

## PERFORMANCE MANAGEMENT SYSTEM FOR PRIMARY HEALTHCARE SERVICES PROVIDERS

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**Purpose:** The purpose of this paper is to identify critical areas of primary healthcare services providers and to develop a performance management framework for these organizations.

**Design/methodology/approach:** Firstly, 12 semi-structured interviews with decision makers experienced with management of primary healthcare services providers are being conducted. Next, based on obtained results, holistic conclusions and the performance management system for primary healthcare services providers are being provided.

**Findings:** Performance management of primary healthcare services providers is highly reliant on significant stakeholders, namely: patients, medical doctors, nurses and midwives, stockholders and National Healthcare Fund. Failure to include any of stated stakeholders would result in considerable underperformance. The proposed framework postulates to focus on the performance management of the following 3 areas: (1) operations management, (2) risk and compliance and (3) development so that stated stakeholders are satisfied and provide, in exchange, their contribution to the organization.

**Research limitations/implications:** The scope of this paper has been limited only to small and medium sized clinics located in Poland.

**Practical implications:** Proposed in this study performance management framework, due to its simplicity, should be a useful tool for practitioners to adapt and apply in their organizations.

**Originality/value:** The first performance management framework for primary healthcare services providers in Poland is being proposed. Since, the proposed framework acknowledges wider society, the developed concept should provide sustainable solutions for organizations willing to implement it.

**Keywords:** Primary healthcare, performance management, performance management systems, SME.

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

## 1. Introduction

The role of a primary health care is increasingly growing. Countries with developed primary health care enjoy lower health care expenditure, fewer hospital admissions and overall better outcomes of patients treatments (Starfield et al., 2005; Bresick et al., 2019). The key objectives of primary health care are: (1) improvement of the patient care, (2) improvement of the population health and (3) reduction of the per-capita cost of healthcare (Haj-Ali and Hutchison, 2017, p. 70). The achievement of aforementioned objectives is not an easy task, as healthcare service providers must: meet the needs of senescent society, overcome significant shortages of medical doctors and nurses, perform within limited funds and follow the changes in IT and telemedicine, (Haczyński et al., 2017; Borkowska, 2018; Haczyński and Buraczyńska, 2018; Korczak and Karlińska, 2018; Kwiatkowska and Skórzewska-Amberg, 2019). In order to approach aforementioned challenges primary healthcare services providers could implement and use performance management systems (PMS), which have already proved to be very successful in other industries and are considered to improve the performance quickly and significantly (Chau, 2008; Cocca and Alberti, 2010; Robson, 2005). PMS are defined as dynamic and balanced systems, aimed to support the decision-making processes by gathering and evaluating relevant information (Korneta, 2018; Taticchi et al. 2010). The implementation and further using of PMS is not a straightforward task. The organizations willing to implement such system should be prepared to meet and overcome considerable difficulties relating to technical or people related issues (Korneta, 2019). It should be noted that it is widely acknowledged that PMS should be designed for specific organizations with particular attention being paid to their individual strategies (Wouters and Sportel, 2005; Amaratunga et al., 2001; Leandri, 2001). Since, successful PMS cannot be generic but designed for specific organization, the objective of this article is to identify critical areas on which, primary healthcare services providers should focus while designing such systems and to develop a practical framework for primary healthcare services providers. In this paper, it was assumed the number of significant areas of performance measurement should be considerably reduced, so that the proposed concept is practical and straightforward to implement by primary Healthcare services providers (PHSP). The scope of this paper has been limited only to small and medium sized companies, as these companies, conversely to larger ones possess less resources and frequently less experienced management, hence require more attention from scholars. The choice of PHSP in Poland stems from the fact, that to the best knowledge of author, no PMS has already been published for contemplated industry in Poland. Additionally, it should be noted that primary healthcare is subject to many local legal regulations, specific for different countries. Hence the framework suitable for one country might require adjustments to be suitable for another one.

The rest of this paper is organized as follows: in Section 2 a literature review regarding key aspects of performance measurement and management and its recent developments for healthcare industry are being provided. In Section 3 methodological approach, based on 12 semi-structured interviews conducted with industry decision makers, is being described. In Section 4 results obtain from the empirical part are being provided. In section 5 The concept of performance management system for primary healthcare services providers followed by the discussion are being disclosed. The paper ends with discussion, conclusions, managerial implications, limitations of the study and indications for further research.

