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Public Health Promotion as a Priority for Regional Governmental Policy



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Abstract. The article reveals aspects of public health management at the regional and municipal levels. This is an urgent task due to the high potential of the regulatory impact of these levels of government on people's well-being. The aim of the work is to substantiate our own approach to understanding public health management at the regional (and municipal) level and put forward a tool for assessing managerial influence. We review scientific literature on public health issues, as well as regional and municipal strategic and program documents in the field of preserving and strengthening public health. We also systematize the components of public health management in strategic planning and project management at the regional and municipal levels (on the example of the Vologda Oblast) and consider individual tools for promoting public health. In order to assess the effectiveness of development of municipal programs related to public health promotion, we work out a public health and well-being index and test it in two variations: to be used at the regional and municipal levels of government; this constitutes the scientific novelty of our study. We reveal key problems in assessing public health management and propose recommendations on their solution and improvement of methodological and informational tools.

Key words: public health, national projects, center for public health and prevention, project management, health and well-being index.

Introduction

Currently, public health preservation is being promoted to the level of national security. In the context of global political, economic, social and moral changes in the world, there emerges a new goal corresponding to modern challenges: to create a system for preserving and strengthening physical, mental and social health of Russians capable of defending the security, sovereignty and prosperity of the country at present and for tens and hundreds of years in the future. Strengthening public health is an intersectoral mission that cannot be fulfilled exclusively within the competence of health services; therefore, not only medical specialists, but also representatives of related industries are engaged in the creation of public health tools¹.

Twelve national projects aimed at implementing the tasks defined by Presidential Decree 204, dated May 7, 2018 "On national goals and strategic objectives of development of the Russian Federation for the period through to 2024" serve as the basis

for intersectoral cooperation in the field of health management. Five of them are focused on the formation of public health, seven – on the creation of a comfortable, safe, health-forming municipal environment. A special place belongs to the national project "Demography" and its key component – the federal project "Public health promotion", because public health unites all factors affecting the people's physical, mental and social well-being related to their lifestyle and environment. At the same time, the municipal level is of great importance – it is a point where the interaction of executive authorities and local self-government is implemented in order to improve the quality and increase the life expectancy of people, preserve and strengthen their health, create a health-saving municipal environment with active involvement of citizens themselves in these processes.

The long-term experience of the Association "Healthy Cities, Districts and Towns" under the leadership of the Chairman, Vologda Oblast Governor, currently uniting 146 municipalities of the country, and the experience of developing

¹ National public health management programs. *Moskovskaya meditsina*, 2021, 6(46), 8–21.

health-saving and health-forming activities in the Vologda Oblast allowed formulating the author's approach to the concept of public health as a national security resource² that characterizes the quality of human potential. Public health protection activities are implemented on the basis of interaction between state, municipal, public and other sectors of society by educating an individual who is healthy, happy, free, work-oriented and devoted to their Fatherland; protecting and strengthening health; preventing diseases; forming a healthy lifestyle; forming one's personal responsibility for their own health; creating a health-saving, comfortable and safe environment for the life of citizens.

In the light of implementation of national goals and priorities, there is a need to develop public health monitoring tools, especially in the context of project and strategic management. At the same time, it is important that such tools should have a scientifically sound methodology and a relevant information base. Currently, it is of paramount importance to substantiate conceptual approaches to the creation of an integrated information base necessary for the development of optimal strategic solutions so as to ensure the most effective management of intersectoral activities aimed at increasing the potential of public health and well-being, assessing their role in achieving national development goals (Katkova, Rybalchenko, 2020). The aim of this work is to substantiate our own approach to understanding public health management at the regional (and municipal) level and put forward a tool for assessing managerial influence.

The paper analyzes regional and municipal strategic and program documents in the field of preserving and strengthening public health.

² On the National Security Strategy of the Russian Federation: Presidential Decree 400, dated July 2, 2021. Available at: <http://pravo.gov.ru>; Collection of legislation of the Russian Federation. July 5, 2021. No. 27 (Part II). Article 5351.

We use methods of systematization of components of public health management in the system of strategic planning and project management at the regional and municipal levels (on the example of the Vologda Oblast), as well as a visualization method using the construction of graphical schemes.

In order to assess the effectiveness of development of municipal programs to strengthen public health, a public health and well-being index was developed and calculated with the use of statistical and departmental data and the principal component method.

Public health and its formation management

Public health as the most important characteristic of socio-economic and demographic development was considered in the works of Russian medical scientists and hygienists (Bednyi, 1972; Lisitsyna, 1987; Medik, Yuryev, 2012; Yuryev, 1993), economists and demographers (Prokhorov, 2007; Health..., 2007; Nazarova, 2007; Shabunova, 2010), as well as sociologists (Zhuravleva, 2006; Lebedeva-Nesevrya, Gordeeva, 2011). However, the scientific literature has not yet formed both a single definition of public health and its universal "meter".

Public health is understood as a social policy concept aimed at improving health, prolonging life and improving the quality of life of the entire population as a whole – through health promotion, disease prevention and other types and forms of intervention³. This definition reflects the idea, which identifies well-known ways to prolong life and improve the quality of life, limited to health promotion and disease prevention.

