REVIEW ARTICLE

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The use of medical imaging and modern technologies in coordinated patient care

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Abstract

Introduction and Objective. Coordinated care, launched nationwide in Poland in 2022, is a team-based model in which the general practitioner (GP) coordinates an individualized plan with specialists in nursing, dietetics, and other allied health carers to speed diagnostics, align treatment and monitor chronic disease. The aim of the review is to assess the technologies that enable this model – particularly diagnostic imaging, telemedicine and artificial intelligence (AI – together with data standards (HL7, DICOM; HIS/RIS/PACS), and the legal context.

Review Methods. A narrative review conducted in line with PRISMA principles. Major databases were searched for publications on coordinated/integrated care and enabling technologies, screened titles/abstracts, assessed full texts for relevance to imaging, telemedicine and AI, and synthesized findings on interoperability standards and regulation.

Brief description of the state of knowledge. Imaging underpins timely, accurate decisions along coordinated pathways; telemedicine broadens access to assessment, follow-up and education; and AI increasingly supports triage, reporting and workflow. Effective use depends on interoperable data exchange and archiving (HL7, DICOM) within clinical systems (HIS/RIS/PACS), robust privacy and security, and clear assignment of responsibilities under applicable law.

Summary. Coordinated care in Poland is a promising, team-based model that enhances access to diagnostics, strengthens treatment coordination and improves chronic-disease monitoring. Its potential is amplified by diagnostic imaging, telemedicine and AI, supported by interoperable standards (HL7, DICOM) and integrated information systems (HIS, RIS, PACS). To realize this potential safely and at scale, appropriate legal and technical standards must be ensured to enable secure, dynamic development of this holistic form of patient care.

Key words

telemedicine, medical imaging, coordinated care, artificial intelligence, multidisciplinary teams

INTRODUCTION

Coordinated care is a new model of treatment introduced in Poland, which is worth presenting more widely due to its effectiveness and practicality. The role of the general practitioner (GP) has been strengthened and has become an element that initiates and coordinates the process of treatment and broadly understood care for the patient whose state of health requires such help. This applies mainly to the new powers of doctors to order detailed diagnostic examinations, such as computed tomography. Within the coordinated care model, the general practitioner is responsible for developing and supervising an Individual Medical Care Plan (IMCP), which integrates diagnostic, therapeutic and follow-up procedures across different stages of patient management. Cooperation assumes close cooperation between a GP with medical specialists and other doctors [1]. As part of coordinated care, the specialist is responsible for: diagnosis, treatment, prevention and health education in the field of such diseases as cardiology, diabetology, pulmonology, endocrinology or nephrology. In these disease groups, modern medical technologies play a key role, supporting early diagnosis, individualized treatment planning and long-term monitoring, particularly in patients with chronic conditions. The main assumption of such care is to improve the health of patients by upgrading the treatment process, which ultimately increases the level of patient satisfaction with contact with the health care system [2].

In Poland, coordinated care is currently being gradually implemented in primary health care, with expanding access to specialist consultations, diagnostic imaging and digital health tools [3, 4]. The gradual dissemination of this model will result in the expansion of the range of available health services from the perspective of their improvement in their availability for patients. Thanks to the integration of various specializations and diagnostic technologies, coordinated care enables early detection of diseases through faster access to medical imaging results, such as X-rays, ultrasound and CT. Medical imaging, electronic medical records, artificial intelligence (AI) and telemedicine support individual stages of the IMCP, from diagnostic assessment and therapy selection to monitoring disease progression and treatment outcomes. The use of integrated information technology systems, diagnostic protocols and modern technologies, including artificial intelligence (AI), allows for more precise diagnosis and minimization of the risk of errors, which also significantly increases the quality and safety of treatment. These solutions are of particular importance in coordinated care of cardiological, diabetological, pulmonological, endocrinological and nephrological patients.