## 2. Theoretical background

Performance management has become considerably popular among scholars and practitioners since early 1990s. That popularity was primarily driven by several successful performance management frameworks, which were published at that time. Among these concepts considerably popular were: balanced scorecard (Kaplan and Norton, 1992, pp. 71-79), Sink and Tuttle model (Tangen, 2004, pp. 726-737), performance pyramid (Cross and Lynch, 1988; McNair et al., 1990), Malcolm Baldrige model (Garvin, 1991) and others. Although aforementioned frameworks contributed highly to operations improvement, they were significantly criticised, mostly because they were not properly linked to strategy (Atkinson et al., 1997) and because they ignored significant stakeholders (Nita, 2016). Criticism relating to ignorance of significant stakeholders was were quickly addressed by Neely, who published performance management framework which was utterly focused on various stakeholders – performance prism. This concept begins with identification of significant stakeholders to organization, next aims to address their needs and contribution through proper organization of strategies, processes and possessing adequate capabilities (Neely et al., 2001). Since this concept is profoundly based on stakeholders, performance prism is supposed to be superior to other performance management models at organizations with numerous and powerful stakeholders. Pursuant to Neely et al. other researches begun to include stakeholders at performance management systems. Among modern performance management systems, which include stakeholders, are: Kanji's Business Scorecard (Kanji and Moura, 2002, pp. 21-23), Holistic performance management framework (Andersen et al., 2006), Total Performance Scorecard (Rampersad, 2004) or Flexible strategy game card (Sushil, 2010).

As for performance management systems for healthcare industry, significant work has already been done for hospitals. Weiner et al. (2006) developed hospital-level quality indicators, Curtright et al. (2000) proposed performance measurement system aimed to support the strategy of clinic, Lilford and Pronovost (2010) studied the relationship between mortality rates and the performance of a hospital, Tyagi and Singh (2019) proposed a multi-criteria

decision-making approach for performance management of hospitals, Shiva and Vish (2019) proposed performance measurement system for hospitals.

Considerably less research has already been done relating to performance management at PHSP, with many scholars claiming, yet a lot to be done in this area (Bresick et al. 2019). Rogan and Boaden (2017) postulate the use of principal-agent theory as to understand the relationships underling for performance management in PHSP. Bresick et al. (2019) measured performance of South African primary healthcare providers, from patients and managers perspective. The study used descriptive surveys and concerned mostly quality and operations aspects like accessibility, coordination of information, comprehensiveness and others. Silava and Ferreira (2010) studied performance management systems of public PHSP in Portugal and found these systems are poorly designed, lacked consistence and coherence, which confirms further studies are required.

The study on the perception of the quality attributes in primary health care industry was undertaken by Chmiel M. (2019) , who found that quality plays a predominant role. She also noted the increasing role of functional quality relating to courtesy, politeness, punctuality and other attributes as easier noted by patients than the technical quality based firmly on medical knowledge.

Considerable literature of performance management for primary healthcare is focused on a system level. The most frequently measured areas are: access and timelines, including regular access to PHSP, but also access to after-hours and none face-to-face care and home visits for target populations; integration, understood as information sharing between other health care service providers; efficiency; effectiveness; patient-centeredness; safety; appropriateness of resources and equity (Kates et al. 2012; Haj-Ali and Hutchison, 2017). Noticeably less papers are focused on performance management of PHSP on an entity level.

### **3. Methodological approach**

Given very little attention paid by scholars to performance management of primary healthcare services provides, and because, to the best knowledge of the author, no research has been undertaken in this area in Poland an exploratory, qualitative approach was employed in this study. Qualitative approach is relevant for this study as it allows to focus in depth on issues important to the researcher, is pragmatic, interpretive, and grounded in the experiences of people (Marshal and Rossman, 2011, Lincoln and Guba, 1985).

### 3.1. Design

This study employs 12 interviews with industry experts possessing significant experience with management of primary healthcare clinics. Structured interviews have not been employed in this paper, as they leave very little room for flexibility and because they are more suitable for larger samples (Fontana and Frey, 1998; Sandy and Dumay, 2011), than the one selected for this study. Unstructured-interviews have not employed either, as to avoid the risk of changing the interviews into informal chats or conversations. Therefore, a semi-structured interviews have been selected for this study, aimed to direct the discussion toward the areas the study should explore, acknowledging however, the key objective of the interview is to access the interviewee perspective. Semi-structured interviews allow, therefore the interviewer to modify the pace, its style, and ordering of questions as to obtain the fullest responses from the interviewee.