Public health is also "a state of society that provides conditions for an active, productive lifestyle, not constrained by physical and mental illnesses, i.e. it is something without which society cannot create material and spiritual values – it is the wealth of society" (Lisitsyn, 2010), and "the property of the population of a certain territory that

³ Glossary of terms used in the "Health for All" series. WHO: Geneva, 1998.

ensures demographic development, the maximum possible life expectancy and labor activity, formed under the complex influence of biological, socio-economic, socio-cultural and environmental factors” (Shabunova 2010; Shabunova, 2011).

In some cases, public health is closely linked to the health system. For example: “the activities of state, municipal, public and other structures carried out on the basis of intersectoral and interdepartmental interaction and aimed at implementing measures to protect and strengthen health, prevent diseases, form a healthy lifestyle and create a favorable environment for the life of citizens” (Starodubov et al., 2016).

This approach is optimal from the point of view of public health management, because, first, it defines the role of state structures in public health management and, second, determines its factors and relevant areas of work: health protection and promotion, formation of a healthy lifestyle and creation of an environment conducive to public health.

It is well known that the factors promoting public health are lifestyle, environment, and medical care (Lisitsyn, 2010). Researchers are identifying new facets and manifestations of the influence of these groups of factors on public health.

One of the most famous concepts explaining the dynamics of public health was developed by A. Omran. It was called the “epidemiologic transition” (Omran, 1971; Omran, 1977).

The role of the healthcare system in maintaining public health is also confirmed by estimates of excess mortality from the coronavirus infection, the pandemic of which has become a significant challenge to demographic development. For example, it has been proven that in Germany in 2020 there was practically no excess mortality, in Sweden it was 3% excluding an increase in life expectancy and 8% taking into account an increase in life expectancy, in Spain – 15% (Kowall et al., 2021). In some countries of Northern (Estonia, Latvia, Lithuania, Norway, Finland, Slovakia), Southern

and Eastern Europe (Portugal, Hungary, Austria, Switzerland, Israel and Slovenia), no statistically significant excess mortality was recorded, which indicates that they coped well with the epidemic and show mortality that is close to what was expected or even below it (Vanella et al., 2021).

The COVID-19 pandemic highlighted the importance of development of digital technologies in healthcare and the role of effective epidemiological surveillance systems (Wong et al., 2022), as well as the urgency of competent healthcare management, including material support for the industry (Liang, Kiang, 2023), staffing (Yeager et al., 2023) and qualified managers (Bickley, Torgler, 2021; Schenck et al., 2023). In addition, the task of forming a health-saving lifestyle and responsible self-preservation behavior can be addressed through education and upbringing, which requires understanding the reasons for the choice of behavioral strategies (Hobbs et al., 2021).

Thus, public health includes parameters that measure its level and properties, as well as groups of factors that identify the parameters of the environment, lifestyle and medical care.

Vologda Oblast’s experience in public health management

Strengthening public health is one of the conditions for the socio-economic development of territories and it is promoted to the level of national security. This task is a priority for the Vologda Oblast Government. In 2016, the region relied on people’s preservation as a key direction of the socio-economic development strategy for the period through to 2030⁴. Since the approval of the national project “Demography”, the priorities of the region have converged with the national priority. The integration of public health promotion as an independent direction in strategic planning documents began with the change of the oblast’s

⁴ On the strategy for socio-economic development of the Vologda Oblast for the period through to 2030: Resolution 920 of the Vologda Oblast Government, dated October 17, 2016. Available at: <http://www.consultant.ru>

main document – the Strategy for Socio-Economic Development of the Vologda Oblast for the Period through to 2030 (hereinafter – the Strategy). In order to consolidate the tasks of creating the necessary conditions in the field of public health, a section “In the field of strengthening public health” was allocated in the structure of the Strategy. In the Vologda Oblast, the Strategy is implemented through the application of a *project-based approach* that takes into account the interdepartmental and intersectoral nature of addressing the development tasks set in it. This made it possible to integrate the *regional project “Public health promotion”* into the Strategy in a short time as a tool for achieving the socio-economic development tasks assigned to the region.

The practice of the region has shown the need to use new tools in solving issues on this topic. It was important to find a tool that would allow the tasks of regional goal-setting to be decomposed at the municipal level and into subordinate strategic planning documents. To this end, the regional Government has carried out extensive work in the designated areas. In 2017, even before the appearance of national projects, a *Coordinating Council for Public Health Protection* was established in the Vologda Oblast; and since 2021, the Vologda Oblast Governor has become its chair. This body coordinates the activities and organizes interaction with territorial bodies of federal executive authorities in the constituent entity of the Russian Federation, executive bodies of state power of the constituent entity of the Russian Federation, local self-government bodies in the constituent entity of the Russian Federation. Interdepartmental coordination councils have also been established in all municipalities of the oblast.

