

## **INTEGRATIVE APPROACH TO THE ORGANIZATION OF SMART HEALTHY AGE- FRIENDLY ENVIRONMENTS BY THE DOCTOR OF GENERAL PRACTICE**

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### **ABSTRACT**

**Attention to the problem of integration in healthcare has arisen in Belarus as well as in many countries in the last 10-15 years. Life expectancy has increased by about 10 years over the past 50 years for both men and women. These changes create challenges and opportunities for us. Aging is causing widespread debate, leading to the development of new approaches in healthcare. The growing level of fragmentation of medical care for elderly necessitates a solution to this problem due to the emerging trend towards narrow specialization of help. An integrative approach involves the analysis of a holistic health care system, which includes several levels. Thus, various options of management models to control one's health are the basis for creating an integrated smart healthy environment for the elderly. It is required to develop an algorithm for ensuring coordination and continuity of medical care for the elderly, taking into account their needs and local conditions (demography, morbidity and mortality structure, equipment of medical institutions with equipment and personnel, etc.), the creation of a unified educational, informational, organizational and technical system of smart healthy age-friendly environment that will provide older patients with access to relevant knowledge and skills to control their health status, as well as allow to establish information exchange of data between the patient and a team of specialists from various healthcare organizations. At the same time, the leading role in the integration processes is played by the organizations of primary health care for the elderly, which are the organizational and coordinating links in interaction with organizations that provide specialized medical and social care. If we want to ensure a fair treatment between generations and a good standard of living for all citizens, then there is a need for urgent action to implement a Smart Healthy Age-friendly Environments.**

**KEYWORDS:** Healthcare organization, public health, elderly people, general practitioner

### **INTRODUCTION**

**Attention to the problem of integration in healthcare has arisen in Belarus as well as in many countries in the last 10-15 years. Life expectancy has increased by about 10 years over the past 50 years for both men and women. These changes create challenges and opportunities for us. Aging is causing widespread debate, leading to the development of new approaches in healthcare. The growing level of fragmentation of medical care for elderly necessitates a solution to this problem due to the emerging trend towards narrow specialization of help. An**

**integrative approach involves the analysis of a holistic health care system, which includes several levels.**

**1. Macro level / level of strategic management includes prognosis, planning, development of long-term goals, ensuring their achievement. The goals of managing the national health care system are to improve and preserve the "human capital" of elderly, the state of health of the population in the conditions of financial constraints for the efficient use of resources.**

**2. Meso level / level of tactical management organizes the design, optimal distribution of resources in accordance with the chosen strategy, organization, analysis and control of the achievement of results.**

**3. Micro level / operational level determines an efficient performance of production processes in compliance with technology compliance, optimal use of resources, accounting, analysis and control. The goals of managing the health care organization are to manage the professional and financial activities of the institution to solve the assigned tasks in the provision of medical care to the elderly, to identify deviations that arise when the goal is achieved, with the subsequent admission [1].**

**At the heart of the integrated health care delivery system in Belarus is the general practitioner who is responsible for care for elderly. Growing healthcare needs define the necessity to have a smart healthy age-friendly environment. Learning and active aging should be started at a young age and continued into mature age.**

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**COST is a funding agency for research and innovation networks. COST Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.**

**The aim of our research was to develop an integrative approach for organizing a smart healthy age-friendly environment by a general practitioner.**

**Currently, medical care for the elderly is carried out by multidisciplinary group of specialists, in which the main role is played by a team - a general practitioner responsible for ensuring the continuity of treatment and regular contact with sick patients, a doctor's assistant, and a general nurse. The whole team will be able to distribute functions and help an elderly patient. At the same time, conversion is made from episodic assistance to constant monitoring of the elderly patient's condition. Creation of properly trained and motivated personnel who fully understand the value of joint activities is the main in the organization of integrated health care. At the same time, with general practitioners, an important role in helping the elderly in primary care is assigned to nurses, physician assistants, psychologists, and social workers.**

