

## ACTIVITY OF SELECTED HEALTHCARE ENTITIES IN THE LOWER SILESIA REGION THROUGH THEIR SOCIAL MEDIA ACTIVITIES IN THE CONTEXT OF IMAGE SHAPING

Iwona CZERSKA

Wroclaw University of Economics and Business; iwona.czerska@ue.wroc.pl, ORCID: 0000-0002-9680-6695

**Purpose:** The study's main objective was to identify the presence of selected healthcare entities from the Lower Silesian province in social media. The specific goal was to assess the status of the use of social media by selected medical entities in the context of building their image.

**Design/methodology/approach:** The author drew attention to the creation of the image of medical entities in the context of legal conditions and presented permissible (in light of the law) marketing activities shaping the idea of the medical entity in social media. Then the author, using the desk research method, analyzed the content of the profiles of selected medical entities from the Lower Silesian Province that have corporate accounts on Facebook, LinkedIn, Instagram, and YouTube. The author based his considerations on Polish and foreign literature on the subject, studying scientific articles and electronic sources. The author used the following professional databases to collect scientific literature: Biblioteka Nauki and Google Scholar.

**Findings:** Shaping the image of a healthcare entity on social media as communicative, engaged, and open to the patient's preferences and needs is a way to increase competitiveness in the region. Given the nature of the healthcare industry, healthcare entities should adopt a strategy to build an expert position in the region. An analysis of the content of the company's social media accounts showed that the selected healthcare entities run their profiles in a diversified manner, emphasizing one medium chosen, which is usually Facebook, and posting less frequently (Instagram) or incidentally (YouTube) in others. The least often used medium is LinkedIn.

**Social implications:** The advantage of using social media channels by healthcare entities is direct and immediate contact with stakeholders, through which it is possible to effectively target information messages to people/groups interested in the facility's offerings.

**Originality/value:** The author directed the article primarily to managers/directors in charge of healthcare entities and medical marketing specialists to make them aware that maintaining a medical institution's corporate social media account is necessary today. Without this, it is impossible to effectively reach a wide range of patients using social media channels daily. According to the author, it is necessary to strengthen the role of the patient in the health system as a full-fledged stakeholder and realize its actual impact on the economic situation and competitive position of medical facilities in the context of their social media marketing activities. The article's value is a comprehensive discussion of the importance of individual social media in the activities of the analyzed medical entities from the Lower Silesian Province.

**Keywords:** healthcare entity, image shaping, social media, Facebook, LinkedIn, Instagram, YouTube.

**Category of the paper:** Research paper.

## 1. Introduction

System changes in health care, especially market rules and competition, have forced a different approach to the management of medical entities. It involves: changing the style of management; introducing a system to support the flow of information between medical facilities and between them and the payer; standardizing the way health IT systems are accessed by providers, pharmacies and medical personnel; introducing a risk management system, including for reducing hospital-acquired infections; emphasis on skilful management of personnel resources; developing technical and technological facilities and internal transportation. However, the issue of competition in health care is more complex than in other sectors of the economy due to the specificity of health services for saving human life and health. Therefore, the health market differs from the free market (Sikora et al., 2022). Despite this difference, the competitiveness of medical entities is associated, first, with the need to build the reputation of medical institutions by gaining the recognition and trust of their patients, and second, with strengthening the negotiating position of these entities when contracting for public financing of health services (Sikora et al., 2021). Added to this is the turbulent environment in which healthcare units have come to operate, which requires a change in approach - from classical management focused on strategy, structures, and systems to management focused on goals, processes, and human capital (Zadros, 2017).

More and more companies, not only large global ones but also those in the small and medium-sized enterprise (SME) sector, are trying to build their image on social media. For medical facilities, a social media presence is an opportunity to attract new stakeholders, including patients, and retain existing ones. According to Katarzyna Zadros (2016), the modern patient is still a burdensome stakeholder or supplicant rather than a stakeholder of strategic importance. Such a statement applies primarily to public healthcare entities. The author's research also shows that medical entity managers are increasingly beginning to realize the real impact of the patient on the economic situation and competitive position of medical facilities - especially in primary care. Hence, the changes introduced in the health care system should strengthen the role of the patient in the system as a full-fledged stakeholder. Taking care of this should translate into the effective functioning of the facility in the long term (Zadros, 2016).

During the pandemic period caused by the spread of the coronavirus, most patients isolated from their doctors contacted them through remote medical services. E-visits dominated mainly in 2020 when the COVID-19 pandemic officially began in Poland in mid-March. At that time,

patients searched for information about medical services online and began to observe fan pages of specific medical entities and doctors on social media. Therefore, medical facilities started promoting their services and the medical professionals working in them on social networks: Facebook, Instagram, and LinkedIn.

Shaping the image of medical entities in the region is determined by the following activities: public relations (PR), corporate social responsibility (CSR), cause-related marketing (CRM), and social marketing (Zadros, 2017). A skillfully created image of a medical facility involving the development and implementation of an appropriate marketing strategy, the selection of distribution channels for information about the entity aligned with current communication trends, and the creation of relevant content about the facility and services make it attractive in the market for medical services. Sabina Ostrowska (2014) points out that building the image of a medical entity is primarily based on communication habits and relationships within it, and the actual image is formed in the patient only during a confrontation with the diagnosis, medical service, or medical professionals. In the case of social media, a facility's image is shaped in response to the manner and quality of presentation of information about services, medical staff, or the frequency of posts on the entity's fan page. According to Piotr Skrobich (2018), social media has become a tool of marketing policy in which the patient plays a key role. However, through marketing, it should create corporate profiles by medical entities and complete transparency in their activities.

The study's main objective is to identify the presence of selected healthcare entities from the Lower Silesia region in social media. The specific goal is to assess the status of the use of social media by selected medical entities in the context of building their image. The author paid attention to creating the image of medical entities in the context of legal conditions arising from the Act. The author studied scientific articles and electronic sources from 2012-2022.