One of the objectives of the project “*Public health promotion*” was the transformation of the centers of medical prevention into regional centers for public health and medical prevention (hereinafter – RCPHMPs), which was implemented in the Vologda Oblast. In accordance with Order 1177n

of the Ministry of Health of the Russian Federation, dated October 29, 2020⁵, the control of public health in the constituent entity is assigned specifically to regional RCPHMPs. In addition, they perform the most important function of technical coordinator for the organization of intersectoral cooperation in strengthening public health at the regional and municipal levels by preparing meetings and monitoring the implementation of decisions of the Coordinating Council for Public Health Protection. At the municipal level, such control is carried out by urban public health centers, adult and children’s health centers and departments/offices of medical prevention clinics. *Regional, municipal public health programs and corporate workplace health promotion programs* have become the main control tools. In order to develop the above programs, the Ministry of Health of the Russian Federation has issued recommendations on their fullness and approval for RF constituent entities.

The federal project “*Public health promotion*” contains three tasks: forming a system of motivation of citizens to a healthy lifestyle, including healthy eating and giving up bad habits; motivating citizens to lead a healthy lifestyle through the implementation of an information and communication campaign, as well as involving citizens and nonprofit organizations in measures to strengthen public health; developing and implementing workplace health promotion programs (corporate health promotion programs).

In the Vologda Oblast, the task is currently set to form an integral system for strengthening public health, which will lay the principle of “unified health” not only at all levels of government, but also at intersectoral interactions of the executive authorities of the oblast at all levels, based on the Helsinki Statement: “synthesis of health – in all

⁵ On approving the Procedure for organizing and implementing the prevention of noncommunicable diseases and carrying out measures to promote a healthy lifestyle in medical organizations: Order 1177n of the Ministry of Health of the Russian Federation, dated October 29, 2020. Available at: <https://minjust.consultant.ru/documents/24840>

strategies of socio-economic development”. The essence of taking into account the principles of health in all activities of socio-economic development plans and national projects is that a developer of any level, any department, when preparing events, is obliged to answer the following question “How will my planning affect the health and quality of life of residents of my city (village)?”.

The main document regulating the development of the public health system in the Vologda Oblast is the *regional comprehensive program “Public health – in the spotlight”*⁶, approved by the regional government in 2020. The main directions of the program are as follows: forming motivation of the population for a healthy lifestyle; creating a safe, healthy and comfortable environment for life. The key normative documents of the municipal level are the *recommendations for the development and implementation of the municipal program “Public health promotion” and the library of best practices*⁷. It is also planned to develop *local health-forming programs* (medical organizations develop the following programs: strengthening reproductive health; pregnant women’s health; a healthy start to life; *social protection services*: the “Healthy family” program; *organizations and enterprises*: a health-forming kindergarten; a health-forming school; a health-forming university; health promotion in the workplace; active longevity).

Another document regulating the development of public health at the municipal level was the *model corporate program “Strengthening health in the workplace”*⁸, sent to the municipalities of the region

⁶ On approving the regional comprehensive program for strengthening public health “Public health – in the spotlight” in the Vologda Oblast for 2020–2024: Resolution 1386 of the Vologda Oblast Government, dated November 30, 2020. Available at: https://vologda-oblast.ru/dokumenty/zakony_i_postanovleniya/3130640/

⁷ Recommendations for the development and implementation of the municipal program “Public health promotion” and the library of best practices. Available at: <https://volprof.volmed.org.ru/index.php?page=ozdorovje>

⁸ Model corporate program “Strengthening health in the workplace”. Available at: <https://volprof.volmed.org.ru/index.php?page=ozdorovje>

to be implemented in organizations and enterprises of various organizational and legal forms.

In accordance with the federal project, municipal programs for strengthening public health should be approved in all municipal districts of the oblast by 2024. In 2021, the Vologda Oblast Governor at a meeting of the Coordinating Council for Health Protection gave an instruction to approve the programs within a year, i.e. three years ahead of schedule. In the Vologda Oblast, by the end of 2021, such programs were approved in each municipal district.

Municipal programs have become one of the main components of the public health system in the region. The set of measures under the municipal public health programs becomes more productive if they are filled with *health-preserving and health-forming technologies*. The development of the public health and medical prevention system in the Vologda Oblast, as well as the long-term experience of the *Association “Healthy Cities, Districts and Towns”* in RF constituent entities and the near abroad have allowed us to accumulate a whole arsenal of scientifically based breakthrough technologies for the formation of public health and the creation of a health-saving, comfortable and safe environment in municipalities⁹. Currently, the task is to introduce them into the practice of municipal entities through the implementation of public health promotion programs based on training events, seminars and conferences.

Municipal programs mostly address the issues of motivating the population of the territory to a healthy lifestyle, but it is worth noting that external factors, such as the public environment, also play an important role in strengthening public health. It was this aspect that became the main one when deciding on the development of the *oblast’s strategic project “Public health”*, into which the regional integrated

⁹ Healthy City – Healthy World (2022): Collection of the best municipal practices of participants of the III contest “Healthy Cities of Russia”. Compiled by T.E. Shestakova, edited by V.A. Polessky. Cherepovets: Cherepovets.

program “Public health – in the spotlight” was reformatted in 2022. The project helped not only to attract the oblast’s municipalities as co-executors to achieve results, but also to give local governments the opportunity to potentially finance the tasks set in the field of public health promotion. Thus, it has become an instrument of even closer interaction between regional authorities and municipalities.

Strengthening public health as a multilevel complex system requires an appropriate management mechanism. Currently, in order to integrate social development issues into the oblast’s strategic planning documents and involve the oblast’s municipalities in public health management, it is necessary to form a *single digital space* for monitoring the main processes and evaluating the effectiveness of public health activities.