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OBJECTIVE

The aim of the study is to analyze scientific reports and publications on the model of coordinated care in health care systems, with particular emphasis on the practical role of modern medical imaging and digital technologies in implementing coordinated, interdisciplinary patient care. The review emphasized the role of artificial intelligence (AI) in the processes of standardizing research results, and the importance of interdisciplinary teams in the treatment process. This assumption was achieved by conducting a systematic analysis of the literature on the model of coordinated care in health care systems, with particular emphasis on the role of modern imaging technologies improving interdisciplinary patient care. It should be added that the scientific literature related to the topic is not numerous due to the novelty of the introduced solution.

MATERIALS AND METHOD

In order to identify relevant publications, a systematic search of the literature was carried out in accordance with the PRISMA guidelines [5]. The electronic databases PubMed, Scopus and Google Scholar were analyzed in search of publications on coordinated care, the use of artificial intelligence in medical imaging, standardization of research results and the role of interdisciplinary teams in health care systems, published in 2010–2025. The following key words and MeSH terms were used, taking into account all commonly used abbreviations: ‘

coordinated care’, ‘integrated care’, ‘continuity of care’, ‘case management’, ‘primary health care’, ‘health services’, ‘chronic disease management’, ‘artificial intelligence’, ‘AI’, ‘DL’, ‘machine learning’, ‘standardization’, ‘clinical guidelines’, ‘care pathways’, ‘interdisciplinary teams’, ‘healthcare personnel competencies’, ‘XRAY’, ‘CT’, ‘MRI’, ‘USG’, ‘EHR’, ‘LS’, ‘HIS’, ‘RIS’, ‘PACS’, ‘WHO’, ‘POZ’, ‘GDPR’. In each case, the operators ‘AND’, ‘OR’ and ‘…’ were used.

The analysis also included review studies published in 2010–2025, containing information on models of coordinated and integrated health care, the applications of artificial intelligence in the standardization of care, and the role of interdisciplinary teams and the competence of medical staff in primary health care. The research selection process was carried out independently by three reviewers based on the titles and abstracts of the works found in the databases. In case of doubt, the full text of the article was obtained and the legitimacy of its inclusion was discussed. Initially, more than 33 results were obtained without time limits – the publications came from 1995–2025. After limiting the time interval to the last 15 years (2010–2025), 200 articles were selected. Abstracts, editorials and letters to the editor were excluded, leaving 100 full-text publications. In the next stage, duplicates in the analyzed databases were removed, leaving 70 articles. The titles and summaries of all the works were analyzed, discarding those unrelated thematically. Finally, 28 publications were included, among them 3 reports from international organizations that provided information on coordinated care, the use of digital technologies (including AI) and the role of interdisciplinary teams in organizing work in health systems.

Scope and characteristics of coordinated care. Coordinated care in Polish primary health care has been implemented nationwide since October 2022 [4]. According to recent data from the National Health Fund (NFZ), almost 3,000 primary care practices – approximately 48% of all POZ contracts – provide coordinated care, and about 20.6 million patients registered with POZ (around 60% of this population) are covered by this model [3]. In cardiology and diabetology, which are among the most frequently implemented coordinated care pathways, the model emphasises extended diagnostic possibilities, long-term monitoring of chronic diseases and improved access to specialist consultations within primary care [3, 4]. Coordination of the patient’s diagnostic and therapeutic process takes place in primary health care and is supervised by a coordinating physician. This model enables more efficient diagnosis, monitoring and treatment, particularly in older patients with multi-morbidity, chronic diseases, polypharmacy and long-term care needs. In coordinated care, clinical decision-making is supported by structured diagnostic pathways, medical imaging, electronic medical records and digital communication tools which, together, enable continuity and coherence of care across different stages of the treatment process. Each patient covered by coordinated care receives an Individual Medical Care Plan (IMCP), tailored to their needs and defining diagnostic, therapeutic and follow-up procedures. The IMCP integrates data from imaging examinations, laboratory tests and clinical consultations, facilitating interdisciplinary collaboration and ongoing assessment of disease progression and treatment effectiveness. Coordinated care includes patients diagnosed with diseases in the field of:

1) cardiology (hypertension, heart failure, atrial fibrillation, ischemic heart disease);
2) pulmonology and allergology (COPD, asthma);
3) diabetology (prediabetic conditions, diabetes);
4) endocrinology (hypothyroidism/hyperthyroidism, thyroid nodules);
5) nephrology (chronic kidney disease).