The interviews were continued until the information become saturated, defined as no or little new information were obtained in the following interviews (Hennink et al. 2017, Bowen, 2008). The saturation for this study was achieved after 8 interviews.

### 3.2. Participants

The interviews were carried out with decision makers from primary healthcare services providers industry. The inclusion criteria for the interview comprised at least 5-years of experience on managerial position in a PHSP, which provides services to more than 4 thousand patients and which employs at least 3 general practitioners, of which at least 2 are full-time employed at the clinic. Additionally, representatives from the largest national chains of PHSH has not been invited, since they differ greatly from small and medium size clinics. Table 1, provides a summary of interviewees for this study.

**Table 1.**

*An outlay of interviewees*

Position	Location	Description	Managerial experience in the industry
Owner*	Warsaw	A graduate of Warsaw School of Economic, son of a medical doctor. He runs the company in a legal form of sole proprietorship, providing primary healthcare services to around 9 thousand patients. Additionally, his outpatient clinic provides other medical services, both financed by NFZ (National Health Fund) and paid by patients.	25 years
Manager*	Warsaw	She runs an outpatient clinic with primary healthcare (4,5 thousand of patients). PHSP also provides additional services to patients, mostly medical specialties, which however remain secondary to the clinic.	18 years

Cont. table 1.

Manager	Radom	This is her third employment in healthcare industry. Since 5 years she has been a general manager for small limited liability company a PHSP, whose owner operates in restaurant business, appointing her to be fully responsible for the medical business. The company provides services to around 4 thousand patients, which contributes to around half of the company sales revenues. The remaining half of revenues come from medical doctors with specialities.	12 years
Owner	Kielce	A son of medical doctors, who graduated from 2 faculties: management and IT. He run the business as a civil company together with his brother who is a medical doctor, providing medical services within the company. The company provides primary healthcare services to around 5,5 thousand patients. The clinic recognize also considerable revenues from medical specialities.	20 years
Manager*	Warsaw	A graduate of administration. He runs a state owned primary healthcare clinic, providing services to around 8 thousand patients. Additionally the clinic provides, financed by NFZ, the following services: dermatology, laryngology, cardiology, neurology and several minor ones.	23 years
Owner*	Michałowice	She, together with her son runs a major regional primary healthcare clinic in a suburbs of Warsaw for around 5 thousand patients. Additional services comprise gynecology, cardiology and rehabilitation.	20 years
Manager*	Warsaw	He is responsible for the management of 1 major primary healthcare clinic providing services to approximately 7 thousand patients. The clinic is a part of a chain of 7 other clinics, focused primarily in primary healthcare services. Formerly he was a manager at retirement house.	8 years
Manager*	Piaseczno	She has been a manager at PHSP for 6 years, following her promotion from reception of the clinic. The clinic provides services to 8 thousand patients and is one of the most well recognized in Piaseczno. Around 40% of clinic revenues are from rehabilitation services.	6 years
Owner	Grójec	A general practitioner (GP), who following completion of his GP specialty opened a clinic from where he comes from. The clinic provides services to 8,5 thousand patients, employs on a full time 2 others GP and 3 more on an hourly basis. Revenues from other medical specialties are considerably smaller and are fully financed by NFZ (the government).	12 years
Owner*	Warsaw	A general practitioner, former employee of the clinic (since 2004), who together with his wife (a dentist) purchased a clinic 7 years ago. The clinic provides primary healthcare services to around 6 thousand patients. The clinic operates also in dentistry industry.	7 years
Owner	Radom	Former head of orthopaedic surgery ward in the hospital, who quit provision of surgery services and set up 5 years ago his own business based primarily on primary healthcare, orthopaedic, rehabilitation and aesthetics medicine services.	28/5 years
Owner	Kielce	A GP who runs the clinic together with his 2 colleagues other GP's. The company provides primary healthcare services to around 7 thousand patients. Other revenues are insignificant and account for less than 15% of the clinic revenues.	17 ears

### 3.3. Conducting interviews

The 12 semi-structured interviews were carried out in a period between 7 October 2019 and 10 January 2020 in a PHSP premises. Before the interviews, the respondents were informed in advance, by the phone, the subject of the interview session, so they could prepare better and improve the quality of obtained results. In each of conducted semi-structured interviews the following 4 issues were discussed:

1. Primary healthcare services market description.
2. Strategy and goals of PHSP.
3. PHSP experience with performance management systems.
4. Critical factors for the performance of PHSP.

