



Role and responsibilities of a medical coordinator in the light of Polish legislation and foreign experiences

Rola i zadania koordynatora medycznego w świetle polskiego prawa i standardów międzynarodowych

Joanna Oberska^{1,C-D,F}, Artur Prusaczyk^{2,A-B,F}, Paweł Żuk^{2,A-B,F}, Marika Guzek^{2,A-B,F}, Piotr Tyszko^{1,E-F}, Grzegorz Zieliński^{3,C,E-F}, Magdalena Bogdan^{1,A,C-D,F}

¹ Department of Social Medicine and Public Health, Medical University, Warsaw, Poland

² Medical and Diagnostic Centre, Siedlce, Poland

³ Faculty of Law and Administration, Kazimierz Puławski University of Technology and Humanities, Radom, Poland

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Abstract

Introduction and objective. Coordinated care has been defined as a function that helps ensure satisfaction of patient's needs. Coordinated care maximizes the value of services provided to patients by facilitating effective, safe and high-quality services and improving healthcare outcomes.

The article analyzes the phenomenon of interpretation of a coordinator's responsibilities by service providers, especially due to the Rapid Oncology Therapy programme in Poland. The scope of medical care coordination in Poland is compared with the United Kingdom and The Netherlands, among others.

Brief description of the state of knowledge. The role of the medical coordinator was introduced into the Polish legislation for the first time in 2014 as the coordinator of oncological treatment. There are various interpretations among Polish healthcare providers with regard to duties of a coordinator, but there is no model on which certain patterns could be built. Most coordinators work together with the hospital medical staff and organizational units, take care of the completeness of the documentation in order to correctly settle oncological services, coordinate the treatment plan established by the medical council, provide the patient with information related to further treatment, participate in medical council meetings, and issue the Diagnostic and Oncological Treatment Card (Karta Diagnostyki i Leczenia Onkologicznego – DiLO). Countries including the UK and The Netherlands are examples of effective implementation of coordinated primary care due to their high level of medical resource management.

Conclusions. In order to make full use of the potential of cancer treatment coordinators, it is necessary to provide them with greater opportunities to cooperate with the patient, rather than independently.

Key words

medical law, coordinated care, medical coordinator

Streszczenie

Wprowadzenie i cel pracy. Opieka koordynowana uznawana jest za jeden z najważniejszych elementów warunkujących istnienie wysoko funkcjonującej opieki zdrowotnej przynoszącej dużą wartość. Jej celem jest podniesienie wartości usług medycznych poprzez zapewnianie pełnego spectrum efektywnych i bezpiecznych świadczeń zdrowotnych o wysokiej jakości przy ciągłej poprawie wskaźników zdrowotnych dla danej populacji.

Celem niniejszej pracy była analiza roli i zadań koordynatora medycznego w polskim ustawodawstwie, z uwzględnieniem doświadczeń zagranicznych. W ramach międzynarodowej analizy porównawczej dokonano przeglądu zadań koordynatorów w Polsce, Wielkiej Brytanii i Niderlandach.

Opis stanu wiedzy. Rola koordynatora w polskim ustawodawstwie pojawiła się po raz pierwszy jako pozycja koordynatora leczenia onkologicznego. Obecnie większość koordynatorów współpracuje z kadrą medyczną w szpitalach oraz innych placówkach medycznych, gdzie zajmują się optymalizacją organizacji opieki zdrowotnej oraz przygotowaniem planu leczenia wcześniej ustalonego przez konsylium lekarskie. Rolą koordynatorów jest również informowanie pacjentów o dalszym leczeniu.

Podsumowanie. Analiza międzynarodowych danych wykazała, że Wielka Brytania i Holandia mogą stanowić przykład organizacji i zakresu zadań koordynatorów medycznych. Wyniki badań pokazały również, że pełne wykorzystanie potencjału koordynatora medycznego uzyskuje się dzięki ściślejszej jego współpracy nie tylko z kadrą medyczną, ale także z pacjentem i jego rodziną.

Słowa kluczowe

prawo medyczne, koordynowana opieka zdrowotna, koordynator medyczny

Address for correspondence: Magdalena Bogdan, 1Department of Social Medicine and Public Health, Medical University, Warsaw, Poland
E-mail: mminko@onet.eu

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INTRODUCTION

Coordinated care is one of the most important conditions for high-performance and high-value healthcare [1–3]. It has been defined as a function that helps ensure satisfaction of patient's needs and preferences related to health services and the exchange of information between people, functions, and facilities in time. Coordinated care maximizes the value of services provided to patients by facilitating effective, safe and high-quality services, and improving healthcare outcomes [4].

