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## FACTORS AFFECTING FORMATION OF SPACE PLANNING SOLUTIONS AS PART OF RECONSTRUCTION OF MULTIFUNCTIONAL MEDICAL FACILITIES

The article deals with the problems that accompany reconstruction of multifunctional medical facilities (MMF). This subject is highly relevant in Russia, as the majority of these institutions need modernization and refurbishment. There is a need to develop an optimal algorithm of reconstruction design development and to identify the factors that affect the formation of space-planning solutions associated with the reconstruction.

The first step of the algorithm may be the analysis of the current condition of the facility, or the medical technological survey (MTS). Its objective is to obtain the data concerning the structure of the facility: its realistic unit structure, its occupied work areas, specialization of its units, exact names and location of all rooms, regular staffing. The second step is the formation of medical technological objectives (MTO). At this step, the post-reconstruction structure of the medical facility may be determined, including the identification of the main functional zones, qualitative and quantitative characteristics and types of basic technological and engineering items of equipment to be installed there. An integral part of the MTO is the programme of useful floor area of the MMF. This document is to enlist all premises of the facility, including their normative dimensions. This programme may be used to find out the preliminary total area of the construction facility. The next step is formation of space-planning solutions. As an example, the authors describe the reconstruction of the N.N. Blokhin Cancer Research Centre in Moscow. Based on the research performed by the authors, the following factors affecting the formation of space planning solutions are identified:

1. Deficiency of useful space in the existing functional units of the MMF, determined on the basis of the MTO.

2. Need for the future development of the MMF identified jointly with the management of the health facility and based on the analysis of the situation and identification of top-priority development objectives.

3. Functional zoning of the MMF.

4. Size, shape and topography of the territory to be restructured.

5. Alternative urban planning solutions for consideration.

6. Regulatory requirements applicable to the design of medical facilities.

Key words: reconstruction, medicine, deficiency of useful space, modernization, design algorithm.

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For citation: Tesler N.D., Malykha G.G., Petrunin V.V. Faktory, vliyayushchie na formirovanie ob"emno-planirovochnykh resheniy pri rekonstruktsii mnogofunktsional'nykh meditsinskikh ob"ektov [Factors Affecting Formation of Space Planning Solutions as Part of Reconstruction of Multifunctional Medical Facilities]. *Vestnik MGSU* [Proceedings of Moscow State University of Civil Engineering]. 2012, no. 9, pp. 48–54.