ITEA PO Days 2025

IWISH

ITEA Award of Excellence 2025 ceremony
16 September 2025
Robert Hofsink – Philips

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IWISH Context

IWISH Challenges

- Complex clinical procedures in Operating Rooms (OR) or Image Guided Therapy (IGT) labs
- Lack of insight in user interaction during clinical procedures leads to suboptimal usage of valuable medical equipment
- Dynamics and unpredictability of complex clinical procedures leads to inefficient usage of hospital OR and interventional labs and suboptimal use of clinical staff
- Scheduling of clinical procedures is not optimal and does not take into account real-time procedure status updates

IWISH Challenges

Operating Room (OR) is one of the most expensive areas of a hospital

1 OR costs ~€1500/hour
~240 hours/OR is lost yearly due to inefficiency in changeover times

~ €360k is lost yearly per OR
>25.000 ORs in Europe

€9 Billion lost yearly in Europe due to OR inefficiencies

IWISH Innovations and objective

- Automated data gathering to create insights about the clinical workflow
- Realization of automatic procedure tracking applications
- Software applications for optimal workflow scheduling
- Gaze tracking to provide insights about user system interaction
- Synthetic data generation tools

Within **IWISH** we propose solutions to realize **automated data gathering** combined with **AI-enabled data analytics** applications to deliver valuable **insights about the clinical workflow**

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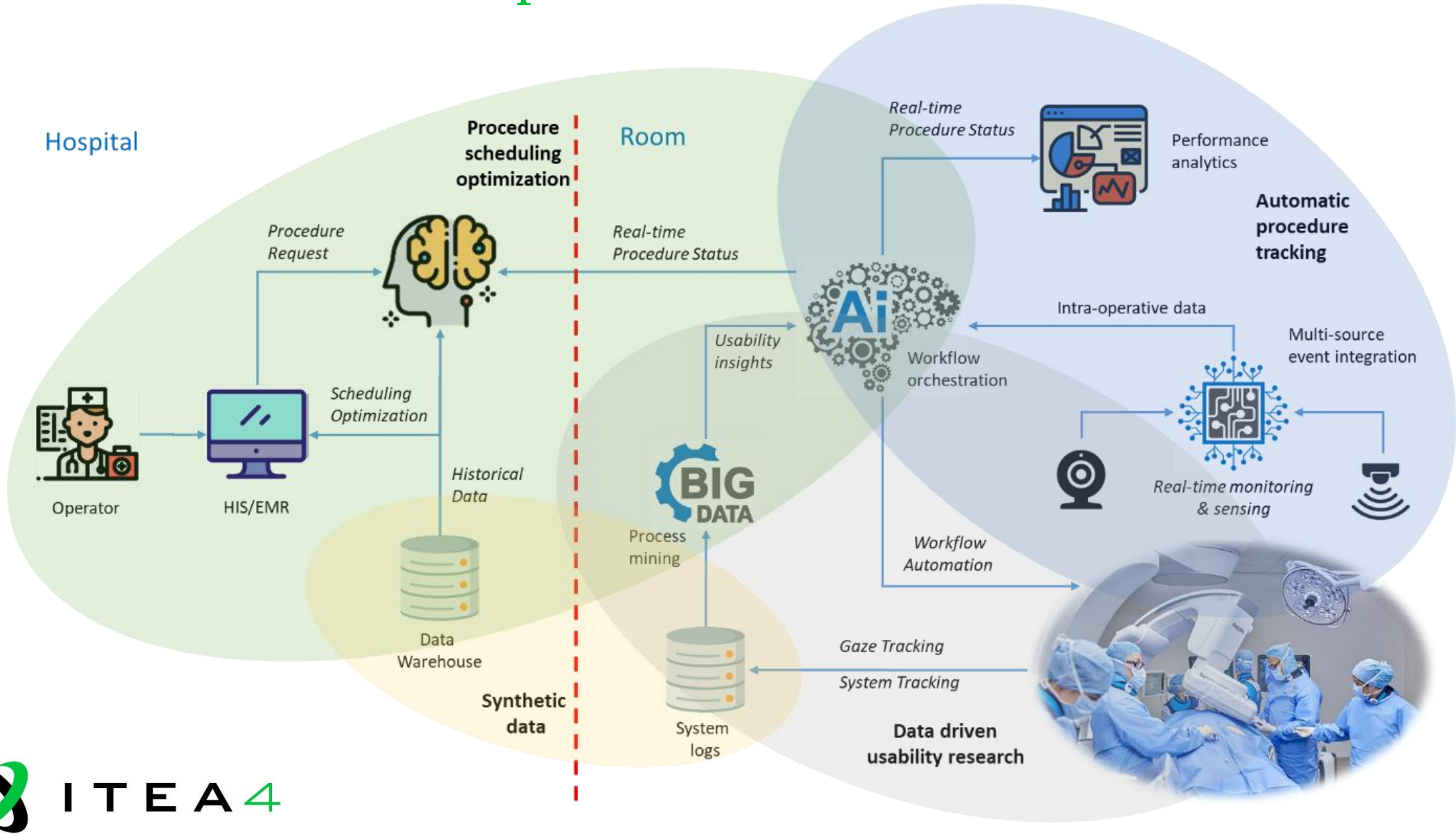
IWISH Solution concept



