INTRODUCTION

Health is one of the biggest factor appreciated by most individuals. It is generally known, that with age and under the influence of other (mostly external) factors, the state of health deteriorates, therefore, population has to apply to health care institutions to get qualified medical care, the availability of which is guaranteed by the Constitution of Ukraine (article 49), Ukrainian Civil Code (articles 283, 284), the Act of Ukraine «Fundamental Principles of the Legislation of Ukraine Concerning Healthcare» (articles 6, 39) and other regulatory legal acts. However, most of the population cannot boast of good health: «every year, the first 60 registered cases of diseases are recorded per 100 heads of the population» [1]; «around 66 thousands of health professionals resigned from national field of healthcare only between 2014–2016» [2], every year from 4 to 7 thousands of qualified health professionals moved out of Ukraine [3]; «Of those surveyed, 23.0 % of men and 25.8 % of women are unsatisfied with the availability and quality of medical care» [4]; «Ukraine took the 94th place out of the 195 places in the Global Health Security Index for the year 2019» [5]. The Ministry of Health of Ukraine did not leave the given situation without attention, and introduced the medical reform («since 2018 at the primary level, and since 2020 at the secondary and tertiary levels» [6]), which aims to increase the availability and quality of the medical services provided. The use of the suitable «methods and ways of public administration in this field guarantees the success of it» [7].

The problems of the medical reform became a cornerstone stone of the research of a number of scientists. Thus, in particular, the proposal of V. Ruden to increase prophylactic measures at the primary level of the medical care, seems to be on point [7]; at the same time, there are certain debatable aspects, e.g., it is more to the point to speak not about «an audit», but «a monitoring»; a proposal to «introduce economical methods of administration» [8] should be supplemented with concrete recommendations. A position of the scientists [9; 10; 11], who suggest strongly the advisability of the application of the New Public Management (NPM) theory for the reformation of the national health system is worth of attention. Also to address, whether NPM prevents waste and opportunism in health care; and to confirm, whether rationality and accountability are greater under NPM or not [9]. The NPM was generally identified to be an effective replacement for the traditional administration.
method. These reforms may be helpful in strengthening the public health complex and the management capacity, as well. NPM also seems to be useful in interacting the public health sector with the private sector in terms of personnel and resources, performance, reward structure, and methods of doing business [11]. Giving credit to the groundwork of the abovementioned scientists, it is necessary to emphasize the necessity of the continuation of research on the given problematic.

The above mentioned determines the relevance of this research after all.

THE AIM
The aim is to analyze the realities and to determine prospects of the medical reform in Ukraine as a method of public administration of healthcare.

MATERIALS AND METHODS
The given paper uses an integrated approach, which consists in the study of public administration of healthcare as a single whole with the coordinated functioning of all its constituents. Besides this, the methods, which were used at the empirical and theoretical levels, such as, an abstract logical method for theoretical generalization, a method of analyses and synthesis for the determination of the factors, which influence the character and orientation of public management, and a method of comparison for the study of methodological approaches, conceptions, developments and offers of the leading domestic and foreign scientists, devoted to the peculiarities of public health management were applied in the given research.

REVIEW AND DISCUSSION
Due to the medical reform in Ukraine, the changes took place, which partially have mixed assessment both concerning on-going effects, and probable ones in the nearest future. Let us refer in detail to the most important of them:

- organization of the medical reform – changes in the national health care system are highly relevant (primarily, because of its low ability to perform its direct functions), but they were implemented «top – down», because of that, they were de facto deprived of the support of its key players, who have a pretty clear understanding of their «losses», but they have no guarantee of its compensation (medical personnel do not have decent formal pay, the population has no continuing access to quality health services); the thought about the expediency of the establishment of the National Health Service of Ukraine (NHSU), which took over some of the functions of the Ministry of Health of Ukraine (MHU), while regional offices of NHSU took over some of the functions of Health Departments of Regional State Administrations is also controversial;