The role of the medical coordinator was introduced into the Polish legislation for the first time as the role of the coordinator of oncological treatment in the Regulation of the Minister of Health of 20 October 2014, amending the regulation on guaranteed hospital health services. The coordinator was assumed to have basic medical, legal, administrative, psychological and social knowledge, and to be entitled to a special training programme [5]. However, the Regulation does not define the tasks of a coordinator, which is why in practice the coordinator's role is limited to the performance of information and administrative activities. The 'oncology package' offering Rapid Oncology Therapy for patients with suspected cancer, which was introduced in the Polish health system in 2015, assumes that the coordinator is a person who helps patients with administrative and information issues [6]. However, it defines coordinator's responsibilities too broadly, which leaves too much scope for interpretation for service providers. This phenomenon is subject to analysis in a further part of this article.

The Regulation of the Minister of Health of 24 May 2019, amending the regulation on guaranteed health service, indicates that the organization of health services should involve the role of the professional coordinator (doctor) and organizational coordinator (which can be a specialist nurse in oncology nursing, a nurse who has completed a qualifying course in oncology nursing, a nurse doing specialization in oncology nursing with at least two years of experience, or any other staff member whose knowledge and experience are appropriate to perform tasks related to this function) [7].

Although the role of the coordinator has not yet been fully defined, it is being planned in the Polish legislation to introduce the role of the coordinator in the primary health care and in other hospital departments. The Act of 27 October 2017 on primary health care states that coordinated care is to be ensured by a primary health care physician in cooperation with a nurse and midwife, thus creating the so-called 'PHC team' (Primary Healthcare Team) [8]. An Article of this Act states that it is the task of the health service provider to appoint a person responsible for the organization of health services, providing information about them and encouraging cooperation between persons providing health services [9]. The Act is thus another legal document which imprecisely defines the principles of coordinated care and the role of the coordinator. Pursuant to this, coordinated care involves prophylactic health care, adjusted to the age and gender of the health service recipients, health problems of an individual recipient and the population entitled to health care, as well as diagnostic tests and specialist consultations, in accordance with an individual diagnostic, treatment and medical care plan [8]. Therefore, coordinated care means performance of joint activities by all team members and delegation of the doctor's tasks to other persons. The legislator abandons the

idea of introducing a new role of coordinator, which is in line with the practices that can be observed in many Western countries where the already existing medical professions are used to support coordinated care (e.g. doctors, nurses, medical assistants, pharmacists or social workers) [9].

MATERIALS AND METHOD

This article is based on a review of the literature on the role and responsibilities of a medical coordinator, and a search instigated in the electronic database MEDLINE (PubMed) using the terms: medical coordinator, coordinated care, responsibilities and competences. Reference lists of key papers were also explored to retrieve research literature. Searches were limited to the period 2010–2020 and in the English language. Additionally, similar searches were performed to identify articles describing the role of a medical coordinator in the United Kingdom and The Netherlands. To describe the role of medical coordinator in Poland, relevant legal acts were reviewed and included in the article.

Scope of coordinator's activities. Particular roles in the coordinated care team have not yet been well defined; there are differences in the perception of team members and their roles by different health care professions, including doctors, nurses and medical assistants [10]. Focus groups of Lithuanian nurses and doctors indicate the critical role of formal schemes and a clear definition of the roles in the formation of teams in primary care. Despite general openness to cooperation, there are no clear boundaries between the duties of both professions, and no information on the level of autonomy of nurses and who and how should the newly-created team be managed [11].

The authors of a study conducted in the United States have observed that registered nurses and licensed practical nurses very often have the same responsibilities, although they differ in skills and level of education, which confirms the lack of clear division of competences [12]. In the United States, a physician and a nurse practitioner or a physician assistant is responsible for the diagnostics, treatment and patient care coordination, while a registered nurse is responsible for patient care coordination, patient and family education, and prevention (e.g. preventive vaccinations). Additionally, the PHC team may include a social worker or a pharmacist. In Canada and the United Kingdom a nurse practitioner is also responsible for monitoring patients with stable chronic diseases, and in Australia, they can issue referrals to specialists, referrals for diagnostic tests, and issue prescriptions [9]. In most of the analyzed countries (including Poland, under the Act of 27 October 2017), the role of the primary health care coordinator is played by a nurse, but it is difficult to determine who would be the most appropriate person for this position. There is also a lack of research on the impact of the performance of the role of health care coordinator by different professionals on patient outcomes [13].