Many issues mentioned by the interviewees, if recognized relevant to the study, were immediately followed up with the questions, such as: “could you please comment more on...”, resulting frequently in the obligation to go back to the initial question later. The duration of the first three interviews were over 2 hours, while the following ones reduced to almost an hour.

## 4. Results

### 4.1. Primary healthcare services market description

In due course of conducted interviews, the following information, regarding considered market, were obtained:

- Sales revenue from PHS have been growing several percent per year. This growth, however is primarily price driven, i.e. NFZ (National Health Fund) 3 times per year increases the fees paid to PHSP, whereas the number of patients is stable.
- Sales margins, calculated as sales revenues less all medical variable costs, as a percentage of sales, ranged between 25% to 50%. These costs include: the salaries of medical doctors and nurses, outsourced examinations like roentgen or blood test and medical materials.
- Start-ups of PHSP in recent years has largely been unsuccessful. PHSP established 10 or more years ago operate well and poses firm positions in the market. Large private chains like Medicover, LuxMed (Bupa Group) or PZU Medycyna, although entered PHSP market poses only an insignificant market share and, at the moment, and are not considered as significant competition.
- There is a great shortage of medical doctors and nurses on Polish market. PHSP experience difficulties with hiring new medical staff.
- The fast development of IT is noticeable. Despite, many PHSP in Poland are small, one location clinics, with limited funds available to be invested in IT, it become no longer

possible to run PHSP without sound IT support. On the one hand it refers to fulfilment of the duties imposed by the NFZ, like electronic receipts, or electronic reporting to NFZ, but on the other, the more patients expect to book a GP (general practitioner) visit online, or to see their results on-line. This shift in patients behaviour is especially noticeable in younger and middle aged patients generations.

- Telemedicine is also very quickly developing. The interviewees stated that for the moment large chains of healthcare service providers are not considered as competition to PHSP, primarily because the patients expect these services to be provided nearby their locations. However, if larger competitors continue with telemedicine development and introduce it to primary healthcare, local PHSP might very quickly lose its proximity advantage and begun to lose their clients to larger competitors who can provide services more quickly and with lower variable costs, on-line.
- The political environment is volatile and unstable. The interviewees recon the risk related to the fact, that the sales revenues from PHS are primarily obtained from only one client – NFZ, and that if an unfavourable law is passed the PHS market might change drastically.

#### **4.2. Strategy and goals of primary healthcare services providers**

The goals of the first group of PHSP were focused around the health of the patients: quick provision of primary healthcare services to as much patients as possible, provision of high quality services within primary care, provision of more complex primary healthcare services in cooperation with other specialist clinics. One of the interviewed owners of the clinic highlighted:

*I repeat, on a regular basis, to all my employees including mostly none-medical ones, that our mission is “we treat the patient”. Once, it is acknowledge by the whole organization, the satisfaction, growth while the profits just follow.*

The second group of interviewees referred to financial results, like the growth of revenues or profits. The final group of interviewees considered sustainability of PHSP as its primary goal. One of the clinic owners stated:

*Overall what is important to me, are not profits, which are OK, but the ability of the clinic to be operating in a long run, as it provides primary funds to me and my family. This requires a lot of compromises to medical doctors and nurses, without whom we wouldn't exist.*

The strategy of PHSP is mostly un-formal, unstructured and not written. None of the interviewees named any indicator aimed to measure the steps towards PHSP goals achievement, nor the efficiency of the strategy.



### 4.3. Interviewees experience with performance management systems

In due course of interviews, the following findings were obtained:

- None of the interviewees works with formal performance management system.
- All of the interviewees measure basic financial quantities, like sales, net profitability or indebtedness, sales of auxiliary services, the value assets.
- The interviewees indicated to measure the following non-financial performance indicators for PHSP: number of general practitioners (GP), number of nurses, number of patients per GP, GP working hours, number of patients complaints, number of new patients per month, number of lost patients per month.
- The interviewees pay very limited attention to quality measurement. Despite 4 of the interviewees confirmed to be working with ISO quality standards, they do not analyse on a weekly or monthly basis, quality ratios, only paying some attention to them during ISO audits. Patients waiting time for a visit, although considered as critical, was not formally measured. However, despite that, the interviewees had a general understanding, that majority of patients are admitted to GP within 24 hours, with some patients in some periods waiting even up to 3 days, especially in case of paediatric patients.
- The measurement of long term goals achievement is ignored, although the interviewees have some awareness of actions aimed at a long term.