Interaction with municipalities within the framework of the strategic project made it possible to work out and consolidate the tasks of public health in the project activities of the region. The execution of the strategic project activities is carried out using the *information system “Managing investment and project activities of the Vologda Oblast” (hereinafter – VEGAS)*. It makes it possible to work with a large number of participants, reduce the cost of their interaction, constantly monitor the implementation of the project and make management decisions in a timely manner. But at the same time, there was a need not only to organize interaction processes, but also to analyze and monitor the achievement of goals. VEGAS capabilities in this regard were limited, so monitoring of the processes of strengthening public health in the oblast is carried out through another information system – *GAS “Management” of the Vologda Oblast*. In it, a list of indicators characterizing the development of the public health management system in the oblast and its municipalities has been formed to assess public health. For this purpose, a *matrix of health indicators* was developed. It contains indicators arranged in blocks: *population, mortality, morbidity,*

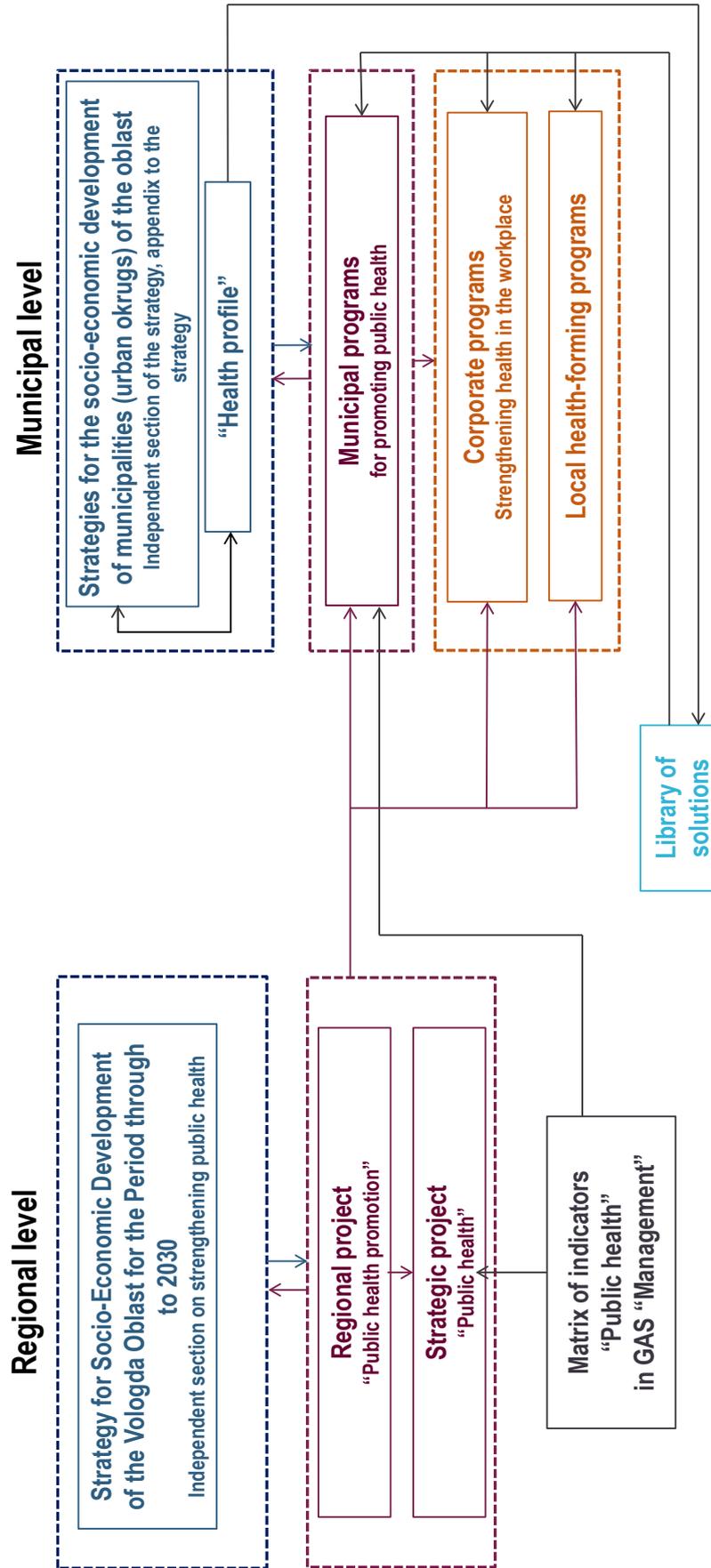
spread of factors promoting non-communicable diseases, ecology, road safety, social security, welfare, implementation of health-preservation programs, infrastructure, cultural potential. Filling of the matrix is carried out by data from statistical and departmental agencies. The use of digital solutions helps to automatically upload and generate a matrix of health indicators. Thus, each municipality can see gaps in the achievement of individual indicators, respond promptly and manage the risk of nonfulfillment. The use of the information system helped to determine the development goal for municipalities in this direction, coordinate it with all participants, verify the data in the system and bring them to the performers. In addition, the generalized presentation of data in the context of each municipal district makes it possible to identify leaders in the issue of strengthening public health, study their managerial experience and disseminate it among other municipalities, taking into account their socio-economic and territorial features.

