



Automating the Future of  
Interventional Radiology  
with **Smart Assistive  
Technologies**

**Smart Human-Centred**  
Effortless Support for  
Professional clinical  
applications



## Expected Impacts

SHERPA will transform clinical workflows in neurology and oncology through smart assistive technologies.

Improved clinical **decision-making** and **precision** in image-guided interventions

Reduced cognitive and operational **workload**

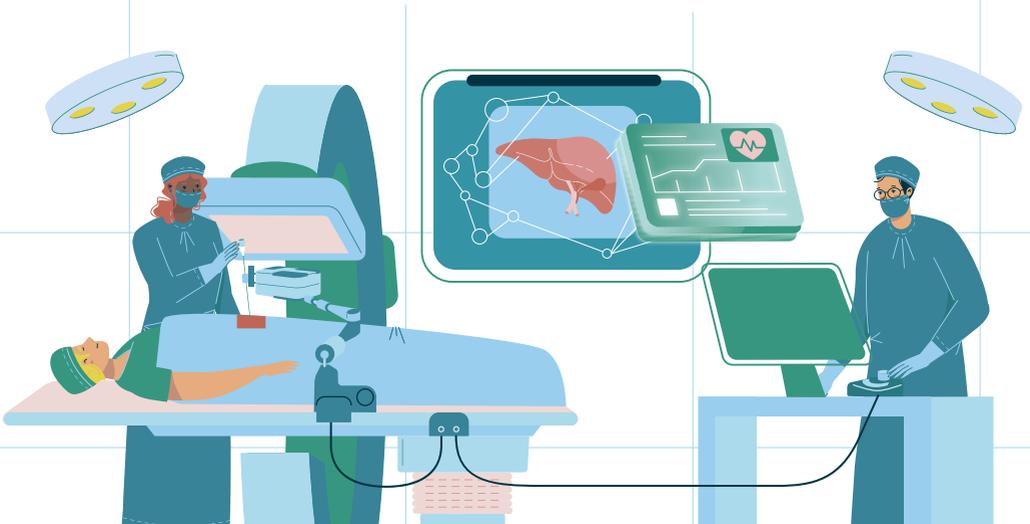
Enhanced **patient** outcomes and safety

Validated **AI-assisted** clinical workflows

Standardised framework for **value assessment** of **assistive technologies**

Accelerated adoption of **smart technologies** in IR and beyond

Long-term **workforce sustainability** and increased **job satisfaction**



SHERPA envisions a future in which interventional radiology is empowered by **intelligent technologies that improve precision, optimise efficiency, and strengthen human connection** in clinical care.

The project will deliver **AI-enabled support and smart assistive technologies** that act as a seamless and trusted companion across workflows in neurology and oncology.

SHERPA will **enhance clinical decision-making, reduce the cognitive and operational burden** on healthcare professionals, and elevate the **quality of care** for patients.



Enhanced clinical  
decision-making

Healthcare



Stress and burnout  
reduction

Professionals



Elevated  
quality of care

Patients

## Benefits

SHERPA's ambition is to transform the clinical workflow establishing **human-centred AI and robotics as a trusted part of interventional radiology practice.**

### Decide

AI-powered solutions support decision-making and patient stratification for image-guided therapy.

### Treat

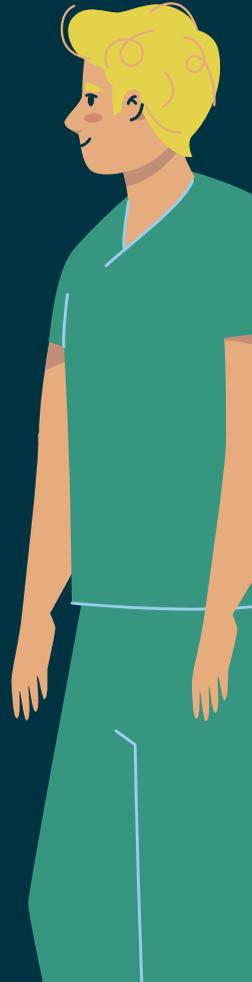
Automated settings and robotic devices replace manual actions, preserving physician focus and enhancing job satisfaction.

### Guide

Enhanced planning software and robotic assistance improve precision and reduce intervention difficulty.

### Confirm

AI software confirms treatment success, preventing re-treatment and supporting personalised follow-up.



## Clinical Use Cases

SHERPA focuses on **two high impact interventional radiology domains**:



### Brain Aneurysms

AI-driven detection, risk prediction, and precise treatment planning.



### Liver Tumours

Robotic-assisted thermal ablation for enhanced accuracy and efficiency.



7 Clinical studies

**RADAR, Aneurysm@risk, INTERACT, ASSIST, SAFO, MISTRAL, and RHODES** will validate SHERPA's technologies and methods.

The results and standards will be **transferrable to other medical specialties**, facilitating a broader adoption of SHERPA innovations.

**Coordinator** Philips

**Consortium** 16 partners from 7 EU countries

**Runtime** 1 January 2025 - 31 December 2028

**Total funding** €13.6 million



Let's stay connected and follow our project