## **2. Methodology**

The author used the desk research method. First, the author analyzed the literature treating the creation of the image of healthcare entities on social media. Second, the author conducted a media content analysis. The subject of the content analysis was the profiles of selected medical entities on social media (Facebook, LinkedIn, Instagram, YouTube) and the posts they publish. Through the media content analysis, the author attempted to identify and evaluate the manner, frequency, and quality of the materials published by the selected entities on the respective social network.

The bibliography includes 49 scientific articles (18) and electronic sources, including social media profiles (31) - mainly from 2020-2022. In the desk research analysis, the author used the following professional scientific databases (brackets show the number of cited publications in a given database): Biblioteka Nauki (3) and Google Scholar (15). The author used these scientific databases because of the opportunity to gather literature for this article.

### 3. Image creation of healthcare entities and legal conditions

When creating the image of a medical entity in social media, it is necessary to consider the marketing aspects of such entities' operations and, above all, the legal aspects. This situation is about advertising one's facility. According to article 14. point 1. of the law on medical activity, an entity performing medical action may make public information about the scope and types of health services provided. Still, the content and form of this information must not bear the marks of advertising (Ustawa z dnia 15 kwietnia 2011, 2021). Persuasion, i.e., persuading patients to use the services of an establishment with simultaneous public disclosure of the size and type of health services offered, should be specified here. These three elements co-occurring: persuasion, public, and health benefits disqualify a medical entity under the law. However, it is possible to use marketing activities differently to make them legal. Table 1 presents the permissible (under the law) marketing activities shaping the image of a medical entity on social media.

**Table 1.**  
*Marketing activities of healthcare entities in social media*

Marketing activities	
Form of action	Description and examples
Informing patients about the scope and type of health services, among other things	<p>It is all about the right way to convey information. The form is often more important than content on the Internet, and how information is conveyed is more important than the information itself. Examples of social media posts containing:</p> <p>Pictorial information (infographics) about preventive services/actions</p> <p>A video showing the treatment</p> <p>A photo depicting the effect of a given treatment with a redirect to a website where a before-and-after photo gallery is posted</p> <p>Information about the possibility of making an appointment through online registration with a link to the facility's website</p> <p>Presentation of the medical staff of a given facility, its experience with the scope of its activities</p> <p>Information/photos of the facility's daily operations</p> <p>Educational materials</p> <p>Informational content from reliable sources: health recommendations, social actions published on the Ministry of Health website, reports on the activities of the National Health Fund</p>

Cont. table 1.

Health promotion through the promotion of healthy lifestyles	<p>As part of health promotion, the healthcare entity may undertake activities that enable patients and their families to increase control over the determinants of their health, thereby improving it. Healthy lifestyles can be promoted as dedicated health/prophylaxis campaigns for specific age groups. Examples of social media posts/actions:</p> <p>Descriptions of activities related to the scope of services of the facility  Facebook events bring together people interested in healthy lifestyles  Webinars on healthy lifestyles  Instructional videos, podcasts, and interviews about diet, physical activity/exercise  Information about live meetings with doctors  Information about White Saturdays, White Sundays</p>
Non-public promotional activities	<p>In non-public promotional activities, a healthcare entity targets messages to a specific group (e.g., a group centred around a particular condition, patients of a specific doctor at a healthcare facility, or patients in a clinical program). Examples:</p> <p>Closed Facebook groups  Direct contact with patients via SMS, MMS, Messenger, and WhatsApp messages  Setting up a chatbot to automatically answer frequently asked questions</p>

Source: own study based on: Al-Sheyab et al., 2021; Grzanek, 2020; Gurol-Urganci et al., 2012; Jędrzejewski, n.d.

The activities and marketing activities carried out by healthcare entities in social media, presented in the table above, can successfully influence the formation of a positive image of the entity in the region, thereby building its reputation. It depends on a given institution what kind of materials it will present on its profiles and the frequency and channels it will use to reach selected patients with its message.

#### 4. Selected healthcare entities from Lower Silesia Province active in social media

One can now point to examples of medical entities doing very well on social media. Their profiles attract the attention of the customer-patient and are updated regularly. Table 2 shows selected healthcare entities from the Lower Silesian region and their social media activity statistics.

**Table 2.**

*Examples of activities and statistics of medical entities from the Lower Silesian Province in social media*

Healthcare entity	Social media profile(s)/ date of creation	Total number of observers	Frequency of publication (on average)	Published materials
Dolnośląskie Centrum Medyczne DOLMED S.A. in Wrocław	Facebook: Dolmed - w Centrum Zdrowia: <a href="https://www.facebook.com/DCMDolmed/">https://www.facebook.com/DCMDolmed/</a> / July 14, 2020.	3017	Once a day	<ul style="list-style-type: none"> <li>- contact information</li> <li>- specialist consultations</li> <li>- occupational medicine</li> <li>- diagnostic tests</li> <li>- medical procedures</li> <li>- presentations of the Center's medical staff</li> <li>- videos (e.g., recruitment, Earth Day, World Health Day, Pink October)</li> <li>- photos</li> <li>- events (e.g., Senior Week, Health Town, Movember in DOLMED, Pink October)</li> <li>- Ask the Dolmed website - at the Health Center: "How can I make an appointment?" "Do you provide medical services under the National Health Insurance?" "What services are provided?" "What are the prices for private medical services?" "Type a question."</li> </ul>
	LinkedIn: DOLMED - w Centrum Zdrowia: <a href="https://www.linkedin.com/company/dolmed-w-centrum-zdrowia/?fbclid=IwAR354rktWlvrCNI7_eX9cVpr79-tZx-NTIuxZeNtWRD5yqNGjaYYh_RRRV8/">https://www.linkedin.com/company/dolmed-w-centrum-zdrowia/?fbclid=IwAR354rktWlvrCNI7_eX9cVpr79-tZx-NTIuxZeNtWRD5yqNGjaYYh_RRRV8/</a> August 2, 2020.	82	Twice a month	<ul style="list-style-type: none"> <li>- contact information</li> <li>- location with a route map</li> <li>- job offers</li> <li>- videos</li> <li>- photos</li> <li>- prevention programs</li> </ul>
	Instagram: DOLMED - W centrum zdrowia: <a href="https://www.instagram.com/dcm_dolmed/">https://www.instagram.com/dcm_dolmed/</a> August 3, 2020.	261	Several times a month	<ul style="list-style-type: none"> <li>- contact information</li> <li>- research packages</li> <li>- preventive programs</li> <li>- tests dedicated to specific age groups</li> <li>- Get to know our team - presentations of the Center's medical staff</li> <li>- information about commercial visits</li> </ul>
	YouTube: DOLMED - w Centrum Zdrowia: <a href="https://www.youtube.com/channel/UCKjWauttNLjRcXZc49EJW-Q">https://www.youtube.com/channel/UCKjWauttNLjRcXZc49EJW-Q</a> / Mai 28, 2021.	Four subscribers	9 and 10 months ago	<ul style="list-style-type: none"> <li>- description of the Center</li> <li>- Two videos (Action Rehabilitation - Primary Health Care, DOLMED - at the Health Center (Join us!))</li> </ul>

Cont. table 2.