An example of a coordinated care pathway in cardiology can be outlined step-by-step [2, 6]. In patients with suspected heart failure, initial imaging diagnostics (echocardiography and, when indicated, CT or MRI) are performed, the results are integrated into the electronic medical record, an Individual Medical Care Plan is created by the coordinating physician in cooperation with a cardiologist, and the patient is subsequently monitored using follow-up imaging, telemedicine and periodic modification of the care plan. In these disease groups, coordinated care relies on the targeted use of modern technologies – for example, imaging and telemonitoring in heart failure, electronic medical records in long-term diabetes management, and remote monitoring tools in chronic respiratory and renal diseases – to support early diagnosis, individualized treatment and long-term patient follow-up. After the diagnosis of any of these diseases, the patient gains access to services such as consultations with the coordinator’s doctor, diagnostic tests, educational advice, specialist and dietary consultations. The implementation of IMCP is supervised by a doctor-coordinator, who is responsible for organizing consultations, tests and allows

Table 1. Summary of key technologies used in coordinated patient care, their clinical applications and principal benefits in selected chronic disease groups

Disease Group	Technology	Application Examples	Clinical Role
Cardiology	Telemonitoring, AI-assisted ECG	Remote heart failure monitoring; AI analysis of ECG signals	Early detection of cardiac events, reduced hospitalizations, personalized therapy adjustments
Diabetology	EMR & Teleconsultations	Electronic Medical Records for long-term diabetes management; teleconsultations for glycemic control	Improved longitudinal tracking of blood sugar levels and treatment adherence
Pulmonology	Remote spirometry & Telehealth	Remote lung function testing using spirometers; telehealth visits for asthma and COPD patients	Enhanced monitoring of disease progression, reduced need for in-person visits
Endocrinology	Integrated EMR with Imaging	Integrated EMR with imaging for thyroid and metabolic disorder management	Streamlined data access, enabling precise monitoring and treatment planning
Nephrology	Tele-nephrology & EMR	Tele-nephrology consultations; EMR integration for chronic kidney disease management	Improved follow-up care and monitoring of kidney function and patient well-being

the patient to participate in preventive programmes, acting as a link between the patient and the medical team. Naturally, his support also improves cooperation between specialist doctors [7]. The overall coordinated care pathway from the perspective of the coordinating physician and the patient is illustrated in Figure 2. The doctor-coordinator can use various forms of diagnostics, consultations, tests, and the assistance of other specialists. Naturally, for the presented analysis, the most important are the technologies that the doctor-coordinator can use in coordinated care for the patient. An overview of the main technologies used in coordinated care, their clinical applications and expected benefits in selected chronic diseases is presented in Table 1.

Medical imaging plays a significant role in the rapid detection of diseases/health problems and monitoring of the patient's health. In coordinated care, imaging examinations constitute a key diagnostic component of the Individual Medical Care Plan (IMCP), supporting initial diagnosis, therapeutic decision-making and long-term monitoring of disease progression. Its integration with IT systems, in accordance with the adopted data transmission standards, enables the efficient flow of information between the recipients involved in this care process (doctor, hospital, specialists). Also, the use of information technology reduces the need to repeat tests, and shortens the time of patient consultation. The basic diagnostic techniques of imaging include: X-ray, computed tomography (CT), magnetic resonance imaging (MRI) and ultrasound (USG). In coordinated care of cardiological, pulmonological, nephrological and endocrinological patients, medical imaging supports both initial diagnosis and follow-up of chronic diseases such as heart failure, COPD, chronic kidney disease and thyroid disorders. Each of the methods is used in the diagnostic process depending on clinical indications. X-rays, mainly used in the diagnosis of the skeletal system and lungs, are based on ionizing radiation. CT, which is also based on ionizing radiation, allows for a more accurate, three-dimensional assessment of tissues and detection of organ lesions. Ultrasound, using ultrasonic waves, thanks to its high availability and low cost, remains one of the most frequently performed imaging tests. MRI, which is distinguished by high sensitivity in soft tissue imaging, remains the study of choice in the diagnosis of changes in the central nervous system. Early diagnosis using, among others, imaging tests plays a key role in the diagnosis and treatment of chronic diseases [8–10]. Repeated imaging performed at defined stages of the IMCP allows objective assessment of treatment effectiveness and early detection