- reorganization of medical institutions into non-profit public utility companies (NPUCs) – the search of the owners (local governments) for a business model, that will not only allow to preserve the present opportunities (in particular, budget financing and privileges on payment for the use of a land plot), but to create the new ones (grant and investment promotion); at the same time, under the decentralization, the state actually «transfers» responsibility for the future fate of the NPUCs to local self-government bodies (compensation for utility services, capital investment, financing of regional programmes), thereby questioning their farther existence;

- the autonomisation and commercialization of the NPUCs, which gained the opportunity to provide paid medical and related services and to dispose of such funds on their own (in particular, for equipment purchase, renovation of premises, staff incentives etc.). However, the lack of regulations, that legalize the generation of such revenues is an obstacle to the full use of such an incentive nowadays; the management should maintain NPUCs functionality through optimization of costs;

- inducement of the NPUCs to make agreements with NHSU – an effective tool for optimizing budget financing of NPUCs, and also bringing their staffing and logistics in line with modern requirements; but not all NPUCs (especially in rural areas) have the potential to radically improve the situation; under such conditions, they have problems covering their operating costs, and subsequently the question of their continued existence will arise;

- reforming the primary link – it is an absolutely justified step at the beginning of the medical reform, as it allows covering the largest number of patients with relatively simple pathologies; this produces a positive social effect at low cost; on of its elements is to enable the people to sign a declaration with a primary care physician, and they reserve the right to terminate the declaration and to conclude it with another doctor at any time; as a result, family doctors, therapists and pediatricians (especially those ones, who have 1,5–2,0 thousands of declarants) on average tripled their official salaries (by the way, a certain part of it is a salary bonus, which will allow the NPUCs management to stimulate physicians); but the salaries of the «narrow specialty» doctors, who work in the primary NPUCs have remained minuscule, and, moreover, many of these posts could be «phased out»; one of the progressive things is the emergence of private practice by a family physician-individual entrepreneur (IE), which may later extend to the secondary and tertiary health care links; as «of the end of 2019, only over 28 million people (at their own discretion, not on a territorial basis) had chosen their doctor» [6], therefore, the rest of the population will have significant restrictions on receiving free primary and secondary health care;

- reforming the secondary and tertiary links – from 2020 NPUCs will receive funds under contracts with NHSU on the basis of «60 % – global budget, 40 % – for the cured case (every year this proportion will change towards increasing the share of payment for the cured case)» [6]; NPUCs must fill medical data into e-Health and submit electronic reports to the NHSU on actual
medical services provided in order to receive funds on the principle of «money follows patient», according to predetermined packages of medical services (by the way, their list is still limited, and does not allow to take into account all the variety of forms of manifestation of pathology); medical services aimed at those conditions, that cause the highest death rate or significantly worsen the quality of life (treatment of acute cerebral stroke, acute myocardial infarction, assistance in childbirth and neonatal care, early diagnosis of cancer) will be paid at an increased rate, which is also justified in terms of improving the medical and social effect in the context of the limited resources of the NPUCs; at the same time, other medical branches will continue to stagnate due to limited funding; special attention should be paid to the NHSU tariff rate for the provision of health care services, which is mainly several times lower than their actual cost, due to which, patients will be either «under-treated», or forced to «cover the difference» at their own expense (the latter to some extent contradicts the declaration on «providing free basic health care»); in addition, if a patient makes a complaint about this fact to the NHSU, they may refuse to compensate the NPUC for such a clinical case at all; the latter, incidentally, also applies to medical data improperly filled into e-Health; the NHSU is trying to encourage NPUCs to improve their staff skills and logistics with higher tariffs, although the above seems problematic without attracting investment, and, nowadays, only certain segments of the health sector are attractive for investment;

– organization of hospital districts – functional associations of NPUCs (first of all, support multi-profile hospitals), which patients can reach by road within 60 minutes, will allow to regulate the provision of medical services to some extent; however, for people living in rural areas (especially those in remote areas) (especially given the mainly terrible condition of roads, lack of regular bus routes and their own vehicles), this means, that access to health services is reduced (with fatal consequences in emergency cases);

