.1	2.7	2.3	2.0	2.9	2.1	0.7	2.3	1.8	2.1

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

Employee issues reported by the North American companies in the sample, from both the scope and quality perspective, are assessed slightly better (Table 2b). All of the issues were given average scores above 2.0. The highest scores were given to diversity and equal opportunities (3.0), and employee development (2.7). The lowest scores were again given to work-life balance and employee volunteering (both 2.1). From the reporting organisations' perspective, the average scores ranged from 2.2 to 3.0.

In both samples, but especially in the North American sample, one can observe that companies realise that their success is based, to a large extent, on the knowledge, skills, engagement, and satisfaction of employees. Thus, as employers, they develop and implement a number of standardised tools to attract and retain the best talents on the market (like fair treatment at work, a transparent and equitable compensation system, company pension plans, the ability to combine working with family commitments, flexible worktime arrangements), but they also offer additional solutions to show society and current and potential employees that they are not only socially responsible

but also socially engaged, establishing a dialogue-oriented corporate culture based on common values and trust. Additionally, companies are trying to adjust to the digital environment by offering numerous innovative digital options to perform their tasks or offer various flexible and innovative working models.

Table 2b. Reporting of employee issues by the North American companies in the healthcare products sector

Issues	Agilent Techn.	Amgen Inc.	Bayer	Biogen Idec	Boston Scientific	Johnson & Johns.	Mylan	Varex Imaging	AVERAGE
Working conditions	3	2	3	2	2	3	3	3	**2.6**
Occupational health and safety	3	2	3	3	3	3	3	3	**2.9**
Employees' development	3	2	3	2	3	3	3	3	**2.7**
Employees' satisfaction	1	1	3	3	3	3	3	3	**2.5**
Employees' engagement	1	2	2	3	2	3	3	3	**2.4**
Diversity and equal opportunities	3	3	3	3	3	3	3	3	**3.0**
Work-life Balance	1	2	2	2	1	3	3	3	**2.1**
Employee volunteering	1	3	2	3	3	3	1	1	**2.1**
Corruption and unethical behaviour	2	3	2	3	3	3	3	3	**2.7**
AVERAGE	**2.2**	**2.5**	**2.5**	**2.7**	**2.5**	**3.0**	**2.8**	**2.8**	**2.6**

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

The reporting of community issues by companies in the healthcare products' sector

When studying the European companies in the sample, it should be noted that in the case of community-related issues, the quality of the reporting was low, and the scope was very narrow (Table 3a). The support of culture and sports issues is very low (0.5 and 0.7, respectively). Social activities and charity (1.7), the development of science (1.5), and support for education (1.2) were reported slightly better. The reporting organisations' perspective revealed that the average scores were extremally diverse, ranging from 0 to 3.0.

The quality of the North American companies' sustainability reporting of community issues was slightly better, but the scope was similar to the European sample (Table 3b). Again, the weakest reported issues were support of culture and sports (0.5 and 0.4, respectively). The best-reported issue was the development of science (2.2), and supporting education and social activities, as well as charity (all 2.1). The reporting organisations' perspective revealed that the average scores were less diverse, ranging from 0.6 to 2.6.

Table 3a. Reporting of community issues by European companies in the healthcare products sector

Issue	ConvaTec	Drägerwerk AG & Co. KGaA	Fresenius Medical Care	Hovione	Krka	Lonza	Merck	Novartis	OPHARDT Hygiene Group	PCC Exol SA	Sonova	AVERAGE
Promotion/ Sponsorship of culture	0	0	0	1	3	1	3	0	0	0	0	**0.5**
Promotion/ sponsorship of sport	2	0	0	1	1	1	3	0	0	0	0	**0.7**
Supporting education	2	3	0	1	1	1	3	1	0	1	0	**1.2**
Development of science	2	2	0	2	3	1	3	1	0	1	0	**1.5**
Social activities and charity	2	2	0	1	3	1	3	3	1	1	2	**1.7**
AVERAGE	**1.6**	**1.4**	**0**	**1.2**	**2.2**	**1.0**	**3.0**	**1.0**	**0.2**	**0.6**	**0.4**	**1.1**

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

The strong support for the development of education and science seems to be a typical form of community engagement for companies in the healthcare product sector. Usually, this support is given by dedicated foundations. For example, the Biogen Foundation is committed to supporting non-profit organisations that focus on four areas: providing access to hands-on science education, teacher development in science, college readiness, plus support and basic social needs (child hunger, poverty, and social mobility).

