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HEALCLOUD

Introduction

Application of medical decision support promotes quality of medical care through enhancing prevention, diagnosis, therapy and patient safety and therefore such IT developments serve higher societal needs

Practising physicians in primary care (family medicine) and outpatient secondary care (private practitioner specialists and polyclinics) are in the need for IT-enabled medical decision support during their daily activities and clinical research curriculum to leverage their skills and their 'rapport' aimed at building and maintaining an optimal patient-doctor relationship

Especially GPs constitute to some extent a neglected medic subpopulation regarding such IT support

Next-generation medical practice management system for general and private practitioners offering

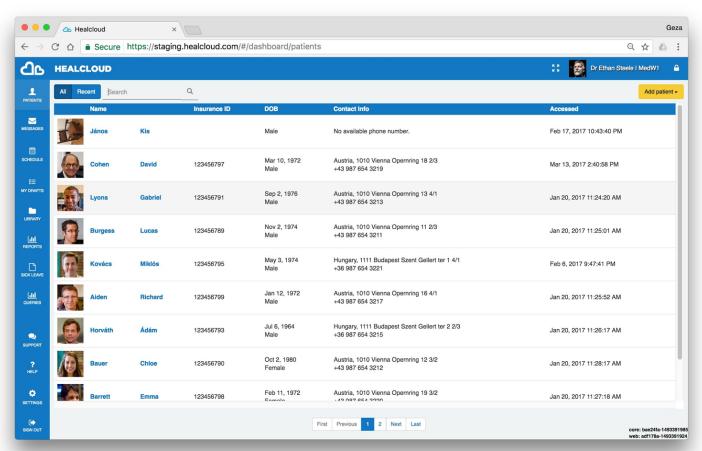
device-independent zero-installation policy

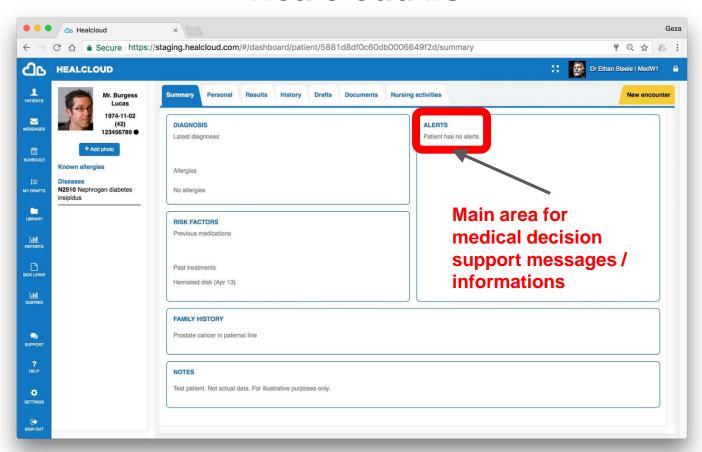
mobile usage

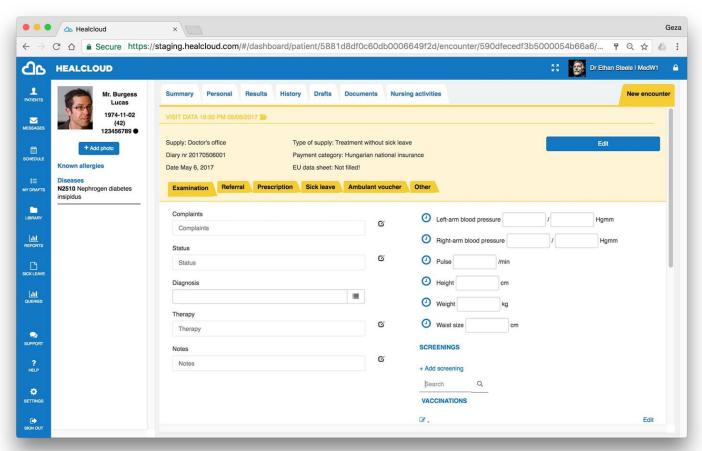
state-of-the-art UX, ergonomic UI

industry-standard data security

Free for medical users: Most probably the single one free EHR system available to include medical logic / decision support!







DDSTs are Healcloud's proprietary implementation of medical decision support

DDSTs pertain to selected "high value" therapeutic areas (TAs)

Aim of DDSTs

to help the physician forming an initial diagnosis, including risk assessment / stratification to support the caring physician - thus promoting safety and efficacy of patient care - by planning follow-up visit schedule and tracking treatment success attaining therapeutic target outcomes

Development of DDSTs occurs on two echelons:

Medical

Technical

Definition - Medical echelon:

Explain core medical concepts related to the respective TA

Feature cumulative knowledge from international guidelines

The information contained therein can be used by the Healcloud physician user community, either as a reading exercise of the complete document and/or as a context-sensitive / field-level popup help

Implementation - Technical echelon:

Translate the medical-professional text into an IT solution

Framework: Model-View-Controller

Model = Hierarchical, adaptive (dynamic) database

View = Featuring entities from the database as input sheets

Controller = Algorithms for patient / procedure flow:

medical logic (automated actions, alerts, etc.)

Combination of programming tools

Traditional: e.g. MongoDB, JavaScript, HTML5/CSS

Al: Medexter ArdenSuite

The operation of DDSTs is based on
Value metrics, extracted from HealCloud databases
captured by the doctor as input parameters,
via screen forms (input sheets) and / or
contained within core databases, e.g. in national drug
formularies

Medical logic

to stratify patients according to selected criteria (e.g. risk stratification, patient selection for clinical research)

processes for follow-up visit planning, tracking trend of treatment indicators, etc.

Rationale for selection of TAs

BioPharma *industry* indicators

Medicines in development

pipeline patterns

number of drug candidates

Sales figures

Competence of the caring *physician* in the given TA (N.B. primary care, outpatient secondary care)

Patient *population* considerations

Epidemiology

Availability and accessibility of patients in primary or private secondary care (specialist outpatient) segments

High-impact TAs

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Diabetology
Cardio- and cerebrovascular medicine
    Hypertension
    Myocardial infarction
    Stroke
Lipidology
Respiratory system
    Chronic obstructive pulmonary diseases (COPD)
   Asthma bronchiale
Algiatry: Pain management (oncological + non-oncological)
Autoimmune diseases
    Rheumatoid arthritis (RA)
   Inflammatory bowel disease (IBD): Crohn's disease + Colitis ulcerosa
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The DTOC(Q) paradigm

Healcloud, enabled by DDSTs, allows evaluation of clinical care along the following domains:

Diagnosis

Therapy

Outcome

Cost

(Quality: Policy compliance)

Thank you very much for your kind attention!

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