Abstract

Projects implemented in the healthcare sector and related to clinical trials are of great importance for achieving civilization progress and sustainable socio-economic development effectively. Most of the literature on this type of research is related to medicine, and there is a lack of scientific studies devoted to considerations in the management and quality sciences. Even greater scarcity of scientific studies is connected to the rapidly growing field of non-commercial clinical trials (NCT) observed in many countries. There are no adequate methods and models to support efficient solving of planning problems in the management of this type of project, and in particular for planning their flow. Therefore, the dissertation proposes a method of planning the flow of NCT projects – hereinafter referred to as the Adaptive Planning Method (APM).

The main hypothesis is as follows: the use of APM, applying the agile approach, stochastic networks and a logical matrix, improves the planning of NCT project flow in relation to universal planning methods. It was assumed that APM consists of seven stages: clinical analysis of patients and identification of problems, formulation of goals and definition of project outputs, overall project planning (preparation of a preliminary version of the design logic matrix), an adaptive and agile plan detailing, stochastic network analysis, development of a detailed schedule and the preparation of a comprehensive project plan.

The following research methods and techniques were used: literature research and bibliometric analysis, participant observation, focus interviews, comparative analysis, morphological analysis method, praxeological analysis, case study and simulation. The APM verification research was carried out using empirical data from a research institute and a medical university. It has been shown that the proposed method improves the performance of the flow planning process of NCT projects, measured by their duration.

Keywords: project management, project flow planning, non-commercial clinical trial projects, research and development, Adaptive Planning Method