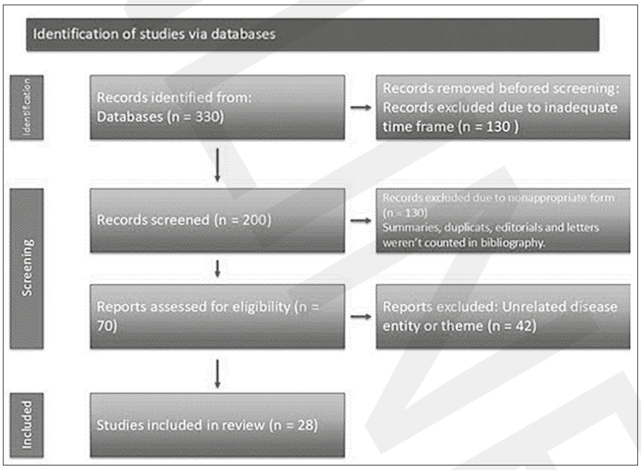

Figure 1. Diagram of the publication selection process according to PRISMA guidelines. A total of 330 items were identified, of which 28 publications were included in the review after exclusions and full-text evaluation

of disease progression, which is particularly important in long-term coordinated care. In radiology, the basic format for storing and archiving information is the HL7 and DICOM standards, with DICOM being more specialized in image transmission. The Hospital Information System (HIS) ensures the rapid and easy flow of patient information between departments, while the Radiological Information System

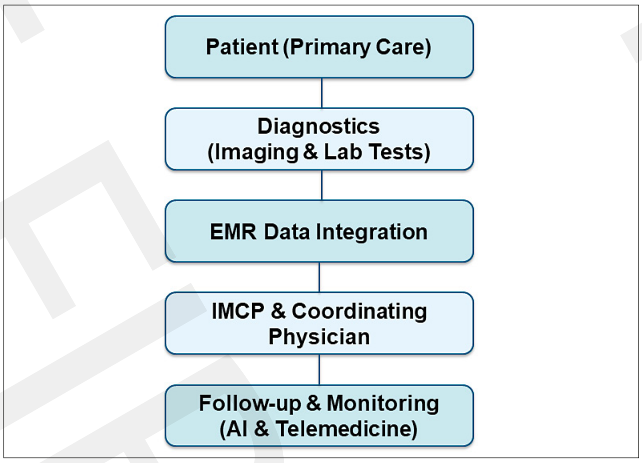

Figure 2. Schematic representation of the coordinated care process, illustrating its progression from initial diagnosis and applied care (including medical imaging), through adherence to EMR data and development of an Individualized Medical Care Plan (IMCP), to long-term monitoring supported by artificial intelligence and telemedicine

(RIS) operates within radiology facilities, managing test lists, descriptions and the transmission of results between staff. All RIS system data is archived and transmitted to PACS (Image Archiving and Communication System) [11, 12]. The role of a radiologist and radiographers is inherent in the coordinated care of the patient, carried out using imaging methods and techniques. Their tasks include working with medical specialists in various fields of medicine and family doctors in order to ensure the best possible process of diagnosis and treatment of patients. Radiologists play a key role in maintaining the continuity of treatment, and interpretations of imaging results allow early detection of abnormalities and precise diagnosis. The integration of the results of imaging studies with the opinions of other specialists allows for the development of a coherent treatment plan, which makes radiologists essential participants in coordinated care [13].

In oncological diagnostics, thanks to the use of imaging techniques such as mammography, ultrasound, CT or MRI, deep learning algorithms improve the segmentation and classification of tumours, also enabling the detection of metastases, e.g. to bone. AI also supports the interpretation of scintigraphic images, while achieving high sensitivity and specificity in detecting the presence of tumors [14]. An international study showed that transformer-based AI models outperform the experts in the diagnosis of ovarian cancer based on ultrasound images, achieving high accuracy and facilitating standardization in different media and ultrasound systems [15].

