

عنوان مقاله:

Designing and Evaluating a Decision Support System on Childhood Leukemia to Improve Medication Management

محل انتشار:

مجله فناوری اطلاعات کاربردی در حوزه سلامت, دوره 1, شماره 1 (سال: 1399)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Aim: To design, develop, and evaluate a clinical decision support system (CDSS) to decrease the adverse effects of treatment in Childhood Leukemia. Method: To achieve high accuracy, a knowledge base CDSS was designed based on the viewpoints provided by experts and clinical references. The system has the capability of medical report documentation, drug prescription, dosage determination, and displaying patients' medical history. It is also able to eliminate the problems caused by prescription and drug dosage errors by considering the patient's status. Results: By documenting the patients' medical report, the system can provide comprehensive information and precise recommendations about the future readmission and drug dosage accuracy. The system achieved 94.5% sensitivity, 93% accuracy, and 80% specificity in the evaluation phase. Conclusion: Application of such systems in the process of prescribing drugs can improve the quality of patient care by reducing the probability of pharmaceutical errors.

كلمات كليدى:

Leukemia, Medication, Decision support system, Pediatrics

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