



Better Task Planning

INTEGRATE. OPEN.
INNOVATE

Matija Kejžar

Senior Software Engineer, Better
Chief Engineer, Better Task Planning



Agenda

- INTRODUCTION
- MODELLING (DEMO)
- EXECUTING A PLAN (DEMO)
- THE MOSCOW CASE
- Q & A



Introduction to Task Planning

What is Better Task Planning?

What is OpenEHR Task Planning?

- An attempt within the OpenEHR community to do for clinical and medico-administrative processes what core OpenEHR did for clinical data.
- Specifying such processes in a familiar fashion – by the modelling of archetypes and templates by clinical modelers.
- An official OpenEHR spec: [Task Planning specification](#) [Thomas Beale et al].
- A specialized, healthcare-focused BPMN stack.

Better Task Planning

- An implementation of the OpenEHR Task Planning Specification.
- A collection of services, applications and tools that constitute a complete stack for managing medical processes.
- Seamless integration with the EHR platform (essentially an add-on for your EHR stack, (re)use data and forms stored there).

The Better Task Planning Stack



Task Engine

Implements the model, executes the process, enforces the logic & business rules and provides management and querying API.



Archetype Designer

Has a Task Planning authoring mode, can deploy plan templates to server for execution



Cockpit

A UI, administrator-facing tool for executing and tracking the process.

The External World (that Task Planning interacts with)



EHR Server

Provides clinical information to drive the process and stores clinical data, generated during process execution.



CDR Application

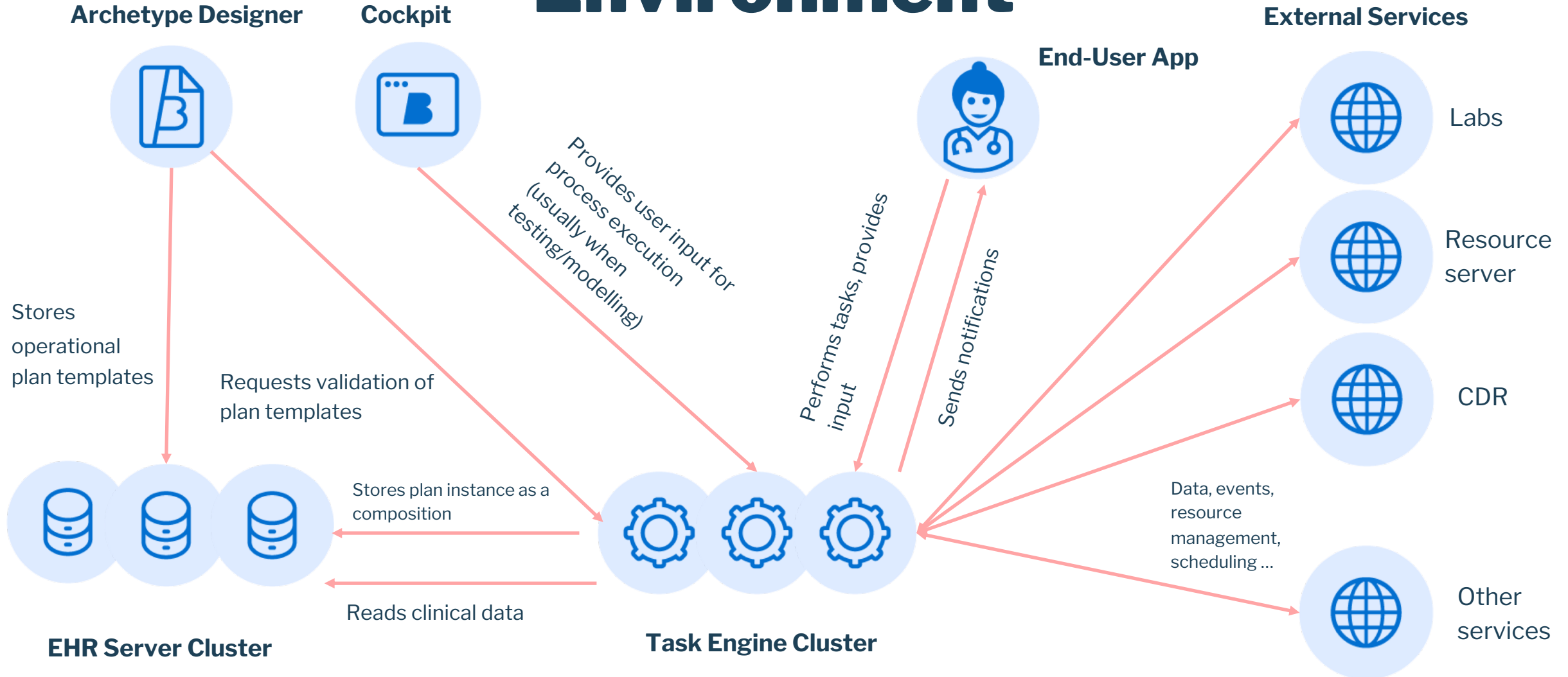
Integrates Task Planning into end-user's (clinical specialist's) daily workflow by providing UI for performer and patient task lists.



