

College of Cardiac Surgery

Implementation of the QUIP (Quality Improvement Program) project from the EACTS in the Belgian cardiac surgery services

What is QUIP?

In 2012 the European Association for Cardio-thoracic Surgery (EACTS) established the QUIP program to encourage improved clinical outcomes after cardiac surgery, and to promote the importance of integrating quality improvement initiatives into daily clinical practice.

QUIP aims to gather data in a pre-defined dataset from a large number of European cardiac surgery centers, in order to create risk assessment and benchmarking tools to monitor and improve quality at both an individual and surgical unit level.

The QUIP benchmarking tool utilizes anonymized data from baseline patient characteristics, surgical interventions, and patient and procedural outcomes. The tool is accessible to any participating individual surgeon or cardiac surgery center, enabling them to obtain an overview of the data and the outcomes from their own hospital, and to benchmark these data and outcomes against other hospitals, nationally or internationally within Europe. Comparison with similar cases in the database down to the level of a specific patient diagnosis will be possible.

How is the current QUIP recruitment?

Currently the QUIP database contains data from 64.000 adult cardiac procedures from 34 centers across Europe. The ultimate goal is to obtain complete data from the majority of European cardiac centers.

How is the current participation in QUIP in the Belgian cardiac centers?

Up until now 9 Belgian centers (=1/3 of the centers) are participating today on a deliberate basis, and recruitment is ongoing. As an incentive, the BACTS dataset was conformed to the QUIP dataset, to facilitate data input.

The current participating Belgian cardiac centers are:

- Onze Lieve-Vrouw-Ziekenhuis Aalst
- UZ Antwerpen

- AZ St Jan Brugge
- UCL St Luc Bruxelles
- Grand Hôpital de Charleroi
- ZOL Genk
- AZ Maria Middelaes Gent
- UZ Gent
- UZ Leuven

The BACTS uploaded 16.675 adult cardiac surgical interventions so far.

Figure 1 demonstrates the breakdown in procedural groups for Belgium, obtained from the current uploaded data.