Wojewódzki Szpital Specjalistyczny we Wrocławiu Ośrodek Badawczo-Rozwojowy	Facebook: Wojewódzki Szpital Specjalistyczny we Wrocławiu Ośrodek Badawczo-Rozwojowy: <a href="https://www.facebook.com/wssk.wroclaw/">https://www.facebook.com/wssk.wroclaw/</a> March 14, 2014.	2192	Several times a month	<ul style="list-style-type: none"> <li>- description of the Hospital</li> <li>- contact details</li> <li>- Ask the site Wojewódzki Szpital Specjalistyczny we Wrocławiu Ośrodek Badawczo-Rozwojowy: "Can I chat with someone?" "What is the location?" "Can I book an appointment?" "What services are offered?"</li> <li>- recommendations and ratings</li> <li>- photos</li> <li>- videos</li> <li>- events (e.g., Celebrating Prematurity Day, 5th Rally for Transplantation. Share yourself!, Laparoscopic Cystectomy, Living Kidney Donor- Conference).</li> </ul>
Przychodnia Lekarska ARMED in Legnica	Facebook: Przychodnia Lekarska ARMED: <a href="https://www.facebook.com/przychodnia.lekarskaarmed/">https://www.facebook.com/przychodnia.lekarskaarmed/</a> November 20, 2017.	910	Three times a month	<ul style="list-style-type: none"> <li>- contact information</li> <li>- a team of employees</li> <li>- services: execution time + cost</li> <li>- recommendations and evaluations</li> <li>- photos</li> </ul>
Szpital Specjalistyczny CDT Medicus in Lubin	Facebook: Szpital Specjalistyczny CDT Medicus Lubin: <a href="https://www.facebook.com/szpitalcdtmedicus/">https://www.facebook.com/szpitalcdtmedicus/</a> June 22, 2018.	Information not available	Every other day	<ul style="list-style-type: none"> <li>- address information plus a map of how to get there</li> <li>- mentions of the Hospital published by other persons/institutions</li> <li>- photographs</li> <li>- films</li> <li>- events (e.g., Month with obesity treatment, Surgical treatment of obesity and metabolic diseases)</li> <li>- information about (new) treatments performed at the facility</li> <li>- job offers</li> </ul>
	Instagram: Szpital CDT Medicus Lubin: <a href="https://www.instagram.com/szpital_cdtmedicus/">https://www.instagram.com/szpital_cdtmedicus/</a> March 5, 2021.	220	Every two or three days	<ul style="list-style-type: none"> <li>- contact information</li> <li>- posts about new treatment methods and procedures performed at the Hospital</li> <li>- videos</li> <li>- job offers</li> </ul>
	YouTube: CDT MEDICUS LUBIN: <a href="https://www.youtube.com/user/cdtmedicus/">https://www.youtube.com/user/cdtmedicus/</a> October 16, 2012.	321 subscribers	Several times a year	<ul style="list-style-type: none"> <li>- comprehensive description - including addresses of clinics in other localities</li> <li>- playlists</li> <li>- videos about current services/treatments</li> <li>- the latest video, dated July 19, 2022, is about the free CDT MEDICUS mobile application that allows:               <ol style="list-style-type: none"> <li>a. use online registration 24/7</li> <li>b. pay for appointments online</li> <li>c. download test results</li> <li>d. viewing medical recommendations</li> <li>e. receiving e-prescriptions</li> </ol> </li> </ul>

Cont. table 2.

Dolnośląskie Centrum Zdrowia Psychicznego dla Dzieci i Młodzieży in Lubin	Facebook: Dolnośląskie Centrum Zdrowia Psychicznego dla Dzieci i Młodzieży w Lubinie: <a href="https://www.facebook.com/DCZPDM/">https://www.facebook.com/DCZPDM/</a> / November 10, 2020.	Information not available	Two or three times a month	<ul style="list-style-type: none"> <li>- contact information</li> <li>- posts about parenting, children/young people's lifestyles, school stress, learning, school violence</li> <li>- mentions of the Center published by other people/institutions</li> <li>- opinions</li> <li>- photos</li> </ul>
	YouTube: dczpdm w Lubinie: <a href="https://www.youtube.com/channel/UCBQY7_671k_qM0OIUDlIVqA/">https://www.youtube.com/channel/UCBQY7_671k_qM0OIUDlIVqA/</a> / March 17, 2020.	No subscribers (93 views)	Exclusively two videos - on the day the profile was created	<ul style="list-style-type: none"> <li>- first video: visualization - Dolnośląskie Centrum Zdrowia Psychicznego dla Dzieci i Młodzieży in Lubin</li> <li>- second video: visualization of the Dolnośląskie Centrum Zdrowia Psychicznego dla Dzieci i Młodzieży in Lubin</li> </ul>
Medfemina Health Centre in Wrocław	Facebook: Medfemina - Centrum Zdrowia Kobiety: <a href="https://www.facebook.com/Medfemina/">https://www.facebook.com/Medfemina/</a> / November 13, 2012.	12 071	Every two or three days	<ul style="list-style-type: none"> <li>- contact information</li> <li>- brief description of the Centre's activities</li> <li>- posts about services performed within the Centre</li> <li>- posts about Open Days at Medfemina Hospital</li> <li>- reviews</li> <li>- photos</li> <li>- possibility to join a private group: Medfemina - let us talk about women's issues</li> <li>- videos</li> <li>- events (e.g., Mom, Dad, what about that cord blood...?, Myths and facts about cytology. Does cytology make sense in the 21st century?, Women's infertility in a nutshell)</li> <li>- Mentions of the Centre published by individuals/institutions</li> <li>- Ask the Medfemina - Centre for Women's Health website: "Can I ask for help?" "What services are offered?" "Can I book an appointment?" "What is the location?" "Type your question."</li> </ul>
	Instagram: medfemina: <a href="https://www.instagram.com/medfemina/">https://www.instagram.com/medfemina/</a> / September 16, 2018.	1495	Every two or three days	<ul style="list-style-type: none"> <li>- news posts</li> <li>- videos</li> <li>- posts and photos with the label Centre</li> </ul>
	YouTube: Szpital Medfemina: <a href="https://www.youtube.com/channel/UCKiohN0PT_TrywKgBOiM-FA/">https://www.youtube.com/channel/UCKiohN0PT_TrywKgBOiM-FA/</a> / Februar 14, 2017.	40 subscribers	Latest videos of 2019.	<ul style="list-style-type: none"> <li>- description + detailed contact information</li> <li>- videos</li> <li>- playlist</li> </ul>