The role of the health care coordinator is most commonly an additional role for an individual person, and this is also true in Poland, despite the assumed autonomous position of the coordinator of oncology treatment. The results obtained in the report of the Polish Oncology Foundation (Fundacja Onkologia 2025), indicate that only 52% of the surveyed

coordinators of oncology treatment in Poland perform this function as a full-time job; and for all the others it is an additional job, which usually accompanies the job of a nurse, administrative worker or medical secretary.

According to the Regulation of the Minister of Health on Rapid Oncology Therapy, the primary task of the coordinator is to ensure the flow of information between the health care provider and a patient at all stages of treatment in order to adapt it to the individual needs of the patient. Furthermore, the coordinator participates in the meetings of the medical council, coordinates the treatment plan established by the council, supervises the completeness of medical documents related to the diagnosis and treatment of the patient, and works with the medical staff and other organizational units [6].

Despite clear messages from the Ministry of Health on the scope of activities of coordinators, no pilot programme has been carried out in order to develop schemes and procedures according to which coordinators could plan their work and carry out the tasks entrusted to them. As a result, there are various interpretations among Polish healthcare providers regarding the coordinator's duties and there is no model on which certain patterns could be built. A single comparison of four hospitals providing rapid oncological therapy in the Lubuskie Province in western Poland, showed a great difference in the scope of activities performed by coordinators in various facilities. In two hospitals, coordinators issued diagnostic and oncological treatment cards at request or command of a doctor, whereas in three hospitals they were responsible for the settlement of diagnostic services. Only in one facility did they coordinate the treatment plan on a regular basis and submit the diagnostic cards. The only activity that was common to all coordinators was the organization of medical councils [14].

A report by the Polish Oncological Foundation (Fundacja Onkologia 2025) entitled 'Who are cancer patient coordinators and what they do?' is helpful for understanding the current situation of coordinators, four 4 years after the introduction of the oncology package, and contrasting it with the intentions of the legislators. Most of the coordinators (over 80% of those surveyed) work together with the hospital medical staff and organizational units, take care of the completeness of the documentation, cooperate with the department of Medical Statistics / Registry of Medical Services (Rejestr Usług Medycznych – RUM) in order to correctly settle oncological services, coordinate the treatment plan established by the medical council (sets appointments and informs the patient accordingly), provides the patient with information related to oncological treatment, participates in medical council meetings and issues the oncology diagnosis and treatment cards (DiLO). Most of the problems faced by the coordinators are related to the DiLO cards and their administration. This might be the reason for coordinators spending most of their time carrying out activities related to the DiLO cards (26.4 hours a week, on average). Coordinators also underline the lack of formal preparation before taking up the position. As many as 49% of the coordinators reported that they obtained knowledge about the duties of coordinator by using the 'trial and error' method [15]. Thus, it can be concluded that it is still necessary to define the tasks of a coordinator, and develop patterns according to which they should be carried out.

Practical implementation of a medical coordinator's role requires availability of an efficient IT system. Coordinators

have reported difficulties concerning their current system and its restraints which cause additional work for the coordinators. The system has been deemed slow, incompatible with other applications, and lacking important features, such as patient path tracking or preview of a previously issued DiLO card [15]. Implementation of electronic information or communication systems could provide additional benefits to patients by streamlining processes, improving communication by primary care providers and specialists, and therefore reducing waiting times for diagnostic tests and treatments¹. They serve as a backbone for the medical coordinator's role and enable them to fulfill their responsibilities.

Desired features and skills of the medical coordinator.

The role of the coordinator in coordinated health care can be assessed from the perspective of Belbin's team roles. According to Belbin's theory, a coordinator is a person determined in pursuit of a goal, who can clearly define goals and prioritize them, manage human resources perfectly, and delegate tasks effectively. They are strategic in their thinking and insightful [16]. Besides technical skills (e.g. knowledge of numerous, constantly changing regulations and many issues related to health protection), the coordinator should also have a number of 'soft' skills, including, the ability to resolve conflicts and deal with stress, communication skills, empathy and good manners [14].

Polish law requires healthcare providers to ensure the confidentiality of patients' medical information². Patient privacy is a basic principle of healthcare delivery and, as such, should be respected by medical coordinators. Use of Electronic Health Records (EHR) may compromise patient confidentiality as ultimate responsibility for maintaining it lies with the end-user³. Medical coordinators should present an ethical code of conduct when handling patient information and using DiLO cards.