– changing the approach to appointing a NPUC leader is a situation, where a NPUC can be headed by a person without medical education, but who has a manager’s education, on the one hand, is a classic example of crisis management, and on the other hand, is a «time bomb», because such a person is likely to simply not know the nuances of medicine (and, as we know, they are the «cause of loud successes and failures»); in addition, this area, unlike «classical business», is dominated by social, rather, than economic function; however, this is not yet a major problem, as most current NPUCs managers already have or are in the process of having a manager’s education;

– formation of the development strategy of NPUCs – the head of a NPUC elected on a competitive basis must propose not only a business plan for its development, but also find investors for its implementation; however, in the current situation, a limited list of segments of the medical services market is attractive for investment, while others look doomed.

Of course, the above list of positive and negative effects of medical reform in Ukraine is not exhaustive, and, therefore, it can be continued. However, it is needed not for criticism (it is common knowledge, that «only he who makes no mistakes, makes nothing»), but, to find ways to address existing and possible problems in this area, including, by the improvement of the cooperation between scientists and healthcare practitioners, representatives of public administration, local government, business, public organizations and the general public.

Taking into account the abovementioned realities, it is necessary to propose conceptual approaches to the improvement of public management of health sector development:

1. The medical reform is not an end in itself, but a way of public management of health development; other related processes should be taken into account:

– globalization – «erasure of borders» in the movement not only of capital, qualified personnel, technologies, material and technical and other resources, but also of pathologies, to which neither domestic medicine, nor the immunity of our compatriots are yet ready; the potential for the development of medical tourism should be noted separately;

– scientific and technological progress – emergence of new technologies, equipment, tools, materials, medicines, etc., the proper use of which can help to combat existing and new pathologies; a significant increase in the importance of service and capital intensity, especially of highly specialized medical services;

– urbanization – the above processes, combined with the existing disproportions in the development of territories, are likely to only accelerate the concentration of the population in metropolises with the simultaneous decline/elimination of those settlements, where there are problems with income generation and the existing stagnation of social infrastructure facilities;

– demographic crisis – the decline in the share of able-bodied population against the background of large-scale labor migration makes it even more difficult for the state to fulfill its constitutionally established social functions; the aging of the nation aggravates the problem of increasing share of diseases inherent in old age and the need to combine medical and social services;

– macroeconomic situation – mass poverty, a wide income gap for certain segments of the population, poorly managed inflation and the national currency rate, industrial decline, a large-scale shadow economy and other factors make it almost impossible to develop medical insurance, and also secured Ukraine's status as a «Third World country», in which only speculative capital «enters» (as it is known, for the realization of economic, not social purposes), so it is worth expecting the implementation of mainly «niche» projects (in particular, opening of narrow or low-profile representative offices of well-known foreign clinics);

– incomplete distribution of property rights in business – there is still a high probability (as it used to be in industry, agriculture, etc.), that the majority of NPUCs (including
due to inability to compensate for the loss of budget financing with their own revenues) may be on the verge of bankruptcy; under such conditions, liquidation (by the way, this option is most likely for depressed territories) or reorganization (on the basis of public-private partnership and in accordance with the abovementioned business plan of the NPUCs) is likely to happen; the investor will «enter» a NPUC and «take control» of its most profitable segments; specialization – its deepening (based on the existing advantages) is one of the real options for the first survival and later development of NPUCs.

2. The Ministry of Health and NHSU should develop, approve, and, then consistently implement the «Strategy of Healthcare Reform in Ukraine», which should contain clear goals, terms and means of their achievement, distribution of powers, incentives and responsibility of performers; organically combine administrative, economic, organizational, legal and socio-psychological methods of public influence on the participants of this process.