Source: own study based on: Facebook, 2012, 2014, 2017, 2018, 2020a, 2020b; Instagram, 2018, 2020, 2021; LinkedIn, 2020; YouTube, 2012, 2017, 2020, 2021.

The author did not choose the above healthcare entities at random. First, the author chose entities he knows and whose services he uses or has used. The author chose a psychiatric care entity because of his professional connection to this area. Namely, the author is a co-owner and board member of the Psychiatric and Psychological Center "Metis" Ltd. in Legnica and serves as a medical information and communication specialist. Of the many mental health facilities



reviewed previously, the author chose one that fairly consistently maintains a profile in at least one social media outlet. Unfortunately, the healthcare entity with which the author is professionally affiliated does not hold its activity on social media.

For this reason, the author did not include this entity in Table 2. However, the Center's management plans to establish a corporate account shortly - initially on Facebook. Finally, analysis of the content of the social media profiles of several medical entities operating in the Lower Silesian Province has made it possible to identify those that resiliently, systematically, and professionally communicate their activities to stakeholders. Resiliently, with a strong commitment, often citing the latest discoveries in medicine, referring to current events and health service offerings, and meeting patients' expectations. Systematically - publishing timely posts on the profile, posting updates. Finally, professionally, that is, among other things, using cross-posting, which means publishing similar content on multiple social media channels. This marketing tactic is used to streamline the publishing strategy and the ability to repurpose content across multiple platforms, thereby continuously updating social channels. Cross-posting is also about building brand awareness due to sharing content across channels, increasing the chance of being seen by the target audience.

## 5. Discussion

As part of the content analysis, the author selected several areas from the treatment entity's social media profile, making the study quantitative and qualitative. The first information the author listed as the profile's name, the link to it, and the date the company created an account in the medium. This criterion is relevant to the article's primary purpose, as it allows us to verify a given entity's profile and track its activity on social media. All the entities considered have company accounts on Facebook. According to Daniel Nowocin (2017), this medium is the most suitable social media platform for medical institutions due to offering potentially the most significant reach of activities and the most intuitive focus of its users' discussions around the entity's activities. Facebook as a powerful and opinion-forming medium in the Polish healthcare market is also indicated by Magdalena Syrkiewicz-Świtała (2015). She argues that it is possible to very precisely target pro-health messages to specific groups of recipients, which of course, affects the formation of a positive image of medical entities in a given region. Piotr Kocemba et al. (2015) give reasons for patients' use of Facebook, among which are: social support, exchange of advice, gaining knowledge, self-care, and communication with the doctor. In doing so, these researchers mention good practices for publishing on social media, such as the consistency of the publicly available profile with a professional image and the support of the published content with scientific knowledge - due to the possibility of patients treating it as medical advice, or, finally, the openness, politeness, and honesty of all communication. Medical

entities should skillfully, reliably, and systematically communicate with their audiences - patients, who are increasingly aware of their expectations and needs in terms of health, education, and society, as well as the possibility of satisfying them - including by medical institutions on social media.

LinkedIn is the second medium worth attention to healthcare entities with corporate accounts. Only one analyzed entity has a company account, established relatively recently in 2020. Publication of posts is pretty regular but not very frequent - compared to Facebook, where communication takes place daily. According to Marcin Janicki (n.d.a), it is difficult for a medical institution to maintain an account on every existing and popular social network. Mostly one starts with one medium and, over time, expands to other mediums. One of the portals that are often overlooked in the choice by medical entities is precisely LinkedIn. Despite its different specifics than Facebook or Instagram - due to LinkedIn's dedication to professional-business contacts in the broadest sense, entrepreneurs, business people, and executives, it is, according to Daniel Nowocin (2020), also a valuable platform for medical entities. Among the benefits for a medical entity present on LinkedIn, he mentions: creating a profile card for a given entity (profile photo, logotype, background photo, tags, a brief description of activities, contact information: phone, email address, link to website); publishing valuable content prepared by the institution: expert articles, scientific and educational materials (e.g., on healthy lifestyle, prevention of various diseases); gaining contacts with medical industry stakeholders; recruiting a medical professional to the team; establishing beneficial business relations; shaping a positive image of the entity in the region. Even though LinkedIn has more than five times fewer users than Facebook and more than two times fewer than Instagram (Grzanek, 2021), it is a valuable place to build engagement among those focused on the institution. Publishing posts on this medium does not have to be frequent - just regular and high-quality. According to Łukasz Grzanek (2021), a medical facility should refer to current events and industry news and publish news from the company's life. It is a good idea to post information on the facility's corporate social responsibility (CSR) activities on its corporate profile. Finally, the LinkedIn platform can also successfully prove itself as a mutual referral system for healthcare entities (Janicki, n.d.b).