FOREIGN EXPERIENCES – POSSIBILITIES AND LIMITATIONS OF THEIR IMPLEMENTATION IN POLAND

United Kingdom. The National Health Service (NHS) in the United Kingdom (UK) covers 80% of its residents [17], which is why coordinated care will be discussed on the example of NHS plans and reforms.

Coordinated care has existed in the UK for many years and is promoted in the framework of the Clinical Commissioning Groups (CCG). Since further health services require a referral from a family doctor, as many as 90% of healthcare contacts take place within the framework of primary health care. In addition, pharmacists play a big role in the provision of primary health care. Pharmacies offer screening tests and health advice services, and pharmacists who have completed an appropriate course have the right

1. Tomasone JR, Vukmirovic M, Brouwers MC, et al., 'Challenges and insights in implementing coordinated care between oncology and primary care providers: a Canadian perspective', *Curr Oncol*. 2017;24(2):120–123. doi:10.3747/co.24.3426

2. Ustawa z dnia 6 listopada 2008 r. o prawach pacjenta i Rzeczniku Praw Pacjenta (Dz.U.2020.0.849)

3. WALLACE, ILSE M. MS, RNC., 'Is Patient Confidentiality Compromised With the Electronic Health Record? Computers, Informatics, Nursing (CIN): February 2015 – Volume 33, Issue 2, pp. 58–62, doi: 10.1097/CIN.000000000000126

to prescribe particular drugs [9]. The cascade effect of the British system creates natural conditions for the development of patient care coordination. Interdisciplinary teams are formed within the framework of PHC to identify people at risk, the individual needs of the patients are then assessed. Consequently, individual patient care plans are developed and their coordination is implemented along with the regular review, monitoring and adjustment of these plans [18]. Interdisciplinary care is associated with a 70% reduction in amputations among diabetic patients [19]. Interdisciplinary teams, usually understood as cooperation between doctors, medical assistants and nurses, require an increase in the number of employees. A higher number of employed nurses translates into better patient outcomes, especially among patients with COPD, diabetes, ischemic heart disease and arterial hypertension [20].

The NHS Long-Term Plan in the United Kingdom (2019) is supposed to create a fully-integrated community-based health care system within the framework of which doctors cooperate with community centres and retail pharmacies. The changes are aimed at better satisfaction of the needs of patients with chronic diseases, especially those with comorbidities, as well as solving the problem of staff shortage and cost control [21].

The Netherlands. In the Netherlands, 90% of all healthcare services are provided in primary care, using only 4% of the total health budget [22]. For a long time, a central role was played by the primary care physician whose referrals enabled the patients to benefit from hospital and specialist care. GPs provided a very wide range of services, and besides diagnosis and treatment, they performed minor medical procedures, such as removal of warts or insertion of an IUD. In the 1990s, some of the tasks of primary care physicians were delegated to other professions, mainly nurses [23]. In 2001, the role of medical assistants was formalized, and their duties have evolved from performing administrative and organizational tasks to medical and technical tasks (e.g. suture removal, blood pressure and glycaemic measurements), and patient education [24]. In 2006, patients gained free access to physiotherapist services, and then to rehabilitator's services. In 2007, the role of a mental care practice nurse was introduced into the PHC [23]. As a result of all changes mentioned above, the primary care physician ceased to be the only guardian of the secondary health care, and health care as a whole became integrated.

Integrated care in The Netherlands focuses on two main groups: 1) patients with chronic diseases, and 2) elderly people prone to fractures. Health care for patients with chronic diseases is organized according to disease entities and there are national procedures and rules for organizing this care. Funding is provided through package payments [23]. The introduction of coordinated care in the treatment of chronic diseases has improved the quality of care [25]. The National Elderly Care Programme was created to help elderly patients, especially those prone to fractures, and it was intended to enable experimenting with providing care by regional groups. Between 2008 and 2016, as many as 125 innovative approaches to health care were implemented [23].

The search for solutions best suited to the organizational structure of a medical facility is unfortunately associated with the lack of detailed guidelines and, consequently, the discrepancy between the perception of the representatives

of particular professions as members of the primary health care team and their actual activities [10].

