

# Philips ClarifEye Augmented Reality Surgical Navigation



A usability evaluation was conducted in 2020 for the ClarifEye system in a simulated lab environment with clinical users (neurosurgeons, orthopedic surgeons, x-ray technologists and OR nurses) in a test lab in Cleveland, Ohio, USA



Involving  
**14 clinical users**  
from the USA



## Perform procedures simply and easily

ClarifEye offers Philips intuitive user experience and simplicity of control to make it easy to learn and use.

100%  
of participants found  
the system user-friendly



## Key findings<sup>1</sup>



100%  
of participants agreed  
that elimination of steps that  
are normally required using  
conventional navigation  
systems (registration, placing  
reference frame, positioning  
of separate camera systems),  
will save them time



100%  
of participants believed  
that the full integration of  
imaging and navigation  
into one system will  
improve the workflow  
of navigated cases



86%  
of participants believed  
the procedure time will  
be shorter compared to  
other navigation systems

Average 68

100

Usability evaluation shows that **ClarifEye** has a SUS-score of

83

The System Usability Scale (SUS) is a scientifically-proven independent scale used to rate technological systems on their usability and learnability (based on 500+ diverse technological systems).

## What is ClarifEye?

ClarifEye is an industry-first solution that combines imaging and augmented reality (AR) navigation into one system, to support precise planning and effective device guidance for accurate<sup>2</sup> placement of pedicle screws.

## Who is it for?

ClarifEye can be used in navigated open and minimally invasive spinal procedures in a hybrid operating room.

Learn more about ClarifEye **Visit [www.philips.com/ClarifEye](http://www.philips.com/ClarifEye)**

## Key benefits of ClarifEye

- ✓ Imaging and navigation into one
- ✓ High quality Intra-operative cone beam-CT imaging at low dose
- ✓ Non-invasive patient tracking streamlines workflow
- ✓ Live augmented reality needle guidance to support precision

1. Results obtained during a Usability Evaluation with clinical users (neurosurgeons, orthopedic surgeons, x-ray technologists and OR nurses) in a simulated use environment.  
2. Elmi-Terander A. et al. Augmented reality navigation with intraoperative 3D imaging vs fluoroscopy-assisted free-hand surgery for spine fixation surgery: a matched-control study comparing accuracy



This medical device conforms with the applicable requirements set out by the European Union, as demonstrated in the Declaration of conformity.

