



## IWISH - Intelligent Workflow optimization and Intuitive System interaction in Healthcare

### DELIVERABLE D7.2

Public summary report



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Eureka thematic AI call

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## HISTORY

Document version #	Date	Remarks
V0.1		Starting version, template
V0.2		Specific content integrated
V1.0		Final version



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## 1 Public summary of project

Within a hospital, many departments and persons need to collaborate and communicate effectively when diagnosing and treating patients. Because of the complexity of patient's symptoms and diseases, diversity of the organization within the hospital, of the equipment and of other factors, many workflow steps can be optimized. Typical problem areas are: (1) not all relevant patient data is available at the desks where people have to decide on diagnosis, treatment planning and treatment, (2) not all equipment is available, varying from surgery tools, infusion pumps, imaging equipment or the OR itself, or (3) not all required staff is available or in time for instance because previous procedures took longer. Or they have to wait because the next procedure has been delayed. This leads to errors and inefficiencies that can be addressed by making the right data available at the right place and time during an intervention, and by using the data for retrospective analysis and feedback.

Clinical procedures in Operating Rooms (OR) or Image Guided Therapy (IGT) labs are challenging as they are typically multi-disciplinary, complex, dynamic, and often time- and resource-constrained. The resulting complexity, information overload and associated planning and administrative burden is adversary to the increasing demand for effectiveness and efficiency of an economic and safe patient care workflow. There is an urgent need for resource optimisation which calls for solutions that can address the abovementioned bottlenecks by automating tasks and supporting humans as effectively as possible.

The main problems that will be addressed within the IWISH project are the lack of insight in user experience during clinical procedures and the inability to deal with dynamics and unpredictability of complex clinical procedures. The IWISH consortium will develop novel products and solutions that will optimize complex clinical procedures in OR's and IGT labs. The project outputs will be integrated in existing product offerings of project partners or it will allow them to introduce new products and expand towards new markets. In addition to commercially exploitable project outputs, there will also be integrated demonstrators and Proof of Concept (PoC) systems, implementing e.g. procedure tracking SW, that will be used for pre-clinical validation. The technical innovations will be demonstrated and evaluated in four use cases, covering a broad range of clinical procedures, including cardiology, gynaecology, liver oncology, glioblastoma, paediatric hydrocephalus and lung lobectomy.