CONCLUSIONS

As early as 1992, coordinated care was identified by Barbara Starfield as one of the four pillars of primary care, along with first contact accessibility, continuity and comprehensiveness [26]. Health care organization in interdisciplinary teams is clearly associated with an increase in the quality of care, better patient treatment outcomes and more efficient organization. Countries including the United Kingdom and The Netherlands are examples of the effective implementation of coordinated primary health care. The introduction of coordinated care in Poland is associated with clear benefits for patients, which can be observed on the example of the successful KOS-Zawał programme (kompleksowa opieka po zawale mięśnia sercowego – comprehensive care after myocardial infarction) which reported a decrease in mortality, shorter waiting time for cardiological rehabilitation, and an increase in patient satisfaction with cardiac care [27].

The introduction of the role of coordinator in Rapid Oncology Therapy turned out to be a measure for relieving the already existing medical professions from administrative and information work, and had little impact on teamwork. An analysis of foreign experiences shows that coordinated care should involve interdisciplinary cooperation, and the coordinator is a role, not a specific person. Coordination takes place through communication, which in turn is shaped by relationships. Improvement of the functioning of teams is ensured by frequent and appropriate communication, problem solving, common goals, knowledge sharing and mutual respect. Improvement of the cooperation between all team members can take place through meetings when the team members have time to get to know each other and discuss their roles, responsibilities and expectations, and introduce systems for information transfer (e.g. IT systems, through trainings and workshops for team members, and through clearly defined roles and workflows (awareness of tasks performed by other team members) [28–30]. These factors, therefore, and not the introduction of a treatment coordinator, have a real impact on the quality of care. It is necessary to determine optimal ways of building teams in health care, preferably using pilot programmes that allow for a more precise refinement of team working patterns.

In order to make full use the potential of the role of the cancer treatment coordinator, it is necessary to provide them with greater opportunities to cooperate with the patient, rather than independently, delegate administrative tasks and activities related to Diagnostic and Oncological Treatment Card (DiLO).

REFERENCES

1. Simon M, Choudhry NK, Frankfort J, et al. Exploring Attributes of High-Value Primary Care. *Ann Fam Med.* 2017; 15(6): 529–34. doi: 10.1370/afm.2153
2. Bodenheimer T, Ghorob A, Willard-Grace R, et al. The 10 building blocks of high-performing primary care. *Ann Fam Med.* 2014; 12(2): 166–71. doi: 10.1370/afm.1616
3. Baxter S, Johnson M, Chambers D, et al. The effects of integrated care: a systematic review of UK and international evidence. *BMC Health Serv Res.* 2018; 18(1): 350. doi: 10.1186/s12913-018-3161-3