Summarizing the consideration of LinkedIn in shaping the image of medical entities, it is difficult to give reasons for the non-use of this medium by the analyzed medical institutions. On the one hand, it could be the lack of knowledge on how to run a profile in this service skillfully; on the other; there may be a lack of a suitable person, a manager, who would communicate with it. Often only one person employed at a given medical entity, in addition to his daily duties, is additionally engaged in running the company's account on at least one social media platform and chooses the more popular ones and the ones he knows best.

Another service used by the selected healthcare entities analyzed is Instagram. Three entities have an account on them. According to Bartosz Nassalski (n.d.), a profile on Instagram is not the basis for marketing medical services, but it can be an essential complement

to a presence on Facebook. Due to the nature of this medium, created primarily for sharing photos and videos, a medical entity should provide visually appealing content, know how to share information and any news, and be patient. Therefore, the facility must focus on sincere messages, use hashtags, target niches (concentrate on providing content built around the issues it specializes in), interact with service users, and regularly add new posts and testimonials. In addition to news posts, photos, and videos, healthcare entities can showcase their medical staff - as in the case of DOLMED, or job opportunities - in the case of CDT Medicus. Important information is also provided by posts about examination packages carried out at a given institution, preventive programs, or examinations dedicated to specific age groups. In summary, Xin L. Wong et al. (2019) indicate that Instagram has great potential to facilitate the exchange of medical information with the public and between medical professionals. From the point of view of medical entities, there is patient education, education of healthcare providers, patient support groups, and availability of active users.

The last social medium analyzed is YouTube. Entities with accounts do not regularly update, translating into very few or no subscribers. YouTube, as a still under-appreciated medium in the health sector, opens up a new space in the health field, according to Rodrigo Luiz Vancini et al. (2021). Their published content can generate engagement comparable to or surpass that of digital media specialized in health communication. YouTube is an opportunity for healthcare entities to gain subscribers, as a skillfully run channel can serve as a health education tool, both for patients and medical students, up to all those interested in issues of taking care of their health (Gimenez-Perez et al., 2020; Hasamnis, Patil, 2019). Running a company channel on YouTube is neither an easy nor a quick way to gain user attention. Published videos should engage and focus the audience's attention, making reaching their needs and expectations easier. Valuable videos help position a treatment entity's website online. According to Marcin Janicki (n.d.c), a higher ranking in Google's search engine involves several rules that a medical entity must remember. First, the audio and video quality must be good. Second, to avoid boring the viewer, published videos should be short, several minutes long. Third, relying on relevant keywords is the right way to meet the needs of information-seeking patient-clients. Finally, a fundamental principle is the right video title, which should be short, concise, and understandable to everyone. Of course, those publishing videos on behalf of a medical entity should review them on an ongoing basis and make appropriate changes to improve their craft and, more accurately, meet subscribers' expectations. In conclusion, YouTube is still a place for medical entities to shape their image in the region.

In the case of the analyzed entities, establishing a company profile on social media dates mainly to 2020. This situation may be related to the coronavirus pandemic, which is assumed to have started on March 11, 2020, and significantly reduced people's mobility and direct social contact, making long-distance communication much more frequent and willingly used than before (Paszek, Sitko, 2021). Adrian Wong et al. (2021) believe that during the COVID-19 pandemic, social media has become a ubiquitous part of modern healthcare systems. Social

media has added a new dimension to health care by providing treatment providers, patients, and the public with a common communication channel on health issues, which can translate into improved health outcomes. In general, social media is becoming a tool to support the health system and foster patient empowerment by increasing patient knowledge and putting patients at the Center of managing their own treatment needs (Farsi, 2021).

It can be noted that entities with accounts after 2017 mainly function resiliently, systematically communicating their activities to their surroundings. According to Daniel Nowocin (2016), this primarily depends on the managers of medical institutions, who use patient engagement on social networks to shape a positive image of the medical entity in the region. This situation is done by drawing patient attention to the engaging and relevant message content and events encouraging patients to engage in various physical activities and care for their health. This situation results in building long-term relationships with patients in the context of the ongoing development of the medical entity in the region. Magdalena Syrkiewicz-Świtała (2015) pointed out that managers of medical entities responsible for communication policy must be aware of the requirement to be constantly active and systematically publish up-to-date and engaging content to keep sustaining the interest of the audience.

Subsequently, the author included the total number of followers for a given profile, but not every entity provided this information. In the case of YouTube, the author considered the number of subscribers. At the same time, the author mentioned that observers/subscribers do not include all visitors to a profile but only those who have chosen this option. The author pointed out the modification of Facebook's settings for corporate accounts; specifically, some profiles' likes are no longer visible - the number of observers is given instead (Żyłowska, 2021). Hence, as a profile statistic, the author chose only the total number of observers for all media. The following statistic was the average frequency of publishing in a given medium. Based on an analysis of the frequency of the posts published by a given entity, the author independently determined its intermediate frequency. According to a study by Juan Manuel Rojas Salazar (2017), the optimal frequency of publishing content on social media is 6-7 posts per week. Broken down by specific medium, it is assumed: Facebook: 1-2 posts per day, Instagram: 1-2 posts per day, and LinkedIn: 1 post per day (Kot, 2017). Posting more frequently reduces engagement among users and positive mentions of an entity. DOLMED follows these recommendations best, posting on average once a day on Facebook, followed by CDT Medicus and Medfemina Health Centre with an average of every second/third day on Facebook and Instagram. It is noteworthy that Medfemina has had its corporate Facebook account since 2012. - the longest of all the analyzed entities, having the most, with more than 12,000 followers. However, it is difficult to find a correlation between the frequency of posting and the number of observers for the analyzed entities. According to David Hartshorne (2022), a more critical issue than frequency is the consistency of posts, i.e., the quality of content, not the quantity. Besides, according to Jeff Quipp (2015), a digital marketing expert, what matters in social media is not the number of followers but their quality.

The last information in the tabulation is the material published by a given medical entity in a given medium. Medical establishments post the most information on Facebook while the least on YouTube. Medical entities often publish on their company profiles: address information with a map of how to get to the facility, a description of activities, and posts with news, photos, videos, and events. Increasingly, the presentation of medical personnel on social media is taking place, which affects the entity's image in the local environment (CAMP7 Digital, 2020). In the case of selected commodities, this is only the case at DOLMED.

