

Is Latvia Ready for The Value-Based Healthcare Era?

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ABSTRACT

The Value Based Health Care (VBHC) has recently become the leading conceptual approach to health care in the world, but no value-based healthcare programme has yet been established in Latvia. Despite the critical interest in implementing VBHC programmes on the part of the health sector stakeholders, the key persons in VBHC programmes are physicians. Goal of research: To clarify the views of physicians and young physicians on values-based health care fundamental principles and their vision for their further inclusion in Latvian health care. Method: The research uses data from a survey conducted among physicians and young physicians who practice at Pauls Stradins Clinical University Hospital (PSCUH). Conclusions: The survey results show that the application of VBHC principles will not contradict physicians' views on traditional management models in health care and their role in it. Proposals: However, before starting the introduction of VBHC programmes in Latvian health care, there are grounds for launching discussions on the benefits of VBHC compared to the traditional management model. Policy recommendations: For hospital management and health sector supervisors to avoid resistance of physicians to implementing VBHC, the strategy should focus not on VBHC re-source-efficient programmes but on patient-centred healthcare.

Keywords: VBHC, Value-oriented approach, Medical and economic efficiency, Healthcare

INTRODUCTION

According to the World Health Organisation (WHO) and OECD experts, 20-40% of their resources are used for complications that could be avoided, unnecessary treat-ment or administrative inefficiency (OECD, 2017). Hence, the value-based health care (VBHC) movement is becoming rapidly popular worldwide (Porter & Teisberg, 2006). Value-based health care (VBHC) is a new transformation system for health care as a response to increased healthcare costs and the widespread appeal to replace models of payment for services, which are considered to be overloaded and inefficient for healthcare services (World Health Organization, 2011; Miller, 2009). Is Latvia willing and able to adopt the latest innovations in healthcare management as a country with a small population and low state funding for health care? Despite the fact that VBHC key persons are patients, physicians are the ones who lead the VBHC process. By introducing VBHC principles, physicians will have to change their views of traditional healthcare management models

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and their role in these. To clarify the opinion of current and future physicians on a value-based healthcare concept and a vision for its inclusion in Latvian health care in the future, a survey has been conducted.

In other countries, even though VBHC programmes have been operational for sever-al years (Porter et al, 2019; Kaplan et al, 2012; Deerberg-Wittram & Lüdtke, 2016), understanding of the critical concepts of VBHC by physicians is still heterogeneous, thereby facilitating the opportunities of involving physicians in the discussion on VBHC is an essential element of a successful transformation into value-based healthcare (Makdisse et al, 2020). Different instruments and variations of VBHC tactics are applied in other countries to achieve strategic objectives. The role of governments, service providers, and private payers is different, similar to funding and payment schemes (Mjåset et al, 2020), which can significantly impact significantly the adoption of VBHC as a daily work model by physicians.

MOTIVATION FOR THE INTRODUCTION OF VBHC

Healthcare System in Latvia

In order to understand the special role of a physician in Latvian health care, the health system and financing will be described first. The National Health Service of Latvia (NHS) is based on the provision of mandatory health care funded under general taxation, which includes one buyer of services (NHS) and a set of a different state (state and local government) and private service providers – a service provider. NHS implements the national health policy, ensures access to health services across the country and is a single purchaser of state-funded health services. In 2017, total health spending was 6.3% of GDP, while per capita spending was USD 1 722. Despite covering almost all general health care, a basket of services is limited by regulatory enactments and, among other things, does not include dental care for adults and most rehabilitation and physiotherapy services. Moreover, co-payments are needed for several services. Out-of-pocket payments (OOP) reached 41.8% in 2017, which is one of the highest proportions in the EU and the OECD and is characterised as a defi-cient level of confidence in the healthcare system. In 2017, the number of physicians per 100 000 inhabitants in Latvia was only slightly below the EU 28 average, while the number of nurses in Latvia is one of the lowest in the EU 28. The current payment system features different payment methods to providers, but there is no link between payment and national policy objectives, between payment and clinical outcomes, and absence of differentiation of payment for different severity and acuity patients, etc. Latvia's payment mechanisms do not provide incentives for health service providers' efficiency and service quality. Various payment methods are used for the payment of other services groups. Currently, only the general practitioner services payment system has some quality payments elements (Behmane et al., 2019; Pētersone et al., 2019; World Health Organization, 2018; Semenyshena et al., 2019; Mykytiuk et al., 2020).