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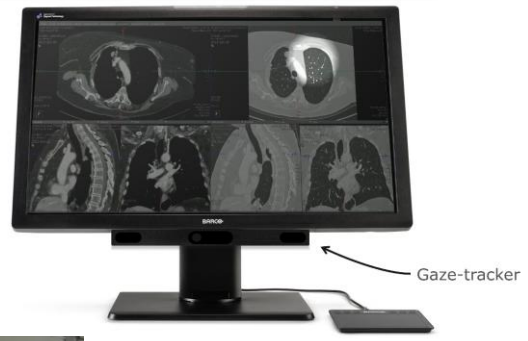
IWISH Key results / highlights

Synthetic data generation

- Deployment at multiple hospitals
- Syntho platform 3.0 released

Gaze tracking

- Gaze tracking successfully demonstrated for radiology case
- Evaluation continues, first release expected by end of 2028

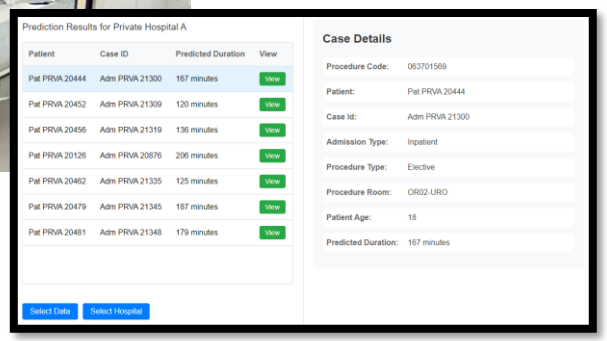


Video based procedure tracking

- Demonstrations of surgery phase recognition
- Video based detection of key events

Adaptive procedure scheduling

- Surgery duration prediction evaluated
- Scheduling applications demonstrated



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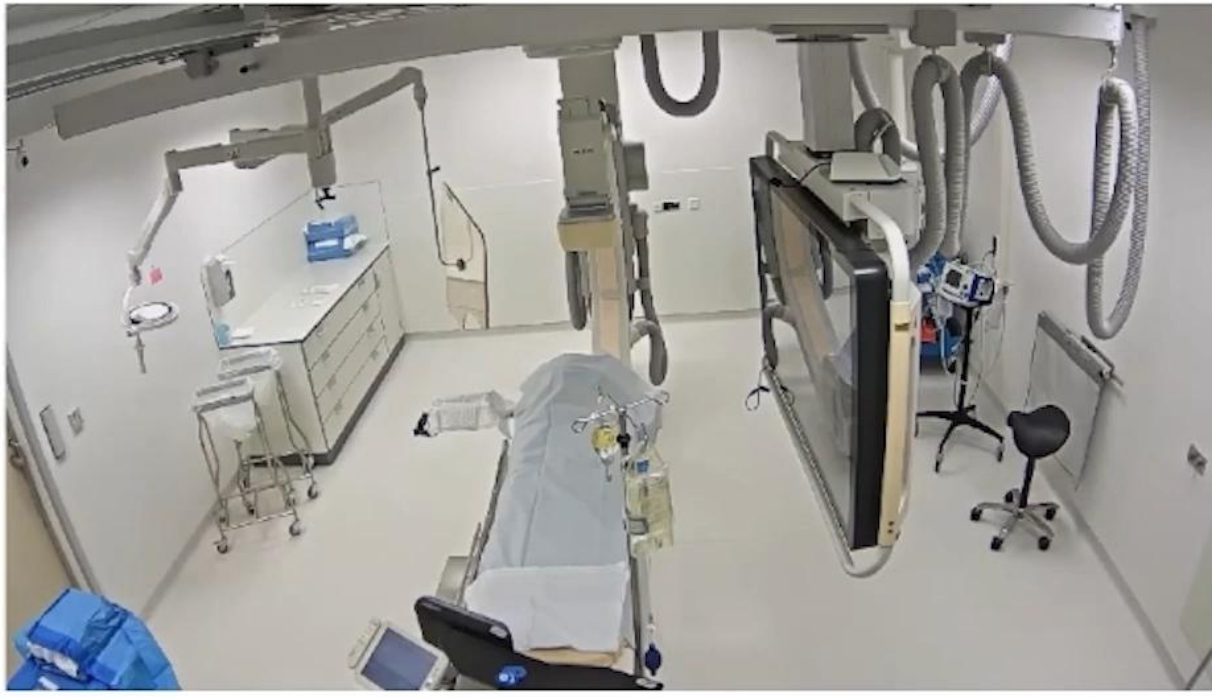