Electronic medical records of the patient. In the age of digitalization, the introduction of test results in electronic form into the patient's medical records has become a natural step. In coordinated care, electronic medical records constitute the organizational backbone of the Individual Medical Care Plan (IMCP), integrating diagnostic, therapeutic and follow-up data across different stages of patient management. Currently, the standard in the field of data collection is the P1 system, which allows the storage and sharing of documentation such as e-prescriptions, e-referrals and electronic research results [16]. This solution facilitates the integrated management, archiving and transfer of data between facilities and hospital wards, ensuring continuity of care. The main purpose of electronic medical records is to ensure easy access to data, their fast and secure transmission between centres in order to enable urgent specialist consultations. Such solutions guarantee full insight into the patient's medical data, speeding up the diagnostic process and enabling more effective treatment. In long-term coordinated care of patients with chronic conditions such as diabetes, cardiovascular and respiratory diseases, EMR systems enable longitudinal assessment of disease control and facilitate coordinated decision-making among primary care physicians and specialists [17, 18].

Electronic medical records support comprehensive, multi-profile and professional patient care [2]. Such documentation allows doctors (at every stage) to inspect the full results of the patient and allows consultations between facilities. A step-by-step coordinated care pathway in internal medicine may be illustrated using type 2 diabetes as an example. Following laboratory diagnostics and data registration in the electronic medical record, the coordinating physician establishes an Individual Medical Care Plan, initiates treatment and specialist consultation when needed, and ensures ongoing monitoring and periodic evaluation of therapy using digital tools and telemedicine.

Artificial intelligence (AI) when used in medicine, speeds up diagnoses and improves their accuracy. AI is widely used, especially in the process of detecting cancer, heart and respiratory diseases. In combination with telemedicine, enabling remote consultations, these solutions improve the availability and quality of health services and reduce the waiting time for an accurate diagnosis and the implementation of treatment. Artificial intelligence (AI) is divided into machine learning systems that analyze data, and a more advanced form that uses multi-layer neural networks. In radiology, the use of algorithms to analyze the results of imaging tests allows to support and improve the diagnostic process [19]. AI supports doctors by integrating data from various sources, such as diagnostic images, laboratory test results and medical histories, which allows for a more comprehensive assessment of the patient's condition and better planning of therapy.

In coordinated care, artificial intelligence is primarily used as a clinical decision-support tool, assisting physicians at selected stages of the Individual Medical Care Plan, particularly in diagnostic imaging analysis, risk stratification and monitoring of patients with chronic diseases [20]. In coordinated care, the use of AI increases the effectiveness of treatment by better matching therapy to a specific clinical case and monitoring patients with chronic diseases, such as diabetes or arterial hypertension [21]. An example of the use of AI is in the analysis of mpMRI images in the diagnosis of prostate cancer. AI algorithms allow a quickly assessment of changes and identification of suspicious areas that require further diagnosis. In pathology, AI supports faster analysis of microscopic images, increasing the repeatability of results and the accuracy of the assessment of changes. Thus, it contributes to improving the efficiency of targeted biopsies, enabling more precise collection of material from areas with the greatest suspicion of cancer [22]. In the case of the cardiovascular system, artificial intelligence supports, among others, the analysis of coronary artery stenosis or the detection of atherosclerotic plaques. In lung diagnostics and brain pathology analysis, deep learning is superior to traditional methods in terms of sensitivity and accuracy, which allows earlier detection of abnormalities.

Although the use of AI has many benefits, it also poses new challenges to the health care system, including lack of equipment, staff shortages and, above all, the need to increase data security. In coordinated care, AI is increasingly used to support long-term monitoring and early detection of deterioration in patients with chronic diseases. AI-based systems can analyze patient-reported outcomes and symptom questionnaires, enabling faster clinical assessment and more timely modification of the Individual Medical Care Plan [23]. In addition, conversational AI tools may support communication with patients and reduce the workload of medical staff, particularly in multilingual or high-volume care settings [24]. Recent studies also indicate that AI-assisted analysis of specific symptoms, such as cough characteristics, may support screening and monitoring in respiratory diseases within coordinated care pathways [12, 23].