Pauls Stradins Clinical University Hospital

Pauls Stradins Clinical University Hospital (PSKUS) is a clinical medical research institution in Latvia with over 100 years of experience. PSKUS is a university hospital, a multi-profile hospital, providing secondary and tertiary health services to patients, participating in the implementation of Bachelor's, Master's, residency and doctoral programmes, carrying out scientific and research activities in the field of medical treatment and promoting the introduction of new treatment methods and medical technologies. The total number of their employees was an average 3310 in 2021.

In Europe, clinical university hospitals play a leading role in the initiation and intro-duction of VBHC, such as the European University Hospital Alliance (EUHA) (Nordic Innovation, 2021). PSKUS as the leading provider of health services and the science and knowledge transfer centre in Latvia, will have to be one of the first to pilot VBHC programmes.

METHODOLOGY

The research has used the survey data conducted among Latvian physicians who practice at Pauls Stradins Clinical University Hospital (PSKUS). The survey was ad-ministered online through the All Data platform, emailed and placed on the hospital's webpage in April 2021. The survey was allowed by the Clinical Research Ethics Committee of the Development Society of Paul Stradins Clinical University Hospital, Statement No 250321-7L. The survey was held at the time when the spread of COVID-19 was between 330.6 and 430.6 per 100 000 inhabitants, which could have had a significant impact on the number of respondents due to a substantial increase in the number of patients in the hospital (The Latvian Open data portal, 2021).

It has been assessed whether VBHC basic principles are acceptable as a traditional working model and whether the value-based health strategy could be the next step for healthcare reforms in Latvia. The first part of the survey has identified the character-istics of physicians' sociodemographic and professional status. There is a risk of ac-cepting or rejecting VBHC principles by physicians. Therefore, the second part of the survey has analysed the opinion of physicians on whether VBHC could be provision-ally viable in Latvia. The assessment has been performed in the perspective of the VBHC matrix dimensions – Condition, Recording, Comparing, Rewarding, Improving, Partnering (The European Institute of Innovation and Technology, 2020). The descriptive statistics and statistical tests have been used in the research to study differences between respondents and analysis of the multifactor logistic regression to identify the characteristics of physicians related to their views regarding the VBHC concept/model.

RESEARCH RESULTS

PSKUS treatment, training, clinical and scientific studies involve highly qualified and internationally recognised medical and academic staff. In 2021, out of an average of 900 physicians practising at PSKUS, an average of 241 were

young physicians (residents). Seventy-one physicians and young physicians have completed the survey, and the response rate is 7.9%.

Patient-reported outcome measures (PROMs) are longitudinally collected to measure effectiveness within clinical trials or for improving individual patients' health status by means of their reported functional, psychological and social outcomes (Van Der Wees et al, 2014; Pennucci et al, 2020). PROMs data are not collected in Latvia, only at the project level (Cabinet of Ministers of the Republic of Latvia, 2021). Collection of PROMs will be one of the biggest challenges in continuing healthcare reforms since information technologies in health care are highly fragmented. However, one of the biggest challenges is expected to convince physicians about the usefulness of these data to achieve better treatment outcomes (Porter, 2006). Therefore, only 42% of physicians have responded with yes and 20% almost yes to the survey question of whether patient polling on the effectiveness of treatment in specific patient groups can improve the treatment results.