To replicate successful experience, a *“library of solutions”* has been introduced into the public health promotion system; the “library of solutions” is a *set of best practices in the field of public health promotion, as well as a set of the best solutions to eliminate unachieved results.*

The formation of the matrix has become the basis on which another management tool – the *“health profile”* – has received wider application in the region; it is a source of information about the health status of the population and the state of its environment, and reflects changes in public health indicators and processes organized to strengthen public health.

The use of all the tools (projects, programs, matrix, “library of solutions”, “health profile”, etc.) constitutes a management system in the field of promoting public health in the region. *Figure 1* shows the place of strengthening public health in the system of strategic planning and project management in the region.

Figure 1. Strengthening public health at the regional and municipal levels on the example of the Vologda Oblast



Source: own compilation.

Methodology for calculating the health and well-being index

With all the scale and number of indicators, there emerged a task to compare the assessment of municipalities' effectiveness. To solve it and to evaluate the entire system of strengthening public health in the region, a special integral ***indicator was developed – health and well-being index – in two variations: for use at the regional and municipal levels of government.***

The **first stage** is to determine the factors that most significantly affect public health; they will combine a set of baseline indicators. As noted earlier, public health is not limited only to medicine, in this case its multifactorial nature should be taken into account. Based on the classification of health factors proposed by Yu.P. Lisitsyn (Lisitsyn, 2010), three main ones are identified: *lifestyle, environment, medical care.*

Next, the initial set of indicators reflecting health and well-being was determined. Given the complex synthetic nature of the category under consideration (health and well-being), the initial set of indicators was determined by expert opinions, i.e. heuristically.

The selected indicators should comply with the following requirements put forward by Doc. Sci. (Physics and Mathematics) S.A. Ayvazyan (Ayvazyan, 2012).

1. Representativeness (relevance). It implies that the indicators cover all aspects of strengthening public health, in our case, meet the three selected factors.

2. Availability. The estimates of the selected indicators are publicly available and are regularly updated in accordance with the monitoring carried out within their framework.

3. Reliability. The indicators are taken from official sources of statistical information and can be verified.

In addition, as S.A. Ayvazyan notes, the set of indicators for measuring the same entity, but at different levels of its manifestation (for example,

country, region, enterprise) should and can be different (Ayvazyan, 2012).

In this case, to calculate the index, 46 indicators for the municipal level and 34 indicators for the regional level were selected from 150 indicators that are relevant and available in statistics.

The **second stage** is to check the indicators for multicollinearity in order to exclude duplicate indicators.

For each indicator, the absolute sample linear Pearson pair correlation coefficient r was calculated. The meaning of the calculation is that all such estimates are added together for each indicator, and there is a certain sum $\sum_i |r_i^j|$ relative to which the rating of indicators is built.

In accordance with it, the indicators with the largest amount are excluded from further processing.

In the case of municipalities, the indicators were analyzed twice by means of correlation matrices, as a result of which 20 out of 46 indicators were left (*Fig. 2*).

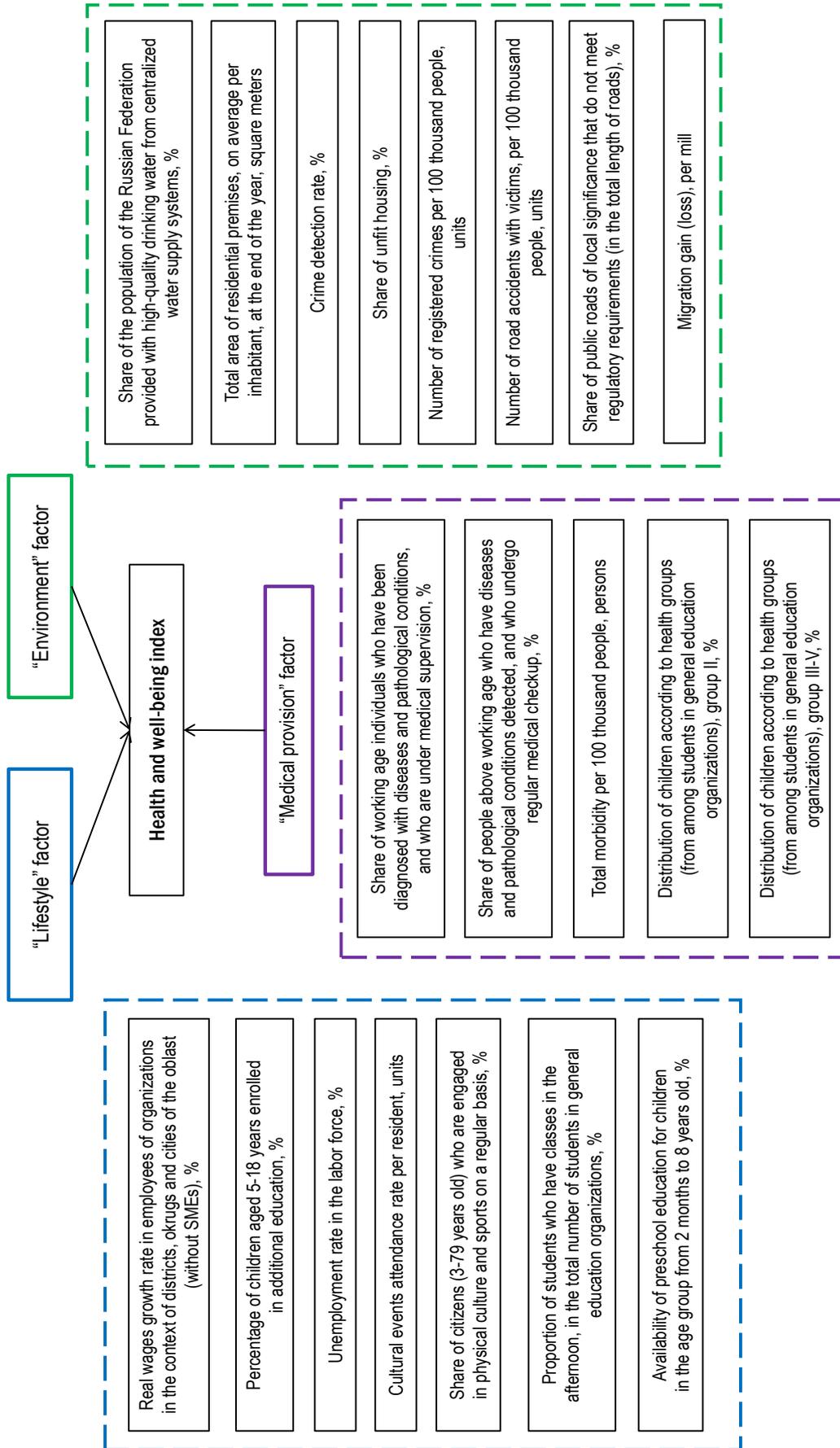
In the case of regions from the primary list containing 34 indicators, 21 were left (*Fig. 3*).

