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Information technology in medicine and public health sphere

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The modern period of development of society characterized by a strong influence on him of Information Technology, who came in all spheres of human activity, ensure dissemination of information flows in society, creating a global information space. They quickly become a vital incentive to develop not only the global economy but also other spheres of human activity. Leaders in the field of implementation of computer technology is the architecture (architectural design), engineering, education, banking and late, and medicine. This medicine, including alternative, becoming today a completely new features. One of the ways of building health information systems is a medical information system (MIS). They are equipped with various medical institutions and units. The structure of such systems include automated registry, formalized hospital records attached contingent, accounting and analysis of attendance, sickness, checkups, health center, temporary disability, vaccinations, fluorography research, planning and calculation of doctors, forming all reporting and statistical documentation on the activities of the clinic, hospital and its departments. MIS provides personnel management, financial, material and technical resources, including medicines, medical instruments and equipment. The widespread introduction of MIS in Ukraine health system is important for the effective management of health care setting, improving the quality and objectivity of the diagnosis. MIS system components in a medical institution (hereinafter – the institution) and its technical support, implemented a set of measures regarding the unauthorized and uncontrolled introduction, modification, deletion, copying, distributing data. A wide range of functionally oriented applications MIS allows to create a variety of information network focused on the decision of all spectrum management tasks of medical and health care process in the medical facility. In health care use computer technology to process financial records. This reduces the duration of the financial operations and reduced the number of errors. Electronic medical history provides operational accounting costs associated with diagnostic and therapeutic procedures using medical supplies and materials, payment of medical services personnel, etc., which is crucial for health insurance. Medical Information System (MIS) – a tool for the definition and planning of all resources of medical institutions that are necessary for the conduct of medical diagnostic, administrative, economic, financial, service activities and accounting in providing medical services. The main advantages of MIS implementation in a medical facility are "Everything at a glance" – is the only database that makes it possible to keep operating beside all resources (material, human, financial). The result is a planning, efficiency analysis and optimization of available resources. Increasing the capacity of medical institutions with the same resources (through the introduction process optimization, search, and analyze summary data faster interaction between departments, planning the workload of doctors, offices, equipment). Improving the quality of patient care (reduced waiting time by planning increases effective patient stay in the hospital) and, consequently, increase patient satisfaction. The use of electronic medical protocols, the possibility of calculating the effectiveness of treatment, reducing the likelihood of medical errors increases the quality of medical services. The ability to quickly forming any reports to make informed management decisions (the amount of services provided, the workload of doctors and surgeries, patients statistics on diagnoses, age, gender, etc.). Effective management of inventory of medicines and consumables by automating the process of cancellation of orders, and maintain an optimal balance. Increased security and privacy policies through the introduction of access to different data and login, password or fingerprint. MIS enables the manager to keep abreast of current affairs clinic. One of the major features of the system is the ability to keep records of financial flows. Modern MIS provide income to track with different levels of detail: clinics in general, departments, doctors and services rendered for any period. For this program has a reporting system that can see the dynamics of income that provide some separation from some services, identifying seasonal or other fluctuations. For the head of HR Management and an important element of motivation is the possibility of payroll and bonuses based on the performance of the employee. Using MIC provides accountability required parameters and automatically calculate the amounts of payments for the specified algorithm. Using MIS makes it possible to automatically register staff (eg, fingerprint) at the beginning of the day and eliminates ethical issues and supervisory staff relations department (s) that is likely to occur under normal conditions. The information system is a reliable tool for strategic decision making. Database event a period is a quantitative and qualitative basis for the conclusions that are essential for developing long-term plans of the hospital. For effective marketing campaign, the clear positioning of the institution, reasonable pricing policy report required for the period, which will provide manager such information as age, location, diagnosis and other parameters that characterize patients. Thanks to them, you can better justify the campaign and further marketing strategy establishment. The method of building integrated systems based on object-oriented approach should be used in health care.

List of sources and literature

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Примітка. У статтях та тезах збережено орфографію, пунктуацію та стилістику авторів.