### 4.4. Critical factors for PHSP performance

In due course of interweaves the following critical areas for performance of PHSP were identified:

- Relationships with patients – the patients receive free of charge services from PHSP financed by NFZ, who pays to PHSP a fixed fee per patient per month. The fee is not linked to the quality, nor to the number of visits. If the patients are not satisfied with PHSP they can turn to another PHSP, hence their satisfaction is of utmost importance. During the study, waiting time and availability of services emerged as a critical driver of patients satisfaction. The interviewees postulated, waiting time in primary healthcare is superior to medical quality of services. This is primarily because majority of patients require basic but immediate treatments for acute diseases like colds, they need sickness leaves to their jobs, or receipts for medicines. This is just the opposite to specialized medical services, where patients are overall interested in the best possible treatment to their more complicated diseases, ignoring waiting time of several days and accepting waiting time up to even several weeks. One of the interviewees stated: *In my clinic the patients prefer to receive the service immediately, even though provided by not yet specialized doctors, than to wait 2 or 3 days for a professor of medicine. Waiting times is what my patients are primarily interested in.*

Next, the interviewees noted that patients are usually not able to evaluate medical skills of doctors, but very easily they can evaluate their courtesy, culture, punctuality, empathy and abilities to listen and to understand the patient. One of the interviewees raised an example, that in his clinic young medical doctors, due to more enthusiasm and courtesy, however yet without specialties attract more patients, than older doctors with considerably greater experience and approved specialties, but with lower enthusiasm. Satisfied patients, on the one hand stay loyal to PHSP and on the another are eager to buy additional services, vaccinations and so on.

- Relationships with medical doctors and nurses. Given, a great shortage of medical doctors and nurses on the market, these groups of employees can very quickly turn to competitors, if they are not satisfied with PHSP or receive better working conditions from them. One of the clinic owners stated: *the biggest barrier in my business development is the constant lack of experienced medical doctors. Since there are no problems with hiring graduates of medicine, I try to keep the balance between young and mature doctors, asking the latter ones to support their young colleagues.* Additionally, medical doctors and nurses work in the front line of PHSP, hence, their courtesy, politeness and professionalism contribute directly to better patient satisfaction, while their recommendations can support sales of additional services. As a result, it is critical to, on the one hand keep them satisfied and on the another to expect their full contribution.
- Risk management and compliance, mostly with National Health Fund (NFZ) laws. The agreements between PHSP and NFZ requires many details, to be met, which are unfavourable to PSHP. The interviewees provided, inter alia, the following noncompliance examples, from which PHSP can benefit in a short term: (1) provision of services by medical doctors without specialty, although reporting to NFZ the services are being provided by the doctors with specialty; (2) not keeping the location open in certain unfavourable hours, against the agreement, when only few patients arrive; (3) limitation of extra examinations, although medically required, which costs cannot be additionally reimbursed on NFZ (all in fixed fee rule); (4) nurses without required by laws certificates (courses) providing vaccinations to patients; Although stated examples of noncompliance would significantly reduce operating costs, they are not allowed under the contract with NFZ. The loss of a contract or penalties for not proper agreement execution might result in loss of going concern of PHSP. One of the clinic owners stated: *it is very easy to improve quickly the profitability of the clinic ignoring contractual liabilities to NFZ. However, than it is only a matter of time, when NFZ notice, which might led to breaking of the contract.* PSHP might be also tempted by other risky or unlawful actions like: (5) mixing medical with office garbage as to reduce costs; (6) risky savings on hygienic and antiseptic materials and others, which again, would improve profits in short term, but in a long one result in too much risk on PHSP.

