



Interoperable Cross Border Virtual Tumor Board for Pediatric Oncologists

A project that shows the influence and importance of patient care



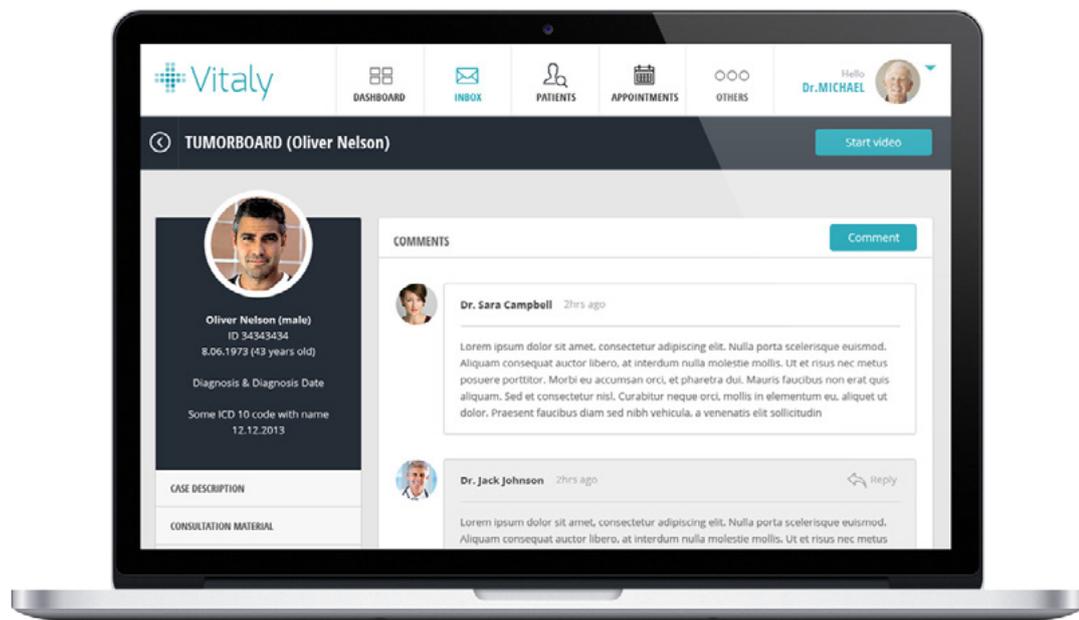
Children Cancers need fast and top-expertise response

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The Cross border Virtual Tumor Board project has been implemented as part of European Reference Network for Pediatric oncology project whose mission has been to reduce current inequalities in childhood cancer survival and healthcare capabilities in different EU Member States. The main goal of the project is to enable the European pediatric oncology community with an Interoperable cloud-based solution that supports virtual conference rooms embedded in the health portal functionalities. The solution was delivered bundling two cutting-edge products in their domains, Cisco Acano and Vitaly health portal.
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Children cancers are one of the most challenging diseases in nowadays healthcare. From one point of view they are relatively rare, so there is lack of high skilled experts for chosen cancer type in each hospital. From the other point of view, the child cancers are often developing fast, leaving almost no time for medical professionals to define and take proper response actions. There are experts spread around different hospitals having the capacity to offer adequate consultations to colleagues, but not being in the position to hold physical meetings across the Europe.

Interoperable Virtual Tumor Board (VTB) solution provided in the collaboration with Austrian Institute of Technology and Cisco Systems shows the way, how cloud-based collaboration software embedded in the health portal solution helps to:

- Interconnect medical experts from different geographic locations without having the need to physically meet;
- Increase the efficiency of consultations among medical experts providing them simultaneous access to patient's medical data when performing virtual conference meetings;
- Increase the speed and reliability of the decisions taken;
- Supporting new business models that allows rare medical experts to provide consultations and thus help children to access the appropriate care in a cost efficient way.



Who does Virtual Tumor Board enable?