Increasingly more healthcare providers started collecting data from Patient Reported Experience Measures (PREMs) (Slawomirski, et al, 2018; Pētersone et al, 2021). Latvian clinical university hospitals have started collecting PREMs data from the European Structural and Investment Funds project. Replying to whether patient surveys of their experience during treatment can help improve the treatment results, 51% of physicians have responded with yes and 20% almost yes. Relatively high rates are attributable to the fact that even though physicians are informed about such data, they do not see them while performing their direct duties.

Worldwide, service providers are increasingly under pressure to compare their performance with other service providers to demonstrate their value. Prejudices on the transparency of such data relate to fears that the results would be revealed that service providers would like to ignore. Therefore, when replying to the question whether comparing treatment results between physicians' teams/hospitals can help improve the results, only 39% of physicians have responded with yes, 24% almost yes, while 25% have no opinion on the matter. In the VBHC context, comparing the results means not 'blaming' health service providers for poor performance, but comparing and learning from best practices (The European University Hospital Alliance, 2021; Nordic Innovation, 2021).

In healthcare systems where the results of treatment are publicly available, it will affect healthcare providers towards high-quality care, i.e. patients will choose healthcare providers whose treatment results will be higher (Wohlin et al, 2017). In turn, it will determine the size and revenue of the healthcare provider. Therefore, when replying to the question whether the public availability of the treatment results provided voluntarily by a medical treatment institution can have a positive impact on the recognition of the service provider, 31% of physicians have responded with yes, 25% almost yes, while 27% have no opinion on the matter.

Transparency of VBHC results stimulates active learning, leading to improvements in both individuals and teams (Campanella et al, 2016). When asking PSKUS physicians whether sharing experience and knowledge in a physicians' team helps to improve treatment outcomes, 82% of physicians have

responded with yes and 15% almost yes, because knowledge transfer in health care is common practice.

"The biggest driver of rising costs is medical progress: new drugs, new tests, new devices, and new ways of using them." (Lee, 2010). It has therefore become clear how physicians see their role in making financial and administrative decisions. Only 39% of physicians have responded with yes, and 23% almost yes to the question whether bigger involvement of physicians in financial decision-making can help improve the healthcare process. Whereas 51% of physicians have responded with yes and 34% almost yes to the question whether bigger involvement of physicians in taking institutional (administrative) decisions can help to improve the healthcare process.

A health care organisation in Integrated Practice Units (IPU), multisectoral teams with competence, a wide range of skills and opportunities needed to achieve good results effectively and quickly throughout the care cycle and is one of the basic principles of VBHC (Porter & Lee, 2015). The idea of IPU, more known in Latvia as a multidisciplinary physicians' team, has become popular in Latvian health care. Therefore, when asked whether an interdisciplinary team can help improve treatment results, 86% of physicians responded yes and 10% almost yes.

So far, there is very little empirical evidence in the world regarding the work payment model that physicians would consider to be the best. Thus, Deloitte survey of U.S. physicians conducted in 2018 showed that premium payments should include new criteria, namely care quality measures, clinical outcome measurements, work volume measurements, patient satisfaction indicators, etc. (Deloitte, 2018) To understand what additional financial incentives might be attractive to physicians if VBHC programs were initiated in Latvia, responses have been obtained where 21% of physicians responded that based on measurements of clinical results, 39% based on measurements of the amount of work done, 32% based on patient satisfaction measurements and 7% based on hospital financial performance.

Latvia has completed the reform phase of the health sector in 2021, linked to the budget allocated by the etc. for structural reforms (Cabinet of Ministers, 2017). Thinking about further improvement of the healthcare system, experience, standards and good practices of Europe and other countries, including in terms of public value in the health services sector, should be taken into account (Pētersone, 2021-1). It has been therefore specified what most urgent management strategies in the healthcare system should be developed from the point of view of physicians and young physicians. The following answers have been obtained: analysis of treatment results and comparability of the obtained results – 18%; greater participation of physicians in the development, approval and measurement of treatment standards - 18%; cooperation networks of different healthcare providers in Latvia - 15%; increased participation of physicians in institutional and financial decision-making – 13%; knowledge transfer activities – 13%; cost management process (not payment) – 12%; cooperation with external partners (manufacturers, scientific centres, insurers, it and other service providers) – 11%. Physicians and young physicians feel personally responsible for improving the health system, therefore 63% of physicians have responded with yes

and 15% almost yes that reforms in health care should be proposed not only by the Ministry of Health but also by other parties in the health sector.