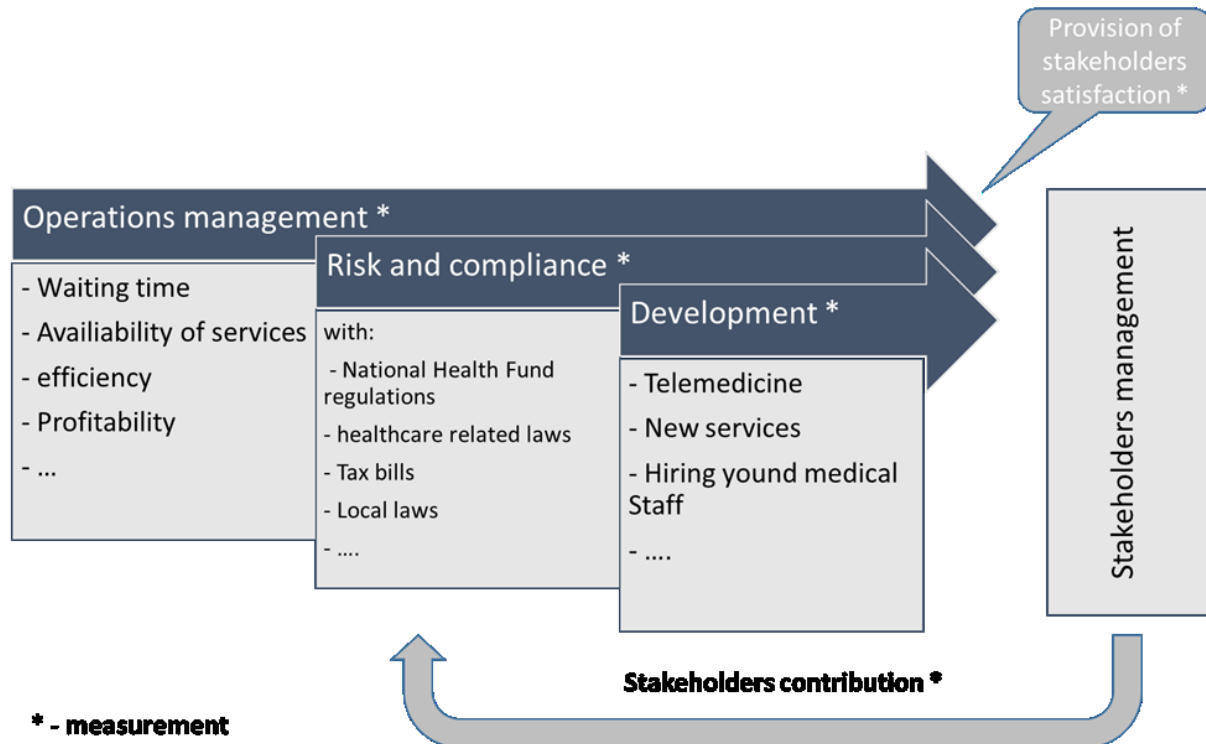
- Operations management. PHSP receive the most significant part of its remuneration per patient per month. This remuneration is not linked to number of services, quality of medical doctors, value of outsourced examinations, which must be financed by PHSP. Lack of direct connection between costs and salaries triggers the need to manage the processes properly. Operations can be managed and improved in every level of PHSP operations, including the followings: (1) matching doctors working hours with the needs of patients, (2) deciding on the right mix of specialists (paediatricians, family doctors, internal medicine doctors, with or without specialty), (3) arranging logistics of medical examinations, (4) outsourcing or keeping inside the house head office services (bookkeeping, helpdesk, payroll), (5) management of patients admissions (6) and home visits if necessary; (7) deciding on medical approach towards treatment of patients (frequency of examinations, recommendation of vaccinations) Ensuring efficiency and effectiveness, although highly important is not a straight forward task for PHSP.
- Sales of additional services – despite PHSP are fully financed by NFZ, all of the interviewees provide additional not free of charge services to their patients. These services comprise: vaccinations, consultation with specialists, extra examinations and others. One of the interviewees combines successfully PHS with stomatology. Such additional services, provide extra surplus and improve the overall profitability of the clinic.
- Finally, the interviewees stated long-term initiatives, although receive very little attention should not be ignored. Among the options discussed were: (1) development of telemedicine; (2) investment in IT systems; (3) acquisition of medical graduates; (4) training of medical doctors and nurses; (5) looking for and entering into alliances with either other PSHP or specialist clinics.

## **5. The concept of performance management system for primary healthcare service providers. Discussion**

As identified at the beginning of the study the experience of industry representatives with performance measurement and management systems is very limited. This is primarily because, PHSP are mostly small clinics, run frequently by medical doctors, who are focused on medicine and lack solid management background. This particular finding, confirms the result of this study might be interesting to decision makers and so have practical implications.

In the beginning of the study, it was assumed, that identified critical areas for performance measurement and management should be only several, so that the proposed concept is practical and straight forward to implement by the primary healthcare clinics. In due course of undertaken research the following areas have been identified as critical for successful

performance management of PHSP: (1) stakeholders relationship management; (2) operations management; (3) risk and compliance and (4) development. The interactions between these 4 areas can be well fitted with the concept rooted in stakeholders theory, and focused on 3 stated primary healthcare services areas, as disclosed in Figure 1.