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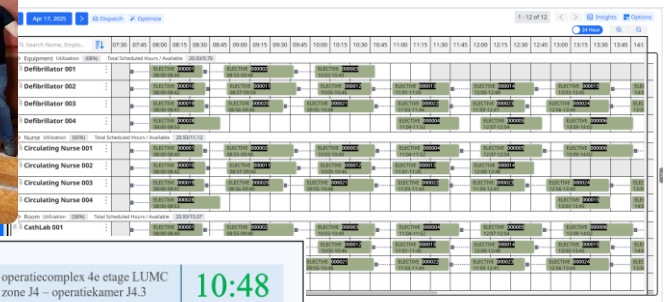
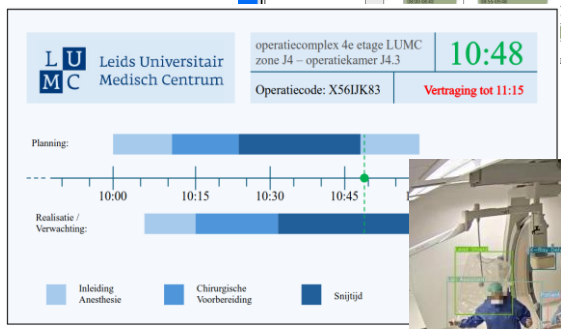
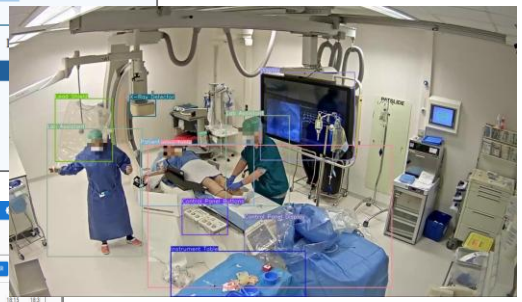
IWISH Impact and outlook

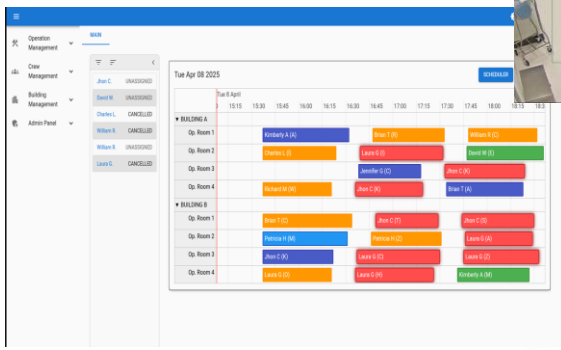
The IWISH project has demonstrated how AI-based applications can help optimise clinical workflows and reduce healthcare costs.

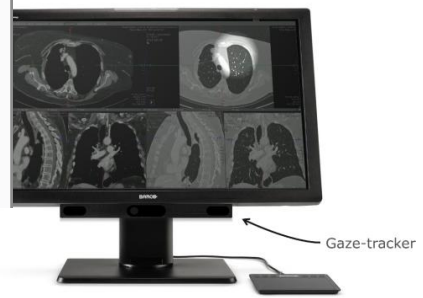
Next steps are to make its achievements part of clinical practice.