To summarize the discussion, according to Dorota Pindel (2014), marketing manager at Blink Interactive, healthcare entities with social media profiles can be divided into three groups. The first comprises entities with company accounts but does not publish any information. These profiles are neglected, and the information posted about the facilities is incomplete. This group includes DOLMED and Dolnośląskie Centrum Zdrowia Psychicznego dla Dzieci i Młodzieży in Lubin - which have YouTube accounts. The second group consists of entities on the profiles in which the flow of information occurs irregularly and only when the institution has something important to communicate. This group includes DOLMED on Instagram and LinkedIn, Wojewódzki Szpital Specjalistyczny we Wrocławiu Ośrodek Badawczo-Rozwojowy on Facebook, ARMED, CDT Medicus on YouTube, Dolnośląskie Centrum Zdrowia Psychicznego dla Dzieci i Młodzieży in Lubin on Facebook, and Medfemina on YouTube. The last group comprises medical entities that share daily or several times a week on social media about their surroundings, with topics that cover medical or cosmetic aspects in addition to organizational issues. Among the messages in the latter group, one can find tips on healthy living, preventive measures, presentations from medical staff, promotions, news, trivia, funny photos, and memes. The latter group includes the other entities in Table 2: DOLMED on Facebook, CDT Medicus, and Medfemina - on Facebook and Instagram.

## 6. Limitations

The author knows the limitations of taking only a few selected healthcare entities for analysis. First, the nature of such a media content analysis is unsystematic in terms of a possible comparison of its results. Second, the piecemeal analysis resulting from the subjective selection of survey subjects limits the value of the survey results. Third, the author omitted other social media (e.g., Twitter) on which healthcare entities could communicate with the public. The lack of inclusion of other social networks in the analysis is primarily due to the author's failure to have an account of them. Finally, limiting only to entities operating in the Lower Silesian Province does not allow us to obtain a broader context for the study.

Despite the identified limitations of the study, this article could form the basis for a more extensive study in the future. A new study could include more healthcare entities from the Lower Silesian region and several or all provinces in Poland. Other researchers could also include other social networks in the analysis, such as Twitter, Pinterest, or, last but not least, TikTok, which is increasingly the place where medical facilities interact with patients.

## 7. Conclusions and recommendations

Promoting a medical entity on social media is a very effective way to increase regional competitiveness. The advantage of medical facilities' use of social media channels is direct contact with stakeholders and, undoubtedly, with the most critical group - patients. Thanks to these channels, it can effectively target information messages to those interested in the facility's offerings. Among the benefits of this type of communication between the treatment entity and the patient are:

- focusing and developing the community around the health services offered,
- creating the image of an entity that is communicative, committed, and open to the needs and preferences of patients,
- building and strengthening trust in the facility by emphasizing its identity,
- expanding outreach to reach more stakeholders.

According to Łukasz Grzanek (2020), Online Digital Marketing Specialist at Medidesk, "The keys to success in managing the medical business on social media are reliability, credibility, and cyclicity." The medical entities analyzed develop their social media activities diversified, emphasizing one selected medium, usually Facebook, and posting less frequently (Instagram) or incidentally (YouTube) on others. The least used medium is LinkedIn, which only supports the shaping of DOLMED's image - and only since 2020.

Due to the nature of the healthcare industry, the image formation of healthcare entities should adopt a strategy of building a position as an expert in the region. To this end, running an establishment's profile on social media must be very serious and responsible, as it is a kind of business card of the entity. The most important features of a professional profile of a medical entity in social media are:

- a refined logo,
- the full address of the facility with a map of how to get there,
- up-to-date photos of the building,
- mission, vision, and values,
- bookmarks with up-to-date information,
- transparency of message,

- relevancy of content,
- regularity and timeliness of published content,
- feedback/reviews about the facility, staff, and services.

## References

1. Al-Sheyab, N.A., Alyahya, M.S., Alqudah, J.A. (2021). Effectiveness of theory-based Multimedia Messaging Service (MMS) on exercise benefits and barriers among patients with type 2 diabetes. *Health Education Research*, Vol. 36, No. 6, pp. 646-656, doi: 10.1093/her/cyab038.
2. CAMP7 Digital (2020). *Przedstawienie zespołu w mediach społecznościowych – czy to konieczne?* Retrieved from <https://www.camp7.pl/przedstawienie-zespołu-w-mediach-społecznościowych-czy-to-konieczne/>, 26.08.2022.
3. Facebook (2012). *Medfemina - Centrum Zdrowia Kobiety*. Retrieved from <https://www.facebook.com/Medfemina/>, 29.07.2022.
4. Facebook (2014). *Wojewódzki Szpital Specjalistyczny we Wrocławiu Ośrodek Badawczo-Rozwojowy*. Retrieved from <https://www.facebook.com/wssk.wroclaw/>, 21.07.2022.
5. Facebook (2017). *Przychodnia Lekarska ARMED*. Retrieved from <https://www.facebook.com/przychodnialekarskaarmed/>, 25.07.2022.
6. Facebook (2018). *Szpital Specjalistyczny CDT Medicus Lubin*. Retrieved from <https://www.facebook.com/szpitalcdtmedicus/>, 25.07.2022.
7. Facebook (2020a). *Dolmed - w Centrum Zdrowia*. Retrieved from <https://www.facebook.com/DCMDolmed/>, 20.07.2022.
8. Facebook (2020b). *Dolnośląskie Centrum Zdrowia Psychicznego dla Dzieci i Młodzieży w Lubinie*. Retrieved from <https://www.facebook.com/DCZPDM/>, 29.07.2022.
9. Farsi, D. (2021). Social media and health care, part I: literature review of social media use by health care providers. *Journal of Medical Internet Research*, Vol. 23, No. 4, e23205, doi: 10.2196/23205.
10. Gimenez-Perez, G., Robert-Vila, N., Tomé-Guerreiro, M., Castells, I., Mauricio, D. (2020). Are YouTube videos useful for patient self-education in type 2 diabetes? *Health Informatics Journal*, Vol. 26, No. 1, pp. 45-55, doi: 10.1177/1460458218813632.
11. Grzanek, Ł. (2020). *Jak wykorzystać social media do promowania placówki medycznej, cz. 2*. Retrieved from [https://medidesk.pl/jak-zarzadzac-biznesem-medycznym-w-mediach-społecznościowych/?fbclid=IwAR1\\_isQSTvB2Oc\\_wZU8Juft3dkJDvzaykWiRIGGkQUIQPq7u0Ugm6U6H0vU&doing\\_wp\\_cron=1657447246.0386359691619873046875](https://medidesk.pl/jak-zarzadzac-biznesem-medycznym-w-mediach-społecznościowych/?fbclid=IwAR1_isQSTvB2Oc_wZU8Juft3dkJDvzaykWiRIGGkQUIQPq7u0Ugm6U6H0vU&doing_wp_cron=1657447246.0386359691619873046875), 10.07.2022.