CONCLUSIONS AND RECOMMENDATIONS

Physicians and young physicians of on value-based concept of healthcare are scarce. The knowledge of physicians and young physicians about VBHC elsewhere in Latvia is probably even lower, as many PSKUS physicians are also academic lecturers who participate in international conferences, read the latest scientific articles and cooper-ate with colleagues from the medical institutions where VBHC programs are run. The survey results show that the application of VBHC principles will not contradict physi-cians' views on traditional management models in health care and their role in it.

Based on our analysis, proposals have been made for patients and NHS professionals interested in increasing value at the local or national level. Firstly, to introduce com-mon terminology so that each person involved in health care, including patients, has a shared understanding of what value-based healthcare is. Secondly, before starting the introduction of VBHC programmes in Latvian health care, there are grounds for launching discussions on the benefits of VBHC compared to the traditional man-agement model. Thirdly, for hospital management and health sector supervisors to avoid resistance of physicians to implementing VBHC, the strategy should focus not on VBHC resource-efficient programmes but patient-centred healthcare.

It is necessary to continue collecting data to compare physicians' knowledge assessed in the survey in the critical aspects of VBHC. With a certain number of people sur-veyed, the opinion of physicians will be the key metrics that will be used to correlate with other answers provided by physicians and the characteristics of their sociodemo-graphic and professional status.

REFERENCES

- Behmane, D., Dudele, A., Villerusa, A., Misins, J., Klavina, K., Mozgis, D., Scarpetti, G. Latvia (2019). Health system review. Health Systems in Transition, 21(4), 1–165.
- Cabinet of Ministers (2017). On the conceptual report "On the reform of the health care system", Order of the Cabinet of Ministers No. 394, Website https://likumi.lv/ta/id/292718
- Cabinet of Ministers of the Republic of Latvia (2021). Public health guidelines (draft) 2021–2027. Website http://tap.mk.gov.lv/lv/mk/tap/?pid=40498718
- Campanella, P., Vukovic, V., Parente, P. Sulejmani, A., Ricciardi, W., Specchia, M.L. (2016). The impact of Public Reporting on clinical outcomes: a systematic review and meta-analysis. BMC Health Serv Res 16, 296.
- Deerberg-Wittram, J., Lüdtke, L. (2016). Diabeter. Value-based health care delivery in diabetes. Website: https://diabeter.nl/media/cms_page_media/130/Value%20B ased%20Healthcare%20Diabeter%20White%20Paper.pdf
- Deloitte (2018). Volume- to value-based care: Physicians are willing to manage cost but lack data and tools. Website https://www2.deloitte.com/content/dam/insight s/us/articles/4628_Volume-to-value-based-care/DI_Volume-to-value-based-care .pdf

