



The strategy of coordination of indicators assimilation of knowledge in the doctor's Portfolio.

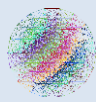
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Keywords. doctor's **Portfolio**, continuous professional development of doctors, intelligent algorithms of information analysis, Big Data, coreference of medical information, **Portfolio**, cognitive structures.

Abstract. Considered issues of creating a **Portfolio** of doctors during continuous professional development. Special attention is paid to the evaluation of the information being analyzed. It is shown that in order to ensure an adequate mechanism for evaluating multidimensional information in the **Doctors' Portfolio**, it is appropriate to use ensembles of algorithms for intellectual analysis of Big Data.

The aim of this work is to substantiate the prerequisites for the creation of a new type of **Portfolio** by using the methods of intellectual analysis of multidimensional information, as well as the formation of models and cognitive structures, which should become a central event in person-oriented active learning. Today, the problems of improving the accounting mechanism and assessing the quality of acquired knowledge in the system of continuous medical education are constantly being discussed. Among the large number of mechanisms for such assessment, the application of **Electronic Portfolio** technology is more relevant both for the formalization of knowledge and competences, their monitoring, and for the integral assessment of the quality of education in the system of continuous medical education.



The number of characteristics that reliably describe the training and work of a doctor is counted in the hundreds. But in today's world, working with Big Data is the norm. For this, many new powerful methods of information processing - methods of intelligent data analysis - have appeared. Taking into account that currently none of the algorithms can provide a valid assessment of the professional growth of a specialist, we suggest the use of ensembles of approaches (a combination of several algorithms that learn at the same time and correct each other's mistakes).

We consider the most important for inclusion in the ensemble: the algorithm for determining priorities and the algorithm for determining the semantic and content equivalence of various thematic improvement courses of specialists.

Taking into account that the **Portfolio** is a classic information technology, we used the SLA (Service Level Agreement) strategy.

The SLA system of post-graduate training of doctors and pharmacists consists of 4 parts: a

glossary, a brief description of the systems, the roles of the participants in the process and the results of the technological learning process.

The integration of medical information systems into a single space involves ensuring the co-reference of clinical information related to the comparison of data obtained from different sources.

The problem of co-referentiality is solved within the scientific direction by the development of artificial intelligence and computer linguistics. The essence of the problem lies in the difficulty of determining the semantic compatibility of various text structures during computer processing of electronic records. To solve this problem, we used ontological models and matching rules.

The cognitive load is reduced if taxonomic techniques are used, which organize the terms in the controlled dictionary into a hierarchy. The main purpose of taxonomy is to create an ontology structure for human understanding and integration of different sources.

Thus, decision-making in the analysis of preliminary information for inclusion in the **Portfolio** can be presented in the form of an algorithm (Fig. 1). Among all the procedures that make up the entire decision - making process, the most attention should be paid to the procedures for extracting important information and

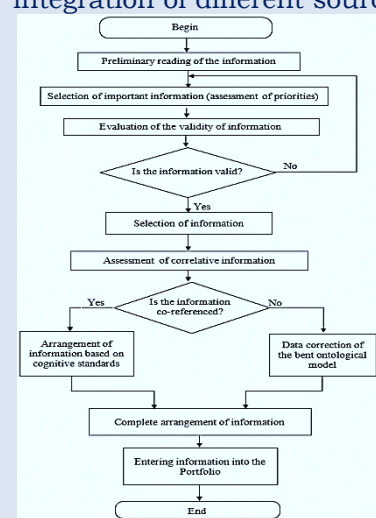


Figure. 1 Decision-making algorithm in the analysis of preliminary information for inclusion in the Portfolio

evaluating its correlativeness, as a source of possible errors.

Conclusions. 1. The entry of information into the **Portfolio** is preceded by the determination of the semantic equivalence of the available information regarding the acquisition and assimilation of knowledge. 2. It is proposed to use an ensemble of approaches in the analysis and arrangement of information in the **Portfolio** - a combination of several algorithms that function simultaneously and provide an opportunity to correct possible errors. 3. The proposed decision-making algorithm in the analysis of preliminary information to the **Portfolio**.