IN NUMBERS

- **50 users (first phase roll-out)**
 - **3 cross border medical institutions**
 - **Following roll-outs to cover 60+ institutions**
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Daily users of the Virtual Tumor Board solution are:

- VTB requestor (A physician treating a child and an, optional data manager);
- VTB scheduler (A specialist, actual coordinator of particular board);
- VTB preparer (Any or all VTB chairpersons);
- VTB scribe (A stenographer, recorder of board meeting);
- VTB chairperson (specialist: radiologist, pathologist, oncologist, radiotherapist, surgeon, oncological nurse, case manager, etc).

International standards enable seamless data interchange

Complying with widely adopted international healthcare standards like Integrating Healthcare Enterprise (IHE - profiles) and Health Level 7 (HL7 - messages), VTB solution supports cross border expansion of reference network member hospitals while maintaining seamless data interchange. Specialized IHE profile used to support VTB specific workflow is XTb-WD and is collaborating with other standard profiles and messages within the portal like:

- HL7 V2 and V3;
- FHIR 1.0.2;
- DICOM;
- XDS.b-I;
- Other IHE profiles.

Overall process is standardized to cover the following steps of tumor board meetings:

- A specialist (VTB requestor) requests a medical board review for a patient to the VTB scheduler, who sends the request including necessary demographic, clinical and diagnostic information.
- The VTB scheduler checks if the patient meets the inclusion criteria of the board, and looks for a timeslot to schedule the patient case.
- The VTB scheduler sends the affirmation to the requester.
- All VTB chairpersons / preparators can prepare for the medical board review by viewing and examining all the relevant medical information.
- At the medical board review meeting, all VTB chairpersons / preparators discuss the case.
- A VTB scribe / report writer writes down the recommendations of the board.

BENEFITS

- **Efficient tumor board consultations**
 - **Optimal and engaging user experience**
 - **Portable web technology**
 - **Interoperability and security**
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- The medical board review report is authorized by VTB finalizer and any other participant, and sent to the requester.

Process is enabled to allow virtual tumor board meetings on:

- National level;
- International – cross border level.

CHARACTERISTICS

- **HE XTB-WD profile workflow**
- **Certified medical device class I**
- **Modular architecture**
- **Secure access to clinical data**
- **Standard exchange of data**
- **Authentication, authorization and user management**
- **Accessibility**

About Vitaly Health Portal

VTB reuses mayor part of Vitaly Health Portal overall characteristics like; Mobile ready and intuitive user interface, standards that ensure interoperability and security, set of pre packed functional modules supported through portal technology. Vitaly Health Portal enables VTB to operate in zero footprint mode that enables thin clients to be rendered by virtually any Internet-connected device (desktop, tablet, smart phone).

VTB is designed to present a set of out of the box Vtaly Health Portal functional modules:

- Messaging;
- Scheduling;
- Appointments;
- Video communication;
- Patient / Medical record;
- Personal notes.

VTB functionalities could be extended with other functionalities requested by specific medical institution in order to expand the usage portal usage in other specialist domains or in the field of patient involvement. By logging into the portal user has a complete overview of the content related to its role and permissions. All the actions and data access are tracked to be compliant with Medical Grade I certification requirements. The platforms user interface could be fully aligned with institutional brand book guidelines.



FEATURES & INFRASTRUCTURE

- **Single Sign On (SSO)**
 - **Portal user support**
 - **PACS integration**
 - **EHR integration**
 - **DICOM viewer**
 - **Data Access Auditing**
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About Acano Video Conference Room

Acano provides cloud-based video infrastructure and collaboration software that follow the aim to increase the interoperability and scalability of collaboration infrastructure, delivering the best collaboration experience across every endpoint, screen or workspace. This allows users the ability to connect into video conference rooms easily from any device they have today.





Parsek has been providing eBusiness solutions in Healthcare, Insurance and Telco domains for more than a decade. To satisfy the needs of our international customers we use a set of enterprise grade technologies and established online products that allow significant diversification from other important players on the market. Our value proposition is founded in the successful digital transformation process implementation with our customers and partners.

During the development of our own products we established a proactive relationship with technology partners who operate throughout the EMEA region, such as: Cisco Systems, Oracle, Liferay etc.

For more information about our company and references don't hesitate to contact us at

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