- Kaplan, R. S., Witkowski, M. L., Hohman, J. A. (2012). Boston Children's Hospital: Measuring patient cost. Case HBS Case Collection.
- Lee, T.H. (2010). Turning Doctors into Leaders, Harvard Business Review
- Makdisse, M., Ramos, P., Malheiro, D., Felix, Cypriano, A., Soares, J., Carneiro, A., Neto, M.C., Klajner, S. (2020). What do doctors think about value-based healthcare? A sur-vey of practicing physicians in a private healthcare provider in Brazil. Value Health Reg Issues. 2020 Dec; 23:25–29.
- Miller, H.D. (2009). From volume to value: better ways to pay for health care. Health Aff (Millwood) 1418–28.
- Mjåset, C., Ikram, U., Nagra, N.S., Feeley, T.W. (2020). Value-based health care in four dif-ferent health care systems. NEJM Catalyst.
- Mykytiuk, O., Varnalii, Z., Nikytenko, D., Gedek, S., Pashnyuk, L. (2020). Investment determinants of economic growth: World experience and Ukraine. Intellectual Economics, 14(2), 106–123.
- Nordic Innovation (2021). Website https://www.nordicinnovation.org/programs/nor dic-interoperability-project
- OECD (2017). Tackling wasteful spending on health. OECD Publishing, Paris. Website: https://doi.org/10.1787/9789264266414-en
- Pennucci, F., De Rosis, S., Passino, C. (2020). Piloting a web-based systematic collection and reporting of patient-reported outcome measures and patient-reported experience measures in chronic heart failure. BMJ Open 2020;10:e037754.
- Pētersone, M., Ketners, K., Erins, I. (2019). Health financing policy reform trends: The case of Latvia. Ad Alta: Journal of Interdisciplinary Research, 9(2).
- Pētersone, M., Ketners, K., Krieviņš, D. (2021). Integrate health care system performance assessment for value-based health care implementation in Latvia. 27th Annual International Scientific Conference "Research for Rural Development 2021" 12 14 May, 2021, Volume 36, ISSN 2255-923X.
- Pētersone, M., Ketners, K., Krieviņš, D., Erins, I., Rakauskiene, O. G., Eriņa, I. (2021). Network for disease-specific networking strategy to increasing of public value: Latvia's approach.
- Porter, M.E., Deerberg Wittram, J., Feeley, T. W. (2019). Martini Klinik: Prostate Cancer care. Case HBS Case Collection.
- Porter, M.E., Lee, T.H. (2015). Strategy Matters Now. N Engl J Med 2015; 372:1681–1684.
- Porter, M.E., Teisberg, E.O (2006). Redefining health care: Creating value-based competition on results. Brighton, MA: Harvard Business Press.
- Semenyshena, N., Khorunzhak, N., Adamyk, O., Sadovska, I., Nahirska, K., Zhuk, V. (2019). The methodology for calculating baseline indicators for budgeting expenditures of budgetary institutions: The case of Ukraine. Intellectual Economics, 13(1).
- Slawomirski, L., Van den Berg, M., Karmakar-Hore, S. (2018). Patient-Reported indicator survey (Paris): Aligning practice and policy for better health outcomes. World Medical Journal 2018; 64:8–13.
- The European Institute of Innovation and Technology (EIT) (2021). Handbook for pioneers implementing value-based health care in Europe. Website https://eithealth.eu/wp-content/uploads/2020/05/Implementing-Value-Based -Healthcare-In-Europe web-4.pdf
- The European University Hospital Alliance (2021). Learning In Value. Website http://www.euhalliance.eu/healthcare/learning-in-value/
- The Latvian Open data portal (2021). COVID-19 statistics, Website https://data.gov.lv/dati/eng/dataset/covid-19/resource/d499d2f0-b1ea-4ba2-9600-2c701b03bd4a

Van Der Wees, P.J., Nijhuis-Van Der Sanden, M.W., Ayanian, J., Z., Black, N., Westert, G., P. Schneider, E.C. (2014). Integrating the use of patient-reported outcomes for both clinical practice and performance measurement: |Views of experts from 3 countries. Milbank Q. 2014 Dec;92(4):754–75.

- Wohlin, J., Stalberg, H., Ström, O., Rolfson, O., Willers, C., Brommels, M. (2017). Effects of introducing bundled payment and patients' choice of provider for elective hip and knee replacement in Stockholm. Karolinska Institutet.
- World Health Organization (2010). World Health Report: Health systems financing the path to universal coverage. ISBN 9789241564021. Geneva, Switzerland.
- World Health Organization (2018). Financial protection in high-income countries. A compar-ison of the Czech Republic, Estonia and Latvia. ISBN 9789289053259.