Table 3b. Reporting of community issues by the North American companies in the healthcare products sector

Issue	Agilent Techn.	Amgen Inc.	Bayer	Biogen Idec	Boston Scientific	Johnson & Johns.	Mylan	Varex Imaging	AVERAGE
Promotion/Sponsorship of culture	1	0	3	0	0	0	0	0	**0.5**
Promotion/sponsorship of sport	0	0	3	0	0	0	0	0	**0.4**
Supporting education	1	3	3	3	3	3	0	1	**2.1**
Development of science	1	3	3	3	2	3	1	2	**2.2**
Social activities and charity	1	3	1	1	3	3	2	3	**2.1**
AVERAGE	**0.8**	**1.8**	**2.6**	**1.4**	**1.6**	**1.8**	**0.6**	**1.2**	**1.5**

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

Even though culture and sport are not widely supported, we can find a few interesting examples of the sector's engagement. For example, Bayer Arts & Culture promotes artistic diversity through music, dance, theatre, and art events. Additionally, Bayer has expanded the stARTacademy, which offers highly talented young artists comprehensive support – such as by bringing solo artists together with orchestras and providing financial assistance.

Reporting of environment issues by companies in the healthcare products sector

Looking at the European sample's sustainability reporting of environmental issues, both the scope and quality were assessed rather poorly (Tables 4a). The weakest reported issues were environmental education campaigns (0.9), pro-environmental products (1.6), and introducing environmentally-friendly solutions (1.7). The best-reported issue was environmental sustainability covering a wide range of aspects like water, energy, and fuel, carbon, paper and waste management/recycling. The reporting organisations' perspective shows that the average scores were rather low, ranging from 1.0 to 2.7.

Table 4a. Environmental issues reporting by European healthcare products' sector companies

	ConvaTec	Drägerwerk AG & Co. KGaA	Fresenius Medical Care	Hovione	Krka	Lonza	Merck	Novartis	OPHARDT Hygiene Group	PCC Exol SA	Sonova	AVERAGE
Environmental sustainability	3	3	3	3	3	2	3	3	2	3	2	**2.7**
Introducing environmentally friendly solutions	1	2	1	3	3	2	3	1	1	1	1	**1.7**
Pro-environmental products	1	2	1	3	2	2	3	1	1	1	1	**1.6**
Environmental education campaigns	1	1	1	1	1	1	2	1	0	1	0	**0.9**
AVERAGE	**1.5**	**2.0**	**1.5**	**2.5**	**2.2**	**1.7**	**2.7**	**1.5**	**1.0**	**1.5**	**1.0**	**1.7**

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

Considering the North American sample's sustainability reporting of environmental issues, both the scope and quality were assessed much better (Table 4b). The weakest reported issue was environmental education campaigns (1.0). The other three issues were assessed over 2.0. The best-reported issue was environmental sustainability (3.0) and introducing environmentally friendly solutions (2.7). From the reporting organisations' perspective, the average scores ranged from 1.5 to 3.0.

The very good assessment of the environmental sustainability issue in the case of both samples suggests that the sector realises that meeting the global challenge of climate change requires that businesses undertake actions that go beyond the regulatory requirements. What is unique for the analysed sector is the continual innovations being made in the design, development, and production of biologics. This includes the emergence of green chemistry, an approach aimed at reducing or eliminating the use of toxic chemicals and the generation of hazardous materials. There are other environmental benefits that can result from green chemistry – such as more efficient processes, and/or reduced energy, and/or water use.