Despite the potential of AI, its routine implementation in coordinated care remains limited due to organizational, legal and technical factors, including insufficient infrastructure, lack of standardized data, regulatory constraints, and the need for additional training of medical personnel [25].

Telemedicine is a modern branch of medicine that allows remote diagnosis, treatment and monitoring of patients. In coordinated care, telemedicine supports the implementation of the Individual Medical Care Plan by enabling remote follow-up, ongoing monitoring of clinical parameters and timely communication between the coordinating physician, specialists and the patient. The development of telemedicine has contributed to improving the availability of medical services, playing a key role in reducing its costs. The expansion of services, such as video consultations, allows for faster diagnostics, accelerating the flow of information [26, 27]. IT systems such as RIS, HIS and PACS enable quick and safe sharing of diagnostic test results as part of coordinated care. Digitization of medical records allows easy access to the patient's medical history and the flow of information between hospital wards, as well as various facilities or medical centres. At the same time, special attention should be paid to the issues of data security and privacy protection, which are always a significant challenge in the digitization of sensitive information [28].

Telemedicine allows for more effective management of patient treatment, thanks to ongoing monitoring and improvement of information exchange between specialists in accordance with the assumptions of coordinated care. Digitization allows doctors to easily access medical records, which improves the consistency of diagnoses. Telemedicine also supports the management of chronic diseases, offering tools for remote monitoring of patients' health and rapid response to individual changes [29, 30]. Telemedical solutions are most commonly used in the coordinated care of patients with cardiovascular, respiratory and metabolic diseases, where they facilitate early detection of clinical deterioration and reduce the need for unnecessary in-person visits.

All these systems improve the cooperation of medical specialists, enabling access to real-time data and accelerating diagnostics. Their integrity allows images to be automatically linked to patient data, minimizing the potential risk of error resulting from duplication or no transmission, which is the result of automation and reduced human participation.

CONCLUSIONS

Coordinated care is one of the new models of treatment which integrates the activities of doctors, medical specialists, nurses and dieticians. A general practitioner (GP) plays a key role in this process as a therapeutic leader. In coordinated care, the GP has access to many diagnostic tools, such as X-ray, ultrasound, CT, as well as HIS, RIS and PACS systems that work together with AI solutions. AI supports the work of doctors, especially radiologists, by supporting the processes of standardization and interpretation of imaging test results. The implementation of coordinated care in combination with modern technologies requires new forms of control and data analysis.

The coordinated care model is an innovative and dynamically developing form of patient care. When using a whole range of diagnostic capabilities and techniques along with the use of AI, this model becomes a promising tool for providing holistic, multi-profile care for people in need of medical assistance. Particular attention should be paid to the role of AI in coordinated care, which absolutely improves this process and is very up-to-date.

It should be pointed out that the use of new technologies and IT achievements is necessary in today's work of doctors and facilitates the exercise of this form of patient care. A dynamic transition from the traditional form of patient care to highly advanced methods using medical technologies, AI, electronic documentation, telemedicine, and advanced statistical methods, is also inevitable. At the same time, it is important to train medical personnel who in their daily practice process patient data (both medical and non-medical data) contained in IT systems. The training of medical staff must be conducted before the employee is allowed to process data and periodically renewed and updated in the era of cybersecurity threats.

Cooperation of multidisciplinary teams minimizes the risk of errors thanks to mutual and continuous verification of the entire diagnostic and therapeutic process. Nevertheless, the integration of medical imaging with coordinated care faces numerous challenges. Currently, a significant problem is the limited availability of modern equipment, which increases the waiting time for research. Another barrier is the shortage of qualified personnel responsible for operating diagnostic devices and preparing test descriptions [2].