IWISH Project data

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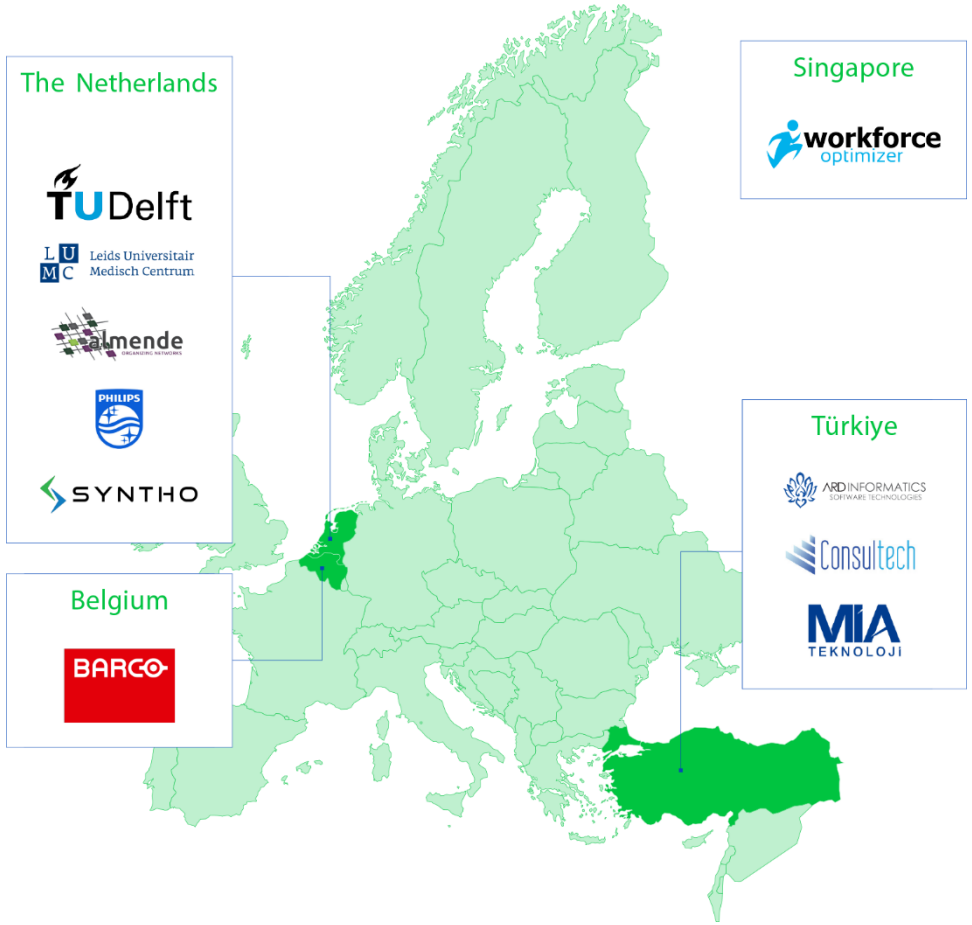

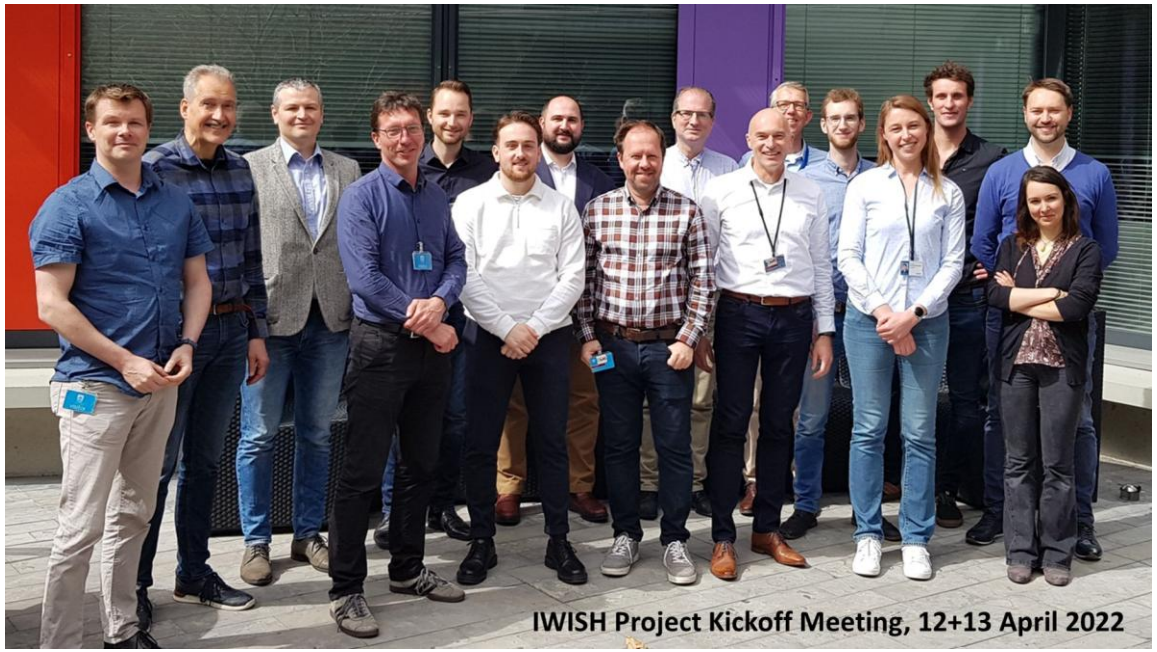

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Project duration: March 2022 – February 2025

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Project website:

This project has received funding from:

Netherlands Enterprise Agency

Enterprise Singapore

TÜBİTAK

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Thank you!

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