External Systems

Provide data needed to execute the process (demographics, authentication and authorization, resource availability information etc.)

A Task Planning Environment





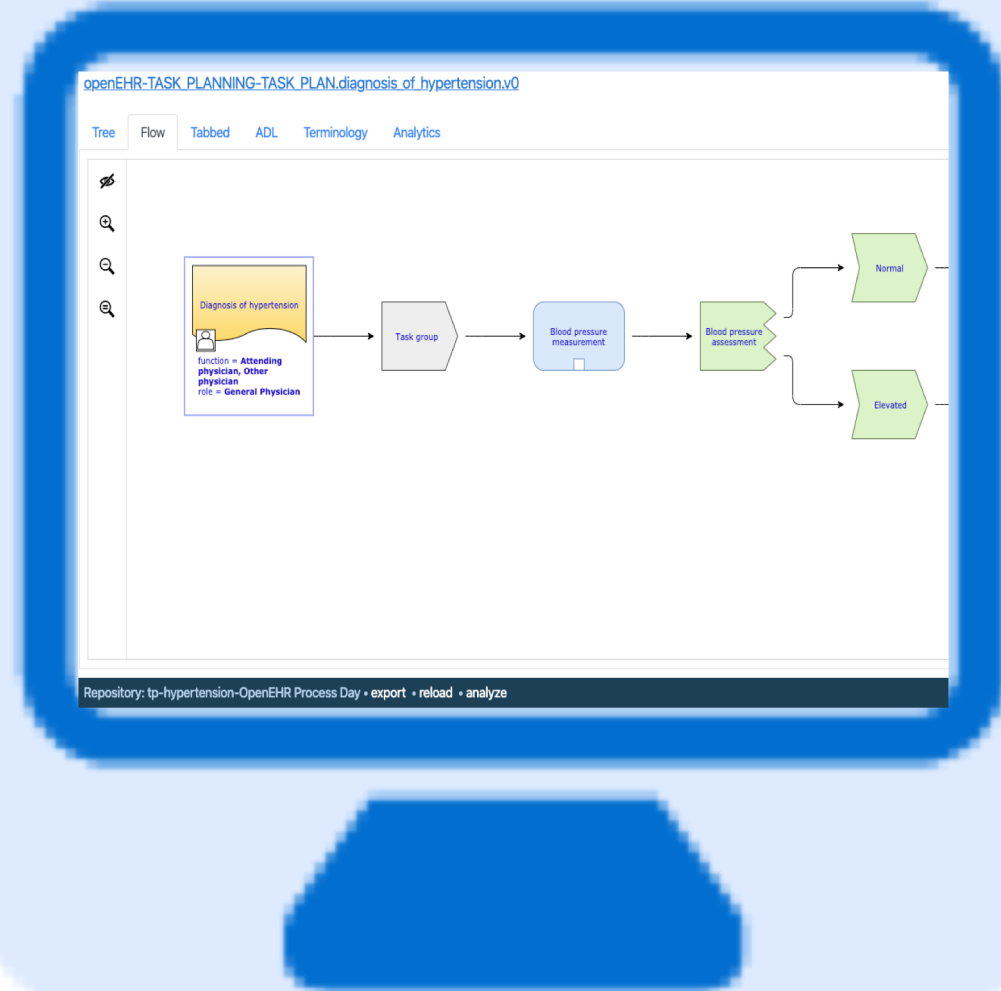
Modelling the plans

Archetypes and templates

Archetype Designer DEMO

Specifying our plan is done in the regular OpenEHR fashion – by modelling archetypes and templates.

AD has a visual Task Planning mode.





Executing the process

In Cockpit

Cockpit/ Execution DEMO

Cockpit is a tool for execution and monitoring of the Task Planning processes.

Task and process state, user input, events, resource and personnel assignment, branch selection.





The Moscow Project

Brief Overview

A Unified, City-Wide Task Planning Cluster

- EMIAS – the integrated healthcare platform, contains a single, unified (Better Platform-powered) EHR for every one of the 13 million inhabitants of the City of Moscow.
- Attempt to do the same for processes.
- A joint project of the Department of IT and the Department of Health.
- Primary customer (and investor) in the Better Platform Task Planning stack, however:
- There is nothing Moscow-specific in the TP stack! (a requirement by the customer)

Cases

- 10 cases for tender requirements – intended more to demonstrate the capabilities of the engine.
- A large, clinically accurate Diabetes Type 2 diagnosis and treatment plan – live demonstration in the presence of the Department of Health.
- First intended use case of the TP stack - outpatient monitoring of chronic diseases (diabetes, hypertension, GERD etc.)
- Committees of clinical experts to specify the plan (a fair amount of bureaucracy involved).