3. The key to the further development of Ukraine’s healthcare sector should be the comprehensive use of public management tools, aimed at the following:
- ensuring macroeconomic stability, increasing real incomes of the population and protecting economic entities to increase the investment attractiveness of NPUCs;
- development of public-private partnership, an important component of which is co-financing by the state, local authorities and business representatives of investment projects aimed at developing NPUCs and increasing the availability of quality of medical services;
- regulation of NPUCs activities to protect the interests of both their personnel (prevention of artificial bankruptcy, violations of labor laws) and patients (quality control of medical services and price monitoring);
- segmentation of medical services according to age, pathology and solvency of patients;
- facilitating the merger of NPUCs and/or deepening their specialization, which will be accompanied by the concentration of medical personnel and equipment on specific locations;
- educating NPUC managers and medical staff, as well as the public about the features and consequences of the medical reform; special attention should be paid to those territories, where the NPUCs are likely to be shut down or eliminated (in particular, «compensatory» measures within their hospital district should be envisaged: providing the public with routes and means of transport to the multidisciplinary referral hospital, facilitating the employment of medical staff, supporting IE doctors);
- the completion of the procedure of concluding declarations between primary doctors and patients as a guarantee of their access to free primary health care;
- a substantial (in accordance with the actual number of medical services provided) increase in the salaries of doctors of «narrow specialization» of all levels, will make it possible to secure the NPUCs outflow of qualified personnel and maintain high motivation for professional growth;
- expanding the list of medical service packages and bringing the size of the NHSU tariff for their provision in line with real costs;
- informing all the participants of this process, that the share of private medicine will increase every year (including through the «arrival» of foreign clinics), and a clearly regulated limited list of free medical services will be available.

CONCLUSIONS
At present, nobody needs to be persuaded in the necessity of the medical reform in Ukraine. The reform calls for the formation of the «vector» of changes, establishment of the National Health Service of Ukraine (NHSU), reorganization of medical institutions into non-profit public utility companies (NPUCs), as well as the autonomisation and commercialization of them, and also inducement to making agreements with NHSU, reforming first the primary link, and later the secondary and the tertiary ones, organization of hospital districts etc. Nevertheless, a great number of questions remains concerning on-going and probable medical, social, and economical effects, caused by misuse of the methods of public management of healthcare development. The medical reform is not a goal in itself, but when implementing the reform, it is necessary to consider other related processes, such as globalization, technological progress, urbanization, demographic crisis, macro-economic situation, unfinished distribution of the rights of property in business, specialization. Now, there is «The Strategy of the Reformation of Healthcare of Ukraine». And the proper use of the complex of methods of public administration, directed both at balanced growth of the national health field, and prevention of negative influence of related sectors and fields of national economy guarantees its successful realization.

The continuation of scientific researches on this issue will contribute to the further development of the national health sector, including by improving the public management of this component of the national economy.

REFERENCES


8. Ruden V.V. An innovative technology «The audit of health status of individuals/community» at the primary level of medical care as a basis in the process of transformation of the medical branch to economic methods of population health management under the conditions of decentralization in Ukraine. AML. 2017; 23:65–71. DOI: https://doi.org/10.25040/aml2017.03.065.


ORCID and contributionship:
Oleksandr A. Melnychenko: 0000-0001-5021-9025 A, B, C, D, E, F
Ganna O. Chovpan: 0000-0002-3619-2927 A, B, D, E, F
Nataliya M. Udovychenko: 0000-0002-5431-3016 A, D, E, F
Georgii R. Muratov: 0000-0002-5865-3747 A, D, E, F
Zhanna D. Kravchenko: 0000-0003-1692-4665 A, B, E, F
Elena H. Rogova: 0000-0003-4482-0847 A, B, E, F
Zhanna M. Kutuzyan: 0000-0002-1729-6325 A, B, E, F

Conflict of interest:
The Authors declare no conflict of interest.

CORRESPONDING AUTHOR
Oleksandr A. Melnychenko
Kharkiv national medical university
4 Nauki av., 61022 Kharkiv, Ukraine
tel: +380501627350
e-mail: mel_doc@ukr.net
Received: 14.12.2020
Accepted: 29.03.2021

A – Work concept and design, B – Data collection and analysis, C – Responsibility for statistical analysis, D – Writing the article, E – Critical review, F – Final approval of the article