4. Forum NQ. NQF-Endorsed Definition and Framework for Measuring Care Coordination 2006; <https://www.tnaap.org/documents/nqf-definition-and-framework-for-measuring-care-co.pdf>. (access: 16.02.2020)
5. Minister Zdrowia. Rozporządzeniu ministra zdrowia z dnia 20 października 2014 r. zmieniającym rozporządzenie w sprawie świadczeń gwarantowanych z zakresu leczenia szpitalnego (Dz.U. 2014 poz. 1441). 2014.
6. Szybka Terapia Onkologiczna. Koordynator. PakietOnkologiczny.gov.pl; <https://pacjent.gov.pl/system-opieki-zdrowotnej/pakiet-onkologiczny> (access: 15.02.2020)
7. Minister Zdrowia. § 4. Rozporządzenie Ministra Zdrowia z dnia 24 maja 2019 r. zmieniające rozporządzenie w sprawie świadczeń gwarantowanych z zakresu leczenia szpitalnego (DzU 2019 poz. 1062). 2019.
8. Art. 11. Minister Zdrowia. Ustawa z dnia 27 października 2017 r. o podstawowej opiece zdrowotnej (DzU 2017 poz. 2217). 2017.
9. Art. 14. Minister Zdrowia. Ustawa z dnia 27 października 2017 r. o podstawowej opiece zdrowotnej (DzU 2017 poz. 2217). 2017.
10. Art. 14. Minister Zdrowia. Ustawa z dnia 27 października 2017 r. o podstawowej opiece zdrowotnej (DzU 2017 poz. 2217). 2017.
11. Freund T, Everett C, Griffiths P, et al. Skill mix, roles and remuneration in the primary care workforce: Who are the healthcare professionals in the primary care teams across the world? *Int J Nurs Stud.* 2015;52(3):727–43. DOI: 10.1016/j.ijnurstu.2014.11.014
12. Doekhie KD, Buljac-Samardzic M, Strating MMH, et al. Who is on the primary care team? Professionals' perceptions of the conceptualization of teams and the underlying factors: a mixed-methods study. *BMC Fam Pract.* 2017; 18(1): 111. doi: 10.1186/s12875-017-0685-2
13. Jaruseviciene L, Liseckiene I, Valius L, et al. Teamwork in primary care: perspectives of general practitioners and community nurses in Lithuania. *BMC Fam Pract.* 2013; 14(1): 118. doi: 10.1186/1471-2296-14-118
14. Edwards ST, Rubenstein LV, Meredith LS, et al. Who is responsible for what tasks within primary care: Perceived task allocation among primary care providers and interdisciplinary team members. *Healthc (Amst).* 2015; 3(3): 142–149. doi: 10.1016/j.hjdsi.2015.05.002
15. Parker S, Fuller J. Are nurses well placed as care co-ordinators in primary care and what is needed to develop their role: a rapid review? *Health Soc Care Community.* 2016; 24(2): 113–22. doi: 10.1111/hsc.12194
16. Kita A. Założone i rzeczywiste funkcje koordynatora leczenia onkologicznego w polskim systemie ochrony zdrowia. *Psychoonkologia.* 2018; 22(3): 107–12.
17. Fundacja Onkologia 2025. Koordynatorzy. Kim są i jaką funkcję pełnią koordynatorzy pacjenta onkologicznego? Wyniki badania ankietowego. 2020. <http://onkologia2025.pl/userfiles/321321321/onkologia/nowy%20folder/Koordynatorzy%20WYNIKI%20BADANIA%202020.pdf> (access: 16.02.2020)
18. Belbin M. Twoja rola w zespole. Gdańskie Wydawnictwo Psychologiczne; 2008.
19. OECD/European Observatory on Health Systems and Policies. United Kingdom: Country Health Profile 2019, State of Health in the EU. OECD Publishing, 2019.
20. Stokes J, Checkland K, Kristensen SR. Integrated care: theory to practice. *J Health Serv Res Policy.* 2016; 21(4): 282–285. doi: 10.1177/1355819616660581
21. Krishnan S, Nash F, Baker N, et al. Reduction in diabetic amputations over 11 years in a defined UK population: benefits of multidisciplinary team work and continuous prospective audit. *Diabetes care.* 2008; 31(1): 99–101. doi: 10.2337/dc07-1178
22. Griffiths P, Murrells T, Maben J, Jones S, Ashworth M. Nurse staffing and quality of care in UK general practice: cross-sectional study using routinely collected data. *Br J Gen Pract.* 2010; 60(570): e36–e48. doi: 10.3399/bjgp10X482086
23. National Health Service England. The NHS Long Term Plan. 2019. <https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/> (access: 16.02.2020)
24. Wiegers T, Hopman P, Kringos D, et al. NIVEL Overzichtstudies: de eerste lijn. 2011. <https://www.nivel.nl/sites/default/files/bestanden/Rapport-overzichtsstudie-eerste%20lijn.pdf> (access: 16.02.2020)
25. Kroneman M, Boerma W, et al. Netherlands: Health System Review. *Health Syst Transit.* 2016; 18(2): 1–240.
26. Engels Y, Mookink H, Van den Hombergh P, et al. Het aantal taken van de praktijkassistente in de huisartsenpraktijk is toegenomen. *Huisarts Wet.* 2004; 47(7): 325–330.
27. Cramm JM, Nieboer AP. In the Netherlands, rich interaction among professionals conducting disease management led to better chronic care. *Health Aff (Millwood).* 2012; 31(11): 2493–500. doi: 10.1377/hlthaff.2011.1304
28. Starfield B. Primary care: concept, evaluation, and policy. Oxford University Press; 1992.
29. Kurzyńska E. Efekty programu KOS-zawał: co wiemy po dwóch latach?. *Puls Medycyny;* 2019. <https://pulsmedycyny.pl/efekty-programu-kos-zawal-co-wiemy-po-dwoch-latach-971821>. (access 16.02.2020)
30. Gittel JH. Transforming relationships for high performance: The power of relational coordination: Stanford University Press; 2016.
31. Sargeant J, Loney E, Murphy G. Effective interprofessional teams: „contact is not enough” to build a team. *J Contin Educ Health Prof.* 2008; 28(4): 228–234. doi: 10.1002/chp.189
32. Ghorob A, Bodenheimer T. Building teams in primary care: A practical guide. *Fam Syst Health.* 2015; 33(3): 182–192. doi: 10.1037/fsh0000120