Telemedicine and AI are tools that are designed to support doctors in providing more frequent contact with the patient, and thus broader patient care. Medical data collected in electronic documentation make it possible to accelerate the flow of information and provide access to full patient data at any place and time which, as a result, translates into a high standard and quality of the services provided. In the era of digitalization, the interoperability of information systems is crucial, which facilitates the integration of research results [31, 32]. However, there are still barriers to data transmission between facilities, resulting from the lack of system consistency and differences in accepted technical and administrative standards. In addition, legal requirements for the protection of personal data (GDPR in Europe, HIPAA in the USA) impose certain restrictions on the area of information exchange, slowing down the data transfer process due to the need to obtain multiple consents. Ensuring data security and privacy requires the use of technologies such as the Internet of Things (IoT), blockchain, mobile applications, cloud computing and hybrid systems. There are three key areas of security: access control, data sharing and storage, while constantly monitoring the security and privacy of information in HIS systems. An important aspect is also providing patients with full transparency consisting in reliably informing them about the method, purpose, scope and time of processing their data [33, 34].

The use of modern technologies in coordinated care gives patients a real chance for fast and accurate diagnosis and implementation of comprehensive therapy at an early stage of a disease. This is the basic assumption of a well-functioning health care system. However, the development of technology, due to the need to process sensitive patient data, requires the development of transparent, clear and understandable legal regulations, ethical principles and clear procedures that will ensure the use of these tools only in a way that guarantees the highest quality of health care. The need for transparent regulation of safety rules and control over the content and regularity of the constantly growing amount of medical data means that digitization also carries considerable risks, especially in the context of the quality of processed data, which are medical data of patients. It should be emphasized that the use of technological achievements requires the implementation and constant monitoring of existing security standards and protection against violations of privacy, dignity and confidentiality of information (especially sensitive data).

The threat against cybersecurity is very real when it comes to the collected medical data of patients. Violations of particularly protected material, such as sensitive personal data, including not only medical data, but also data from environmental, family, personal and social history, should be eliminated through the implementation of unambiguous legal regulations, appropriate verification mechanisms and transparent procedures.

On the other hand, the telemedicine and AI tools used should be consistantly tested in terms of the stability of operation and correct processing of the medical data they contain and is continually being introduced. Another challenge is the responsibility for possible diagnostic errors resulting from incompatibility of systems or unclear procedures. The risks can also be posed by the databases themselves – their incompleteness or errors are often the result of the human factor, which emphasizes the need for technological supervision over their creation and updating [35, 36].

The use of AI in the coordinated care model in image analysis significantly reduces the time needed to evaluate and make an accurate diagnosis. In the case of imaging tests, their correct interpretation is the basis for the accepted actions of the doctor in primary and specialist care. An efficient model of coordinated care is holistic care for patients suffering from chronic diseases, such as neurological, oncological, cardiac or nephrological diseases. This model assumes a comprehensive assessment of the patient's health and quick response to worrying changes or disorders. It is of particular importance in the era of an aging society, which requires a re-profiling of health care towards increasing the role of coordinated care, taking into account the elements of specialist care – cardiac, neurological, pulmonological, diabetological and preventive. In geriatric care, which is also coordinated care, it becomes important, among others, for monitoring blood pressure, heart rate, glucose levels, the use of fall sensors or pulse oximeters, which allows support the process of treatment and care.

Lack of familiarity with medical terminology and the technical nature of diagnostic descriptions may pose a challenge for other medical specialists as well as for the patients themselves. This issue is particularly relevant in the coordinated care model, where diagnostic information, including imaging results and data generated by modern medical technologies, is exchanged between the coordinating physician, specialists and the patient at successive stages of the Individual Medical Care Plan. Therefore, there is a need for further analysis of communication processes within multidisciplinary teams and between the coordinating physician and the patient, to ensure that the patient is not excluded from the complex diagnostic and decision-making process. Future research should focus on the development and standardization of medical technology terminology, simplification of diagnostic reporting and evaluation of how communication quality affects the effectiveness of coordinated care and patient involvement. The integration of medical imaging, electronic medical records, AI and telemedicine within coordinated care enables structured diagnostics, individualized planning and continuous monitoring, thereby supporting effective implementation of the Individual Medical Care Plan in patients with chronic diseases [5, 37, 38].

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