12. Grzanek, Ł. (2021). *Nowoczesna placówka medyczna na LinkedIn, cz. 1*. Retrieved from [https://medidesk.pl/linkedin-a-nowoczesna-placowka-medyczna-jak-stworzyc-profil-firmowy/?fbclid=IwAR2icHfmkHtK9zt3iPwflKVLpr4ZMDd87GPIE71VwNnwspONGA1Wk\\_IOF9E](https://medidesk.pl/linkedin-a-nowoczesna-placowka-medyczna-jak-stworzyc-profil-firmowy/?fbclid=IwAR2icHfmkHtK9zt3iPwflKVLpr4ZMDd87GPIE71VwNnwspONGA1Wk_IOF9E), 4.08.2022.
13. Gurol- Urganci, I., de Jongh, T., Vodopivec- Jamsek, V., Car, J., Atun, R. (2012). Mobile phone messaging for communicating results of medical investigations. *Cochrane Database of Systematic Reviews*, Vol. 6, No. CD007456, doi: 10.1002/14651858.CD007456.pub2.
14. Hartshorne, D. (2022). *How often should you post on social media in 2022?* Retrieved from <https://www.sendible.com/insights/how-often-to-post-on-social-media>, 23.08.2022.
15. Hasamnis, A.A., Patil, S.S. (2019). YouTube as a tool for health education. *Journal of Education and Health Promotion*, Vol. 8, No. 241, doi: 10.4103/jehp.jehp\_150\_19.
16. Instagram (2018). *Medfemina*. Retrieved from <https://www.instagram.com/medfemina/>, 29.07.2022.
17. Instagram (2020). *DOLMED - W centrum zdrowia*. Retrieved from [https://www.instagram.com/dcm\\_dolmed/](https://www.instagram.com/dcm_dolmed/), 20.07.2022.
18. Instagram (2021). *Szpital CDT Medicus Lubin*. Retrieved from [https://www.instagram.com/szpital\\_cdtmedicus/](https://www.instagram.com/szpital_cdtmedicus/), 25.07.2022.
19. Janicki, M. (n.d.a). *Doktorze, nie ma Cię na LinkedIn? Czas to naprawić*. Retrieved from [https://medyczny-marketing.pl/tools/profil-lekarza-na-linkedin/?fbclid=IwAR1To3icMtdTSNK6TCNkTLpPTNRqg4CmjKIJ2kog8V9q\\_At4kRZt6rUoKVA](https://medyczny-marketing.pl/tools/profil-lekarza-na-linkedin/?fbclid=IwAR1To3icMtdTSNK6TCNkTLpPTNRqg4CmjKIJ2kog8V9q_At4kRZt6rUoKVA), 5.08.2022.
20. Janicki, M. (n.d.b). *LinkedIn jako narzędzie do promocji marki medycznej*. Retrieved from <https://medyczny-marketing.pl/business/linkedin-dla-branzy-medycznej/?fbclid=IwAR1HKhqm5jnlqy5uxobObQ9ipKqnOp5bL6QKYQDUxX0T4MsJIZb-uKXSg6g>, 6.08.2022.
21. Janicki, M. (n.d.c). *5 reguł publikowania filmów wideo dla placówki medycznej*. Retrieved from <https://medyczny-marketing.pl/tools/5-regul-publikowania-filmow/?fbclid=IwAR3ry0NR4bCIedq1GtM8VIOHaHjAm49r4tnMMeJSFleJqZuqKqxTHFvTs5A>, 13.08.2022.
22. Jędrzejewski, P. (n.d.). *Jak stworzyć reklamę (podmiotu leczniczego), aby nie była (zakazana) reklamą?* Retrieved from <https://imagemed.pl/jak-stworzyc-reklame-podmiotu-leczniczego-aby-nie-byla-zakazana-reklama/>, 8.07.2022.
23. Kocemba, P., Lasota, M., Sroka, N.H., Feleszko, W. (2015). Facebook-based medicine, or the doctor's professional image on the Internet. *Pediatrics i Medycyna Rodzinna*, Vol. 11, No. 3, pp. 328-338, doi: 10.15557/PiMR.2015.0032.
24. Kot, J. (2017). *Jak często publikować w mediach społecznościowych?* Retrieved from <https://geekcat.pl/jak-czesto-publikowac-w-mediach-spolecznosciowych/>, 24.08.2022.
25. LinkedIn (2020). *DOLMED - w Centrum Zdrowia*. Retrieved from [https://www.linkedin.com/company/dolmed-w-centrum-zdrowia/?fbclid=IwAR354rktWlvrCNI7\\_eX9cVpr79-tZx-NTIuxZeNtWRD5yqNGjaYYh\\_RRRV8/](https://www.linkedin.com/company/dolmed-w-centrum-zdrowia/?fbclid=IwAR354rktWlvrCNI7_eX9cVpr79-tZx-NTIuxZeNtWRD5yqNGjaYYh_RRRV8/), 20.07.2022.