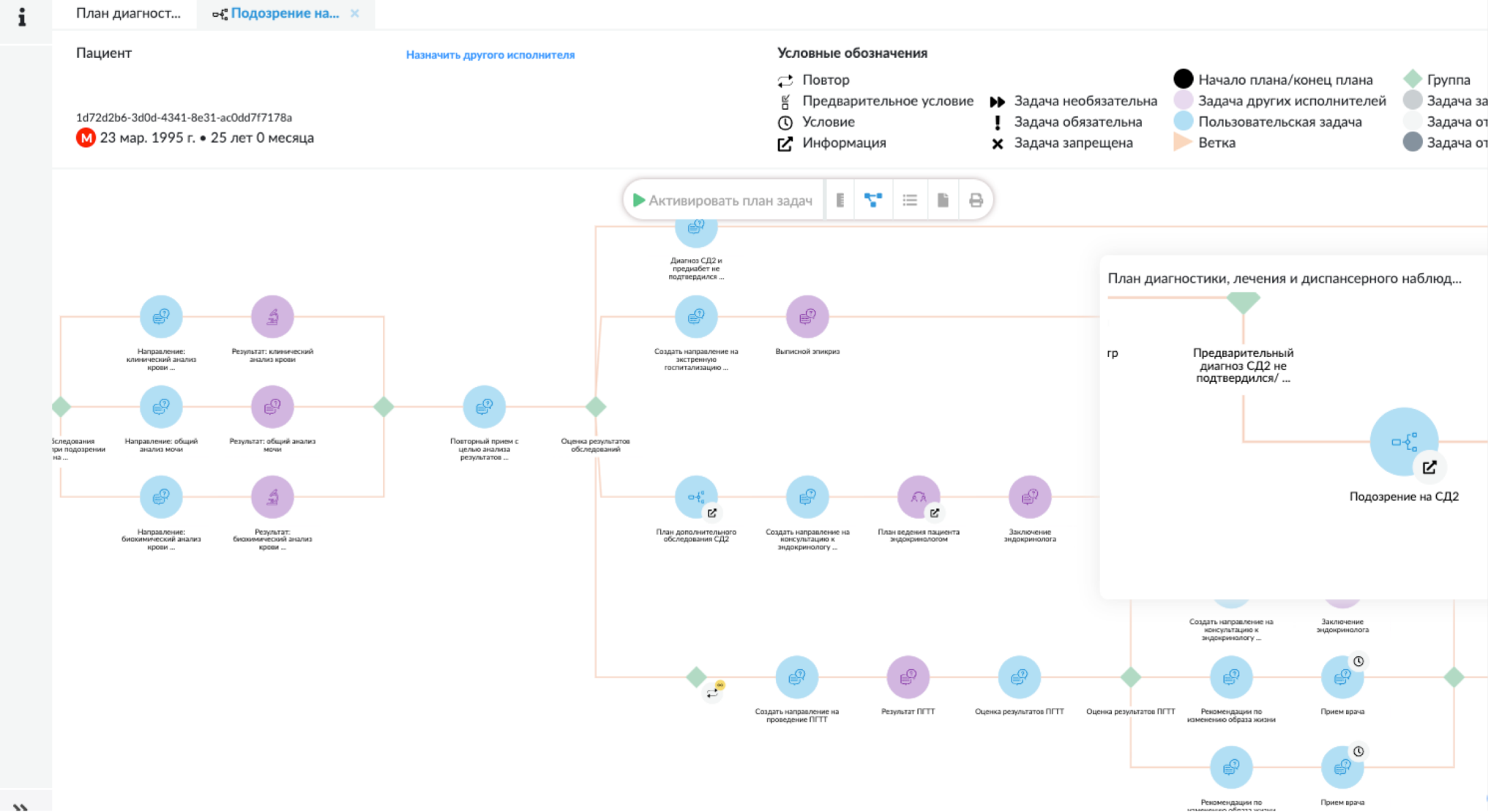
Diabetes Type II Diagnosis, Treatment and Management

- Huge plan, designed by a working group of clinical specialists of the City of Moscow – took about 3 months for the head ophthalmologist to sign off on it.
- The Work Plan is split between three different principal performers: GP, Endocrinologist and Ophthalmologist.
- 12 (!) different Task Plans, lots of passing back and forth among different performers.
- Plan repeats every 3 months for the duration of the patient's life – currently no exit condition except manual termination by the GP.

Diabetes Type II

Инструмент планирования медицинских задач v1.0.31 / План диагностики, лечения и диспансерного наблюдения пациента с СД2

Русский





Q & A

Questions?



Contact

Write us at

task.planning@better.care



**Better data,
better care.**