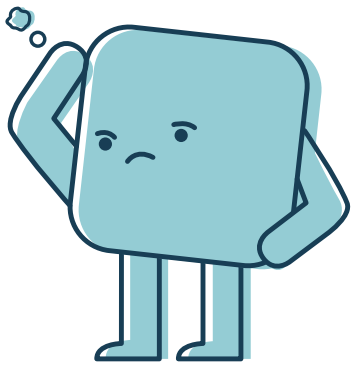


## CATHLAB SMART REPORTING APPLICATION



Catheterization is a procedure adopted for a minimal invasive treatment of patients suffering from cardiovascular diseases, typically performed in a Cathlab. X-ray imaging is typically used during these procedures for navigation, while other data sources like ultrasound imaging and blood flow measurements are often included to treat complex cases.

## PROBLEMS



One of the biggest challenges in the image guided therapy lab is the amount and complexity of data that physicians acquire every day, and the difficulty in deriving meaningful insights from it. Catheterization typically takes between 30 minutes and one hour depending on the complexity of the case. Physicians can treat 8-10 patients a day, which involves detailed reporting to describe the required steps taken and prove that treatments were performed correctly. Pre- and post-treatment images need to be analyzed to decide which combination offers the best evidence proving that treatments were performed in a proper way. This requires extensive manual browsing between different images and sequences and ensuring that all essential steps are being logged and reported. It is widely recognized that this entails significant administrative burden and potentially leads to burnouts among physicians.

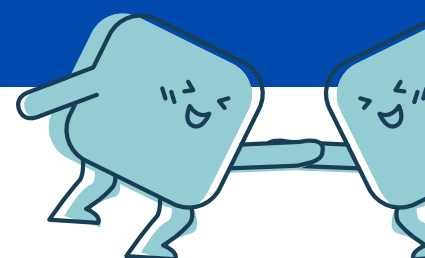
## OBJECTIVES

- Alleviate the administrative burden in the image guided therapy lab, allowing clinicians to focus more on the procedure and patient care.
- Less time spent on browsing and selecting all the images acquired
- Assure that more complete and exhaustive information is reported
- Recognize key events that need to be logged.

## THE SOLUTION



The Smart Reporting application consists of a smart clinical application able to **automatically analyze medical images**. A second component **assists the reporting for PCI interventions** by automatically tracking each step of the procedure, logging relevant events and actions, and auto-populating reports with images and measurements acquired during the procedure. The solution is conducive to minimally invasive treatments of patients with cardiovascular diseases where X-ray imaging is typically used for navigation, but other data sources like ultrasound imaging and blood flow measurements are often included to treat complex cases.



## VALUE PROPOSITION

The proposed solution alleviates the burden of physicians required to log and report key events during the clinical procedure. Current available solutions offer the possibility to integrate and interpret structured data, but the automatic interpretation of medical images offered by the Cathlab smart reporting application is a novel feature.



## MARKET

Healthcare: Hospitals

## BENEFICIARIES

Cardiologists (and their teams) performing interventions and deciding which images should be included in reports.

## SOLUTION PROVIDERS

### Main solution provider:

PHILIPS – Contact:

Robert Hofsink

### Hosting facility:

Vrije Universiteit

Brussels – Contact:

Nivedita Yadav