At the **third stage**, significant evaluation criteria are combined, i.e. the remaining indicators are distributed according to the three earlier specified factors.

For municipalities, the ***lifestyle factor*** includes seven indicators, which to a greater extent characterizes the behavioral characteristics of the population. The ***“environment”*** factor includes eight indicators reflecting the capabilities and quality of the living environment of the population. The ***“medical provision”*** factor contains five indicators that determine the therapeutic and diagnostic activities of the healthcare system, which makes it possible to assess people's health.

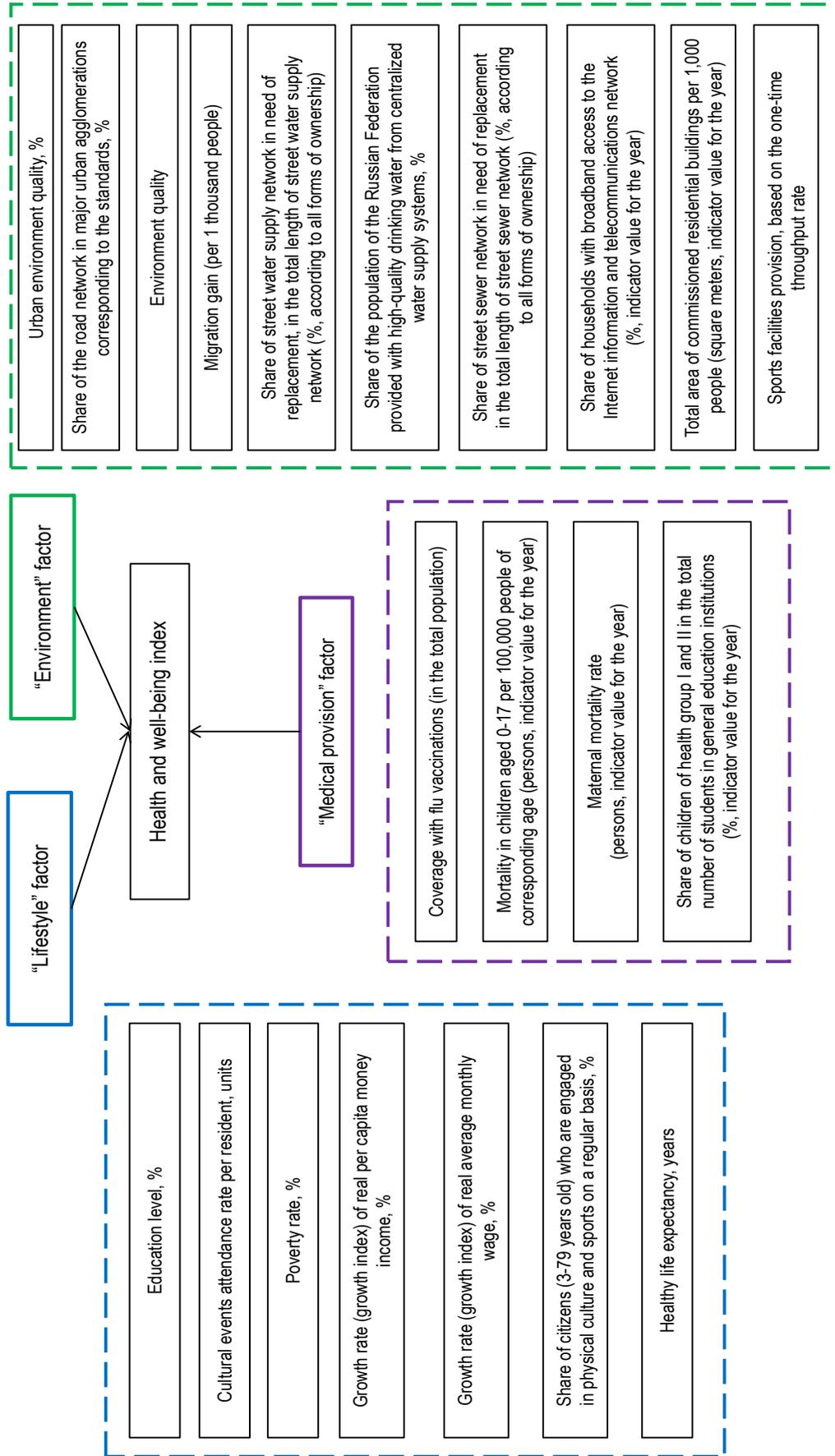
The list of indicators used for calculations in the context of RF constituent entities is shown in Figure 3. The change in the list of indicators is due to the level of analysis, which determines a different set of indicators for the same health and well-being factors.

