THE ARCHITECTURE OF MEDICAL DIAGNOSTIC SYSTEMS IN DENTISTRY

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The intellectual medical diagnosis system is described in the article. The informative model of such system is projected. Goals, objectives and the scope of such a system are defined.

The application "DentExp" is designed for either dentists or patients to help them make decisions about the possible disease and conclude the diagnosis based on the patient's complaints.

The main objective of the dental clinic is to provide the quality care and timely detection of diseases of the teeth. The process of the diagnosis is one of the most important tasks and the processes of the dental clinic, as results of diagnostics, determine the direction and the treatments in the future. Given the trends in the mobile phone market, the PS "DentExp" was developed under the operating system iOS 7.0 and later (since version 6.1 and earlier were only 15% of the smart phones). Nowadays there is the system Rapid like the TxDent, but it does not support mobile platforms and does not include additional inspections. The PS "DentExp" allows the dentist to establish the diagnosis based on the patient's complaints.

The information is processed, represented as the Boolean values (presence / absence of complaints).

The inference is based on the production rules, which at the entrance will receive a set of Boolean values of all symptoms, and the output characteristics give a percentage of each probable disease. The source input information system is the set of the interface elements called triggers that are able to have the value true or false, depending on the user's selection.

The characteristic feature of the program is the possibility to be used by the dentist to help determine the diagnosis and the average patient to acquire knowledge about their disease.

Keywords – rules, dentistry, intelligence system.