**An important element of integrated care is good coordination between hospitals and aftercare organizations. This is a key principle behind primary care strategies for noncommunicable diseases. At the primary care level, we are working with mechanisms that help to effect on the risk factors and control major noncommunicable diseases. The doctor and his team must have sufficient competence, communication skills in order to work with elderly patients in a preventive direction. Their main tasks will be: carrying out preventive work aimed at identifying risk factors for the of diseases and its prevention; teaching elderly patients to monitor their health status, get advice and recommendations for ensuring their healthy lifestyle from specialists; conducting motivational counseling on risk factors of the**

noncommunicable diseases and adherence to treatment; the purpose of medical research, analysis of their results to establish a diagnosis and the nature of the course of the disease; providing patients with the necessary medical care; carrying out rehabilitation measures. However, for a positive result in this activity, it is important help of the patient by himself but not only the contribution of the team of specialists.

Many older people continue active lives and make valuable contributions to society and the economy. Nowadays, people are living longer, and the demand for health care and long-term treatment is growing. Ensuring the availability and quality of care will continue to increase. The education of the elderly in methods of controlling their condition is becoming a priority for the team of the general practitioner.

The timing of working hours confirmed the reasons for the loss of time by the elderly patient. This is the wrong logistics: the lack of an optimal route for a person (for carrying out the entire range of necessary medical measures) and continuity between services, a low level of its management. Decision support assumes common clinical standards and recommendations for integrated systems, training of doctors goes with an emphasis on abidance to the order of patient management.

One of the reasons for the increased attention to primary health care for the elderly and the need to improve it, is the adaptation of the health care system to modern demographic and epidemiological conditions, in particular, such as an aging of the population and an increase in the number of non-communicable diseases along with infectious diseases. With the modern availability of the information patients themselves insist on certain treatment, and the task of medical worker is to understand the patient's wishes, and then patiently and competently, based on the facts, agree with him with the optimal way of solving his health problem. Nowadays, marketing of technologies is attracting more patients and the number of older people with multiple chronic conditions is increasing, there is an urgent need for well-organized primary medical sanitary health care that is more people-centered and more involving elderly patients in the care processes. The benefits of nurses and physician assistants are also increasingly being emphasized. The ability to communicate with the patient and their family should not be underestimated. Home visits by a physician assistant are associated with training, monitoring the patient's general condition and fulfilling medical prescriptions, as well as interaction with social workers who serve the elderly at home. In addition, thanks to this, work is being carried out to form a healthy lifestyle in the family and prevent diseases.

This allows not only to increase the availability of medical care, but also to free up time for the development of the preventive component of health care. Thus, the functions of a doctor's assistant, in terms of their qualifications and activities, do not replace a doctor, but allow them to rationally distribute responsibilities to improve the quality of medical care for the elderly population.

**Conclusions.** Thus, various options of management models to control one`s health are the basis for creating an integrated smart healthy environment for the elderly. It is required to develop an algorithm for ensuring coordination and continuity of medical care for the elderly, taking into account their needs and local conditions (demography, morbidity and mortality structure, equipment of medical institutions with equipment and personnel, etc.), the creation of a unified educational, informational, organizational and technical system of smart healthy age-friendly environment that will provide older patients with access to relevant knowledge and skills to control their health status, as well as allow to establish information exchange of data between the patient and a team of specialists from various healthcare organizations. At the same time, the leading role in the integration processes is played by

**the organizations of primary health care for the elderly, which are the organizational and coordinating links in interaction with organizations that provide specialized medical and social care.**

**If we want to ensure a fair treatment between generations and a good standard of living for all citizens, then there is a need for urgent action to implement a Smart Healthy Age-friendly Environments.**

## **REFERENCES**

**N. V. Krivenko, P. V. Elfimov, N. L. Kuznetsova. Chapter “Ways of formation of the system of sustainable development of municipal health care on the regional level” in monograph “Humanitarian problems of today: individual and society” //Under general editorship of S.S. Chernov. Book 3. Center for Scientific Co-operation Development – Publishing House “SIBPRINT”. 2008. (Russian Index of Scientific Quotation) ISBN 978-5-94301-048-4. P.300-307.358p.**

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