Figure 2. Decomposition of indicators for calculating the health and well-being index for municipal districts



Source: own compilation.

Figure 3. Decomposition of indicators for calculating the health and well-being index for RF constituent entities



Source: own compilation.

The **next step** is to form the values of subindices and the integral index.

The convolution of the remaining indicators into a single aggregated index is implemented on the basis of the *principal component method*. To do this, it is necessary to find the largest eigenvalue of the correlation matrix for the remaining indicators. Subject to preliminary standardization of the values of the indicators under consideration, the square of the estimates of the found eigenvector will characterize the weight of the corresponding indicator $\in [0,1]$. Currently, the statistical cross-section of the data is small and the weighting factors of the indicators require annual revision.

With the accumulation of a sample over about 10 years, the weights may become more stable (they will not change much when new data are added). This method was also proposed by S.A. Ayvazyan (Ayvazyan, 2012).

The **final stage** is approbation of the developed tools and interpretation of the results obtained.

The results obtained according to the calculations for municipal okrugs and districts are presented in *Table 1*. The index helps to assess the variability of values and the “lagging” of municipalities from the “leader”, and form a conditional rating of municipalities. In 2022, seven municipal districts of the Vologda Oblast were included in the group with

Table 1. Results of calculating the health and well-being index for municipal districts of the Vologda Oblast for 2022

| Municipal district | Health and well-being index | Level |
|--------------------------|-----------------------------|---------------|
| Kaduisky | 0.625 | Above average |
| Nyuksensky | 0.613 | |
| Mezhdurechensky | 0.607 | |
| Ust-Kubinsky | 0.604 | |
| Nikolsky | 0.603 | |
| Tarnogsky | 0.592 | |
| Vozhegodsky | 0.561 | |
| Totemsky | 0.554 | Average |
| Gryazovetsky | 0.529 | |
| Syamzhensky | 0.522 | |
| Vashkinsky | 0.520 | |
| Babushkinskiy | 0.518 | |
| Sokolsky | 0.510 | |
| Ustyuzhensky | 0.493 | |
| Sheksninsky | 0.492 | |
| Kichmengsko-Gorodetsky | 0.474 | |
| Babaevsky | 0.474 | |
| Vologodsky | 0.462 | Below average |
| Chagodoshchensky | 0.460 | |
| Verkhovazhsky | 0.460 | |
| Vytegorsky | 0.453 | |
| Kirillovsky | 0.448 | |
| Harovsky | 0.435 | |
| Cherepovetsky | 0.431 | |
| Belozersky | 0.424 | |
| Velikoustyugsky | 0.384 | |
| Source: own compilation. | | |

the level of values of the health and well-being index (HWBI) above the average (the value of the HWBI is in the range from 0.55 to 0.63). Eleven municipalities made up the “core” of the rating (HWBI – from 0.46 to 0.53), HWBI values were from 0.39 to 0.46 in seven municipal okrugs and districts.

Separate calculations were carried out for large cities of the oblast.

The logic of constructing the index is similar to the general one for municipalities, however, due to the high concentration of population and economy for these territories, the calculation of weighting coefficients was carried out separately. The HWBI values obtained for large cities in the region are higher than those for municipal okrugs and districts, which is explained by relatively better conditions and standard of living (*Tab. 2*).

A similar calculation was carried out for the RF constituent entities that are part of the Northwestern Federal District (*Tab. 3*). In comparison to the approach to calculating the index for

municipalities the only difference is the list of indicators used to form each factor included in the calculation of the health and well-being index and their weight values.

The results of calculating the health and well-being index for the constituent entities of the Northwestern Federal District indicate the leadership of the Vologda Oblast and Saint Petersburg in the health and well-being index; the values are above the average in the Leningrad, Kaliningrad and Novgorod oblasts.

Discussion and conclusions

The advantage of the proposed index is the availability of analysis indicators, the main part of which is included (directly or by structural components) in the calculation of indicators for national projects. The calculation of the index made it possible to conduct a comparable ranking of municipalities and a comprehensive assessment of the effectiveness of the public health promotion system in the region.