Table 4b. Environmental issues reporting by North American companies in the healthcare products sector

	Agilent Techn.	Amgen Inc.	Bayer	Biogen Idec	Boston Scientific	Johnson & Johns.	Mylan	Varex Imaging	AVERAGE
Environmental sustainability	3	3	3	3	3	3	3	3	**3.0**
Introducing environmentally friendly solutions	3	3	3	3	3	3	1	3	**2.7**
Pro-environmental products	2	3	3	3	3	3	1	1	**2.4**
Environmental education campaigns	0	0	1	0	2	3	1	1	**1.0**
AVERAGE	**2.0**	**2.2**	**2.5**	**2.2**	**2.7**	**3.0**	**1.5**	**2.0**	**2.3**

Source: own studies (A four-level index: quantitative disclosure = 3, non-quantitative disclosure = 2, general disclosure = 1, disclosure absent = 0 (Wiseman 1982)).

In the reports, we can also meet company-specific projects, as in the case of Merck and its Clean Meat – which focus on the biotechnology required to produce meat in laboratories so that it is healthier, more efficiently produced, ethical, and environmentally sustainable. There is also or Liquid Biopsy. These are technologies that are focused on non-invasive alternatives to traditional tissue-based diagnostics, such as liquid biopsy, thereby reshaping methods of detecting and managing various diseases.

Conclusions

The healthcare products sector is one of the world's largest and fastest-growing. Due to the indispensable nature of healthcare at all levels of society, there are also high expectations of the sustainable practices of the sector. Those practices can be acknowledged from the sustainability reports, which are supposed to present the social and environmental impacts of the company – both positive and negative. Even though sustainability reporting has been dynamically developing for almost three decades,

it is only one decade ago that the healthcare products sector joined this phenomenon. However, there is very limited research on the scope and quality of those reports. The aim of this research was to contribute to the international health management literature, and to the existing research into sustainability reporting. The authors compared the practices of North American and European healthcare product organisations, and based on that approach, characterised the trends and best practices in this field.
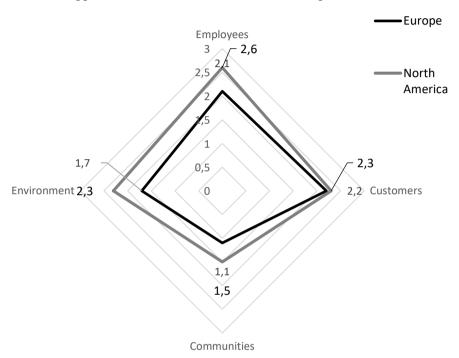

Figure 1. European and North American healthcare product sector – assessment of CSR reporting
Source: own study.

The analysis focused on the scope and quality of sustainability reporting in four categories: customers/patients, employees, community, and environment. The radar chart presented in Figure 1 shows the average assessment of each category, based on the four-level index presented in the methodology section.

In the case of the European sample, the highest quality of sustainability reporting is represented by the customer (2.2) and employees categories (2.1). The lowest scores were awarded to the environment (1.7) and community (1.1) categories. For the North American sample, the highest scores were given to the employees (2.6) and customers and the environment (both 2.3) categories. The weakest category is community (1.5).

In general, the North American sample organisations were assessed better than the European sample in all categories. It is surprising, as the analysed American companies registered their first reports in the database much later than the analysed European companies, which suggests less experience in sustainable reporting.

In terms of each of the analysed categories, the key conclusions are as follows:

- Customers' issues are well reported, and the scope is wide. Companies report on the quality dialogue with customers/patients, and the activities focused on customer satisfaction. Due to the very sensitive relations of the sector's companies and patients, significant attention is given to the issue of customer data safety. Very special attention is given to product quality and innovativeness, in relation to the compliance issues (as the sector is subject to a number of national and international regulations).