26. Nassalski, B. (n.d.). *Instagram w branży medycznej – jak zacząć i zaistnieć?* Retrieved from <https://simpliteca.com/medycyna/instagram-w-branzy-medycznej-jak-zaczac-i-zaistniec/>, 6.08.2022.
27. Nowocin, D. (2016). *Jak skutecznie wykorzystywać social media w marketingu medycznym. Część I.* Retrieved from <http://mediahealth.pl/skutecznie-wykorzystywac-social-media-marketingu-medycznym-czesc/>, 26.07.2022.
28. Nowocin, D. (2017). *Social media w marketingu medycznym.* Retrieved from <https://mediahealth.pl/social-media-w-marketingu-medycznym/>, 1.08.2022.
29. Nowocin, D. (2020). *LinkedIn – czy placówki medyczne powinny z niego korzystać?* Retrieved from [https://mediahealth.pl/linkedin-czy-placowki-medyczne-powinny-z-niego-korzystac/?fbclid=IwAR0QPgLL7tkSHPS9vy1ZF9WjYYJR8rcUue38oRJ0VHDg\\_OahWHJJrHNXvnrc](https://mediahealth.pl/linkedin-czy-placowki-medyczne-powinny-z-niego-korzystac/?fbclid=IwAR0QPgLL7tkSHPS9vy1ZF9WjYYJR8rcUue38oRJ0VHDg_OahWHJJrHNXvnrc), 4.08.2022.
30. Ostrowska, S. (2014). Kształtowanie wizerunku podmiotu działalności leczniczej. *Studia Ekonomiczne, No. 185*, pp. 142-150.
31. Paszek, A., Sitko, B. (2021). The media in the face of the coronavirus pandemic – new trends and challenges. Outline of the issues. *Com.Press, Vol. 4, No. 2*, pp. 36-51, doi: 10.51480/compress.2021.4-2.323.
32. Pindel, D. (2014). *Analiza branży medycznej na Facebooku.* Retrieved from <https://marketerplus.pl/analiza-branzy-medycznej-na-facebooku/>, 26.08.2022.
33. Quipp, J. (2015). *In social media it's not the number of followers you have but the quality that counts.* Retrieved from <https://financialpost.com/entrepreneur/in-social-media-its-not-the-number-of-followers-you-have-but-the-quality-that-counts>, 23.08.2022.
34. Salazar, J.M.R. (2017). Inverted u-shaped impact of social media posting frequency on engagement and sentiment ratio. *Empirical Quests for Management Essences, Vol. 1, No. 3*, pp. 1-15.
35. Sikora, T., Kanecki, K., Sikora, A., Bogdan, M. (2021). Key factors of the competitiveness of healthcare entities. *Journal of Education, Health and Sport, Vol. 11, No. 11*, pp. 73-83, doi: 10.12775/JEHS.2021.11.11.00.
36. Sikora, T., Sikora, A., Bogdan, M. (2022). Management of a medical entity based on models of competitiveness of enterprises on the example of Corten Medic Medical Center. *Journal of Education, Health and Sport, Vol. 12, No. 1*, pp. 216-224, doi: 10.12775/JEHS.2022.12.01.018.
37. Skrobich, P. (2018). Konceptualizacja postrzegania jakości udzielanych świadczeń zdrowotnych w dobie społeczeństwa informacyjnego. *Medyczna Wokanda, Vol. 11, No. 11*, pp. 57-66, doi: 10.32055/mw.2018.11.4.
38. Syrkiewicz-Świłała, M. (2015). Facebook – medium komunikacji marketingowej w ochronie zdrowia. *Zarządzanie Mediami, Vol. 3, No. 3*, pp. 197-205, doi: 10.4467/23540214ZM.15.010.4870.

39. Ustawa z dnia 15 kwietnia 2011 r. o działalności leczniczej. (2021). Dz.U. z 2021 r., poz. 711, 1773, 2120. Retrieved from <https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20210000711/U/D20210711Lj.pdf>, 8.07.2022.
40. Vancini, R.L., Viana, R.B., Andrade, M.S., Barbosa de Lira, C.A., Nikolaidis, P.T., de Almeida, A.A., Knechtel, B. (2021). YouTube as a source of information about physical exercise during COVID-19 outbreak. *International Journal of Sport Studies for Health*, Vol. 4, No. 2: e123312, doi: 10.5812/intjssh.123312.
41. Wong, A., Ho, S., Olusanya, O., Antonini, M.V., Lyness, D. (2021). The use of social media and online communications in times of pandemic COVID-19. *Journal of the Intensive Care Society*, Vol. 22, No. 3, pp. 255-260, doi: 10.1177/1751143720966280.
42. Wong, X.L., Liu, R.C., Sebaratnam, D.F. (2019). Evolving role of Instagram in #medicine. *Internal Medicine Journal*, Vol. 49, No. 10, pp. 1329-1332, doi: 10.1111/imj.14448.
43. YouTube (2012). *CDT MEDICUS LUBIN*. Retrieved from <https://www.youtube.com/user/cdtmedicus>, 25.07.2022.
44. YouTube (2017). *Szpital Medfemina*. Retrieved from [https://www.youtube.com/channel/UCKiohN0PT\\_TrywKgBOiM-FA](https://www.youtube.com/channel/UCKiohN0PT_TrywKgBOiM-FA), 29.07.2022.
45. YouTube (2020). *dczpdm w Lubinie*. Retrieved from [https://www.youtube.com/channel/UCBQY7\\_671k\\_qM0OIUDIIVqA](https://www.youtube.com/channel/UCBQY7_671k_qM0OIUDIIVqA), 29.07.2022.
46. YouTube (2021). *DOLMED - w Centrum Zdrowia*. Retrieved from <https://www.youtube.com/channel/UCKjWauttNLjRcXZc49EJW-Q>, 20.07.2022.
47. Zadros, K. (2016). Pacjent w podmiocie leczniczym – interesariusz, interesant czy petent. *Zeszyty Naukowe. Organizacja i Zarządzanie*, No. 93. Politechnika Śląska, pp. 525-534.
48. Zadros, K. (2017). Kształtowanie wizerunku i pozycji rynkowej podmiotów leczniczych – CSR czy PR? *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, No. 313, pp. 198-210.
49. Żyłowska, K. (2021). *Facebook dąży do zlikwidowania liczby polubień na stronach profesjonalnych*. Retrieved from <https://socialpress.pl/2021/01/facebook-dazy-do-zlikwidowania-liczby-polubien-na-stronach-profesjonalnych>, 21.08.2022.