Table 2. Results of calculation of the health and well-being index for large cities of the Vologda Oblast for 2022

| City | Health and well-being index |
|--------------------------|-----------------------------|
| Cherepovets | 0.707 |
| Vologda | 0.644 |
| Source: own compilation. | |

Table 3. Results of calculating the health and well-being index for the constituent entities of the Northwestern Federal District of the Russian Federation for 2022

| Constituent entity | Health and well-being index | Level |
|--------------------------|-----------------------------|---------------|
| Saint Petersburg | 0.628 | Above average |
| Vologda Oblast | 0.543 | Average |
| Leningrad Oblast | 0.523 | |
| Pskov Oblast | 0.464 | |
| Kaliningrad Oblast | 0.457 | Below average |
| Republic of Komi | 0.450 | |
| Novgorod Oblast | 0.449 | |
| Arkhangelsk Oblast | 0.443 | |
| Republic of Karelia | 0.427 | |
| Nenets Autonomous Okrug | 0.386 | |
| Murmansk Oblast | 0.373 | |
| Source: own compilation. | | |

Despite the presence of many indices in the field of social well-being, the methodological niche of indicators in the field of public health seems to be insufficient. One of the most developed indices used to assess public health is the “*years of potential life lost*”, reflecting demographic losses due to premature mortality and calculated as the sum of the products of the number of deaths in each age group by the number of years they did not live to a certain age limit (most often up to 70 years) (Korobitsyn et al., 2014). The advantage of the health and well-being index is its integrative nature. It provides a multidimensional analysis of mortality, increases the level of awareness, commensurability and comparability of estimates (Novgorodova, 2015). We should also point out the *quality of life ranking* calculated by the Agency for Strategic Initiatives¹⁰. It is comprehensive and evaluates the overall satisfaction with the social sphere and the place in which an individual lives (including medical care and environmental conditions); It will significantly complement the characteristics of the impact of morbidity and premature mortality on the viability of the population and the indicator of *healthy life expectancy* (Katkova, Rybalchenko, 2020).

The insufficiency of methodology when analyzing the process of strengthening public health is due to the presence of unsolved problems in Russia. *The first problem lies in the complexity of obtaining statistical data and their quality.* The number of indicators of official statistics (Rosstat), when we look at the municipal level, is significantly reduced, individual indicators are simply not monitored at the level of municipal districts and settlements. For example, the indicator “life expectancy at birth” that reflects the development of public health, is not calculated at the municipal level. *The second problem* is related to the period of

publication of official indicators after the end of the reporting period. A significant time lag between the end of the reporting period and the formation of official statistical data limits the possibilities of risk management and impedes the formation of an adequate management response. *The third problem* is that certain areas of the public health sphere either do not have official statistics (Rosstat), or are collected only at the departmental level (regional medical information analytical centers (MIAC), and are not collected subsequently at the federal and/or regional level, which means there is an analytical gap in relation to the public health sphere and it is impossible to provide a comparable assessment between RF regions/constituent entities. Thus, the following *areas* currently need to be worked out at the level of the concerned authority together with Rosstat:

- expanding the list of indicators in the field of public health (including by introducing the indicators of departmental statistics of the Ministry of Health, Ministry of Construction, Ministry of Sports, etc., sectoral authorities);
- reducing the period of publication of indicator values after the reporting period;
- decomposing the indicators at the municipal level.

To analyze the comparability of processes in the field of public health at the regional and interregional levels, the collection and publication of indicators in the field of public health should be assigned to Rosstat and its territorial offices in the regions. At the same time, in our opinion, it is not entirely correct to be guided only by statistical data, since the analytical value of indicators from sectoral departments and Rosstat decreases if there are no data on public opinion. Representatives of the World Health Organization note the need to study the factors that affect people’s health, the so-called *social determinants of health* that an individual creates around themselves on their

¹⁰ Quality of life ranking. Agency for Strategic Initiatives. Available at: https://asi.ru/government_officials/quality-of-life-ranking/

own. The determinants are investigated with the help of sociological studies. One of the popular methods used in conducting sociological research is a *sociological survey*. Despite the fact that it is a resource-intensive procedure (scale of coverage of the sample of respondents, involvement of single-discipline specialists), its results help to obtain information unique in its content – feedback from the population. The result of the sociological survey should be the formation of a *sociological index of satisfaction with the health-preserving environment and the healthcare system*.

Taking into account the above, we propose to include the health and well-being index in the federal/regional project “Formation of a system of citizens’ motivation for a healthy lifestyle, including healthy nutrition and rejection of bad habits” within the framework of the national project

“Demography”; as well as the issue concerning the development and launch of a sociological survey within the framework of this federal project.

The calculation of indicators and the execution of an annual sociological survey should be financed at the expense of the federal budget.

In 2023, the Vologda Oblast Government conducted a sociological study to identify behavioral factors promoting a healthy lifestyle and ensuring satisfaction with public spaces to preserve health. This survey, along with the health and well-being index, is planned to be used as a tool for assessing the existing system of public health promotion in the regions. The long-term tasks for the Vologda Oblast include continuing and enhancing regional and municipal work to strengthen public health and increasing the responsibility of citizens for their health.

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