- The employee category analysed in the sustainability reports covers a wide range of issues, which are well presented. Companies focus a great deal on employee development programmes, diversity, and equal opportunities issues. Two issues are slightly neglected by the sector, namely 'work-life balance' and volunteering. It can be assumed that companies realise that their success is based on the talents they can attract, engage, and retain. The analysed organisations develop and implement a number of standardised social responsibility activities, such as fair treatment at work, a transparent and equitable compensation system, company pension plans, the ability to combine working with family commitments, and flexible worktime arrangements, but they also make much effort to convince society, along with current and potential employees, that they are socially engaged, by establishing a dialogue-oriented corporate culture based on common values and trust.

- In the case of community issues, the sample companies focus mostly on education at all levels (from pre-school level to medical doctors), and science development. However, a significant number of reports cover charitable activities aimed at supporting less developed parts of the world in getting access to pharmaceutical products and modern medical equipment. A very limited number of companies report on support for sports and cultural development.

- Taking into consideration the reporting of the environmental category, both the scope and quality are rather good. The sector realises its impact on the environment, and its potential in meeting the global challenge of climate change. What is specific for the analysed sector is continual innovations being made in the design, development, and production of biologics. This includes the growing emergence of green chemistry, an approach aimed at reducing or eliminating the use of toxic chemicals and the generation of hazardous materials.

However, this evaluation has certain limitations, as the sample refers only to the European and North American sectors, and it contains only a small number of reports. As our sample is restricted to only two regions, samples drawn from other regions might have produced different results. Secondly, as we are drawing from only two years of reporting, this analysis will not reveal changes in the reporting scope and quality over a longer time. Analysing trends across several reporting years may reveal different patterns in sustainability reporting practices due to business environment dynamics or maturity along the stages of sustainability.

Despite these limitations, the authors believe that the study makes a significant contribution to the existing literature. The results of the research are, to the best of the authors' knowledge, the first that present a content analysis and review of the healthcare product sector's sustainability reports. The characteristics of the sector's practices in this paper may support other healthcare products companies in sustainability reporting, and encourage them to follow the recognised practices. From the theoretical perspective, the paper adds to the current body of knowledge and presents a snapshot of the healthcare sector's reporting practices, showing the strong and weak points in this field. The research results reveal that the healthcare sector's reporting practices are advanced, but it still has many areas to work on.

In future research, the authors plan to research in-depth each of the four defined categories, to define the sectors' metrics and best practices. It would also be interesting to analyse the sector's reporting practices for the last decade, to see its dynamics and define key trends and challenges. There is also a need to research consumer responses to sustainability practices.

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Streszczenie

Analiza praktyki raportowania zrównoważonego rozwoju w sektorze ochrony zdrowia na podstawie Europy i Ameryki Północnej

W ciągu ostatnich dwóch dekad wśród naukowców i praktyków zarządzania toczy się ożywiona dyskusja na temat raportowania w obszarze zrównoważonego rozwoju. Wynika to z rosnącego zainteresowania informacjami niefinansowymi ujawnianymi szerokiej grupie interesariuszy. Jednak już samo opracowanie raportu zrównoważonego rozwoju, który odpowiada potrzebom różnych grup interesariuszy, stanowi nie lada wyzwanie. Różnice między różnymi sektorami sprawiają, że zadanie to jest jeszcze trudniejsze. Celem artykułu jest zbadanie zakresu i jakości raportów zrównoważonego rozwoju firm działających w sektorze produktów medycznych w Europie i Ameryce Północnej. W badaniu tym zostanie przeprowadzona analiza treści raportów zrównoważonego rozwoju wydanych w 2018–2019 przez 11 europejskich i 8 północnoamerykańskich organizacji sektora produktów medycznych. Charakter badania będzie opisowy i oparty wyłącznie na informacjach pochodzących ze źródeł wtórnych.

Słowa kluczowe: raportowanie zrównoważonego rozwoju, raportowanie CSR, raportowanie niefinansowe, GRI, sektor ochrony zdrowia, analiza treści