ARDENSUITE to Enhance Epic

With the software included in our ARDENSUITE, Medexter offers tools for the representation and processing of medical knowledge based on a standardized syntax. The Arden Syntax is a Health Level Seven (HL7) International standard and approved by the American National Standards Institute (ANSI).

Heart Failure Readmission Risk Score Calculation

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Medexter's ARDENSUITE is in use at the University of Colorado Health (UCHealth) System in Colorado/U.S.A. for the calculation of heart failure readmission risk scores (HFRRSs). The purpose of these HFRRSs is to inform hospital physicians and heart failure nurse practitioners in case of a patient's increased risk for readmission due to heart failure. In this way, actions can be taken to reduce this risk before the patient's discharge. Medical knowledge using the Arden Syntax is represented in medical logic modules (MLMs). In Colorado, the entire calculation of the HFRRS is contained within one primary MLM and two subMLMs. These MLMs contain more than 30 data items used for the risk score calculation, including lab data (such as CPK, troponin I, INR), vital signs (such as temperature and pulse), demographics, number of missed clinic visits, and others.

The University of Colorado Health Hospitals

The UCHealth System comprises five hospitals and approximately 400 clinics. They all use Epic as electronic medical record system, into which Medexter's ARDENSUITE software components have been successfully integrated. For this purpose, UCHealth purchased an enterprise-wide ARDENSUITE software license for patient care.

Integration into Epic

In the production environment, one ARDENSUITE server is handling incoming MLM calls. The results are sent back and displayed in the Epic GUI. In the case of the HFRRS calculation, an email is additionally sent to the nurse practitioners responsible for the patient. The effective implementation of the HFRRS MLMs led to demand for further approximately 50 clinical applications of the ARDENSUITE at UCHealth. Additional MLMs are currently being developed, for example to classify catheter-associated urinary tract infections (CAUTI) or to measure laboratory-based acute physiology scores (LAPS), comorbidity point scores (COPS), and others.

It's highly flexible and versatile structure allows the ARDENSUITE to be applied to a vast amount of medical tasks and to solve clinical problems in every medical discipline. It can be integrated into Epic, i.s.h.med, and others, connected to intensive care, laboratory, and telemedical systems as well as used with mobile apps.

For details on integrating ARDENSUITE into your clinical setting, talk to us now or contact us at **office@medexter.com**.