**Figure 1.** Performance management system for primary healthcare services providers.

As presented in Figure 1, PHSP receive contribution from stakeholders, in exchange for satisfaction, which they are obligated to deliver them in exchange. The aforementioned model proposes to provide satisfaction to stakeholders through (1) adequate operations management, (2) compliance with binding laws and regulations and (3) taking care of development activities. This concept echoes performance prism, proposed by Neely et al. (2001), with adjustments aimed to reflect the specific primary healthcare industry.

### 5.1. Stakeholders relationship management

The results obtained in this study indicate the adequate relationship management with stakeholders is an important determinant for successful performance management of PHSP. During the interviews 4 significant stakeholders have been identified: (1) medical doctors, (2) auxiliary medical personnel, comprising nurses and midwives (3) patients and (4) the stockholders (the owners of clinics) whose satisfaction and contribution should be measured and next managed. Additionally, the fifth very significant stakeholder – the National Health Fund (NFZ) has been identified, whose satisfaction should be measured. However, since NFZ is a remote stakeholder, whose contribution cannot be managed, we propose to analyze it in the next (risk and compliance) section of our concept. The results obtained in interviews regarding shortages of medical doctors and auxiliary personnel are aligned to findings presented by other

researchers: Haczyński J., Buraczyńska M. and Borkowska I. Given the key role of these stakeholders at primary healthcare, the measurement of their satisfaction is critical for sustainability of PHSP. The satisfaction of these stakeholders can be measured, for instance, with personnel rotation ratios, satisfaction surveys, ratios comparing their salaries as compared to the market or to prior years, development possibilities, including trainings received, or possibilities of discussion with specialists and other benefits. Their contribution can be measured with technical quality ratios resulting from medical knowledge (number of doctors with specialties, scientific degrees, courses and others), functional quality quantities, obtained from surveys: courtesy, politeness, punctuality, empathy and others; availability ratios; flexibility; readiness to provide auxiliary services or to work in overtime.

The following group of significant stakeholders, whose satisfaction and contribution should be measured are the patients. The results of this study indicate patients are overall interested in waiting time and availability of services. Next, the patients are interested in the quality understood more in a functional than in a technical way. The measurement of quality for patients is the same as described above, once the contribution of doctors was discussed. The findings of this study endorse therefore what has already been postulated by Chmiel M. (2019). Contribution of the patients can be measured with various patients rotation ratios, including new patients, lost patients, rotation of patients, additional services bought by patients and others.

Stockholders are always significant to the company. In PHSP the stockholders are frequently key medical doctors in the clinic, combining both functions. Their satisfaction should be measured with financial ratios, which reflect the growth of the value of the clinic. The contribution of stockholders can be measure with dividends withdrawn, the time spent in clinic or others.

## **5.2. Risk and compliance**

Compliance area steams primarily from contracts with NFZ, which finances the vast majority of PHSP activities. NFZ pays PHSP a fixed monthly fee per patient, which is around 8 EUR, no matter how often a patient requires primary healthcare treatment. Stated fee, should also cover several basic treatments, like blood tests, USG or roentgen. As already indicated, NFZ is another significant stakeholder, however, conversely to others, we propose only to measure its satisfaction and not to measure its contribution. This is because the contribution of NFZ cannot be managed. As indicated in interviews, PHSP have many occasions and incentives not to comply with stated agreement, which is very detailed, and comprise many unfavorable points for PSHP. The none compliance comprise for instance not keeping the location open in agreed timeliness, or though providing services via medical doctors without specialties, although stated in the contract the opposite, and so on. NFZ is a government body which finance nearly all primary healthcare services in Poland. Although failure to comply with NFZ liabilities

might improve the profitability of a clinic in a short term, it puts a very high risk on the clinic. The none compliance with NFZ liabilities might result in a loss of a contract or significant penalties. Such loss practically means a loss of a going concern to PHSP, as practically, there are no other ways to obtain the funds for further operations.

The compliance should not be limited only to NFZ contracts. Provision of healthcare services is highly related to other considerable risks, which also should be decreased and managed. These risk might result from wrong medical treatment of patients, which might lose their health or lives, not paying enough attention to protection of PHSP employees (savings on antiseptics) and so on. Additionally to above, local laws, including tax ones should also be addressed properly.

### **5.3. Operations management**

The importance of managing performance in the area of operations, results primarily from the fact that PHSP are paid per patient and not per quality or a number of services provided. Additionally, under the agreement with NFZ, PHSP must provide services in constant hours, while the patients prefer to visit doctors in certain hours than the others. The managers, or the owners of PHSP must therefore manage the operations carefully, especially as their cost are high. Finding the proper balance between providing satisfactory services to patients and keeping costs under control, through employment of the right mix of specialists not only during the day but also through the whole year, as this business is subject to high seasonality, is a challenge.

### **5.4. Development**

Finally, PHSP should pay some attention to the performance management of future operations, undertaking initiatives aimed to benefit the companies in a long term. Although, for the moment PHSP are profitable organizations, with high sales margins, their future is not so obvious. Good profitability of PHSP results from niches they currently operate in. The most important factor for patients when they chose PHSP are: their proximity, availability of services and waiting times. Once the telemedicine develops, PHSP might lose the patients to larger competitors, who would provide primary healthcare services on-line, which are more quickly accessible than site visits. Although the answer to that challenge is not straightforward, PHSP should try approach this issue before is literally too late, and therefore should not ignore their development aimed to adjust them to changing environment.

## 6. Conclusions

The vast majority of primary healthcare services providers in Poland are small and medium sized clinics with limited performance management experience. We consider reduction of numerous challenges surrounding primary healthcare services providers to a 3 variables model, based on deep understanding of significant stakeholders, could become, due to its simplicity, a useful tool for decision makers. Stated 3 recommended areas for performance measurement and management namely are: (1) operations management, (2) risk and compliance and (3) development. Proposed concept is firmly rooted in a stakeholder theory and assumes 3 aforementioned areas should deliver satisfaction to the significant stakeholders, identified in empirical part of the study. These stakeholders are: patients, medical doctors, nurses and midwives, stockholders and the National Healthcare Fund. The concept assumes also measurement of significant stakeholders contribution. Given considerable shortages of medical doctors and auxiliary medical personnel, including nurses and midwives and their roles at the clinics, failure to address these stakeholders properly would result in considerable underperformance of the clinic. Their satisfaction can be measured with satisfaction surveys, salaries as compared to the market, development possibilities and rotations. Their contribution can be measured with quality ratios, both technical resulting from medical knowledge and functional comprising: courtesy, politeness and others; personnel availability ratios; flexibility; readiness to provide auxiliary services and others. Satisfaction of patients, is a prerequisite for their loyalty and sales of auxiliary services.

The first of identified critical areas for performance of primary healthcare services providers are operations, which if not managed properly can lead to many inefficiencies, not satisfaction of stakeholders and loss of profits. Operations are expensive (time of medical staff) and are not linked directly to sales revenues, which depend on the number of patients, not the number of services the patients receive. Such inconsistency puts a considerable risk on the clinics.

The second area that requires performance management is the risk management and compliance. This is due to the fact that primary healthcare is highly regulated by laws and agreements with National Healthcare Fund. Noncompliance with the latter can improve the profitability of primary healthcare services providers in a short term, triggers greater risk levels. This may eventually led to a loss of a contract or considerable penalties. Give National Healthcare Fund is the principal founder of primary healthcare services, loss of such a contract could result in a loss of going concern of the clinic. Risk management is also very important, which is due to the considerable threats resulting from the medical process itself and the environments in which the clinics operate.

Finally, primary healthcare services providers should also focus on development area. Despite, the clinics consider themselves to be operating in niche markets, resulting from their proximity to patients and availability of services, a proper attention should be paid to the future.

Quickly developing IT solution and telemedicine, can in a few years change the habits of patients and so change the structure of primary health care services market.

This paper has several limitations. Firstly, only primary healthcare service providers from Polish market has been studied. Secondly, the sample for this study has been reduced only to small outpatient clinics. This however, has been done deliberately. According to the author selected to the study companies require more attention from the researches, as are more numerous and poses less resources than larger companies. Also, because of the specific, for each country national laws relating to financing of primary health care, the scope of the study has been narrowed only to the Polish market. Because of these limitations, the results obtained in this study might not be suitable for wider generalizations.

Aforementioned limitations are a good direction for a further research. Additionally, in this study a great uncertainty about the future of Polish primary health care service providers has been identified. Stated uncertainty stems from IT changes in the environment, which combined with larger multinational companies healthcare companies development, which are already present in Poland, might reshape studied market in near future. Further study of potential market development could be very interesting from both scientific and decision makers point of view.

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