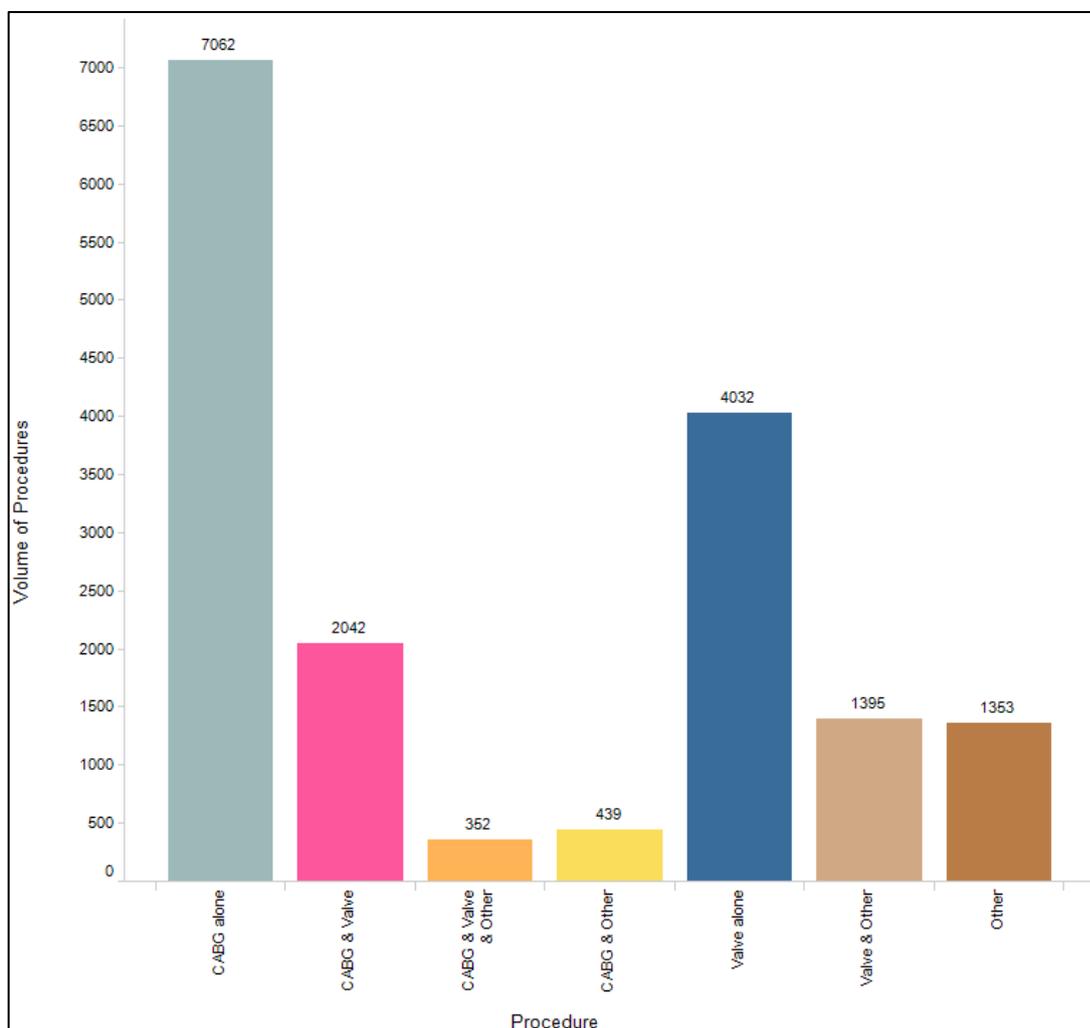


Figure 1. Procedure group breakdown. CABG: coronary artery bypass graft

At this moment, due to incomplete data from Belgium, an adequate comparison of the Belgian dataset with the total database, as depicted in Figure 2, cannot yet be obtained.

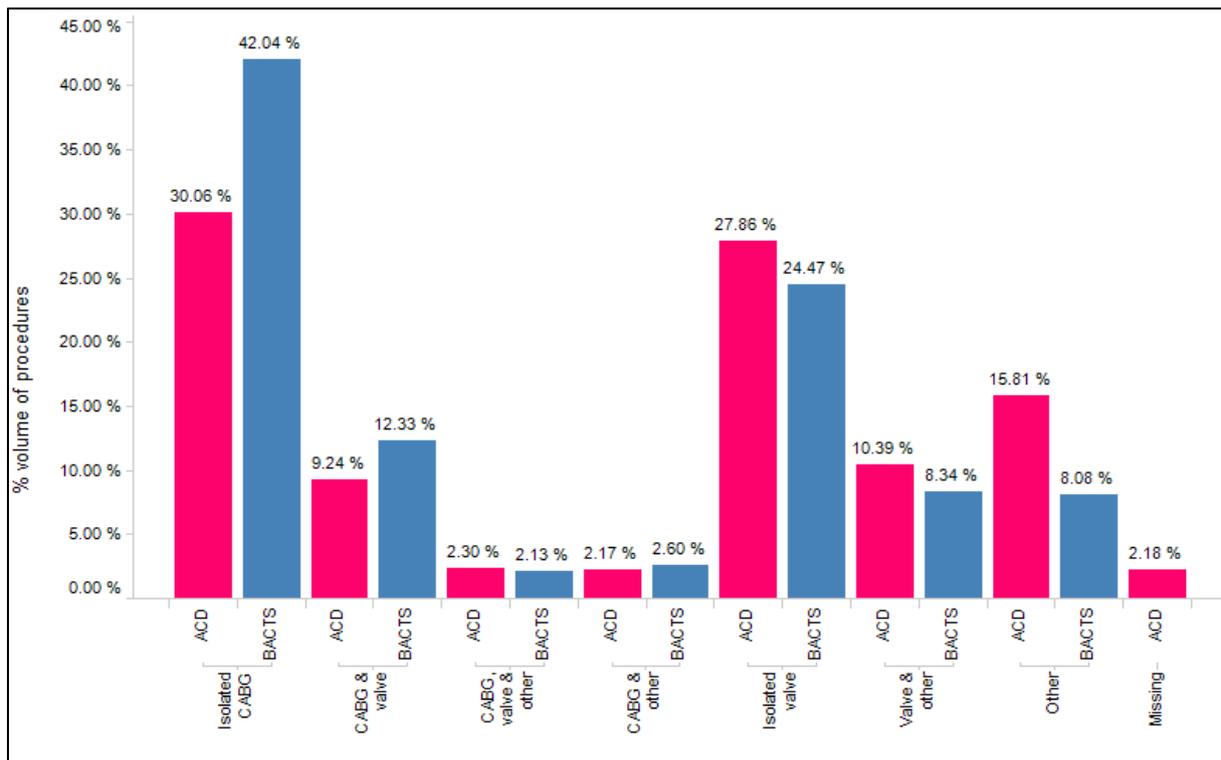


Figure 2. Comparison of the current Belgians results with the total QUIP data. CABG: coronary artery bypass graft; BACTS: Belgian Association for Cardio-Thoracic Surgery; ACD; Adult Cardiac Database.

Implication on quality management through feedback

The QUIP tool offers the opportunity for each individual center or surgeon to benchmark its own data concerning patient characteristics, procedures, and outcomes. The larger the database becomes, the more correctly centers can compare their own outcomes with the current European standards. Outcome data can consist of data on mortality, the incidence of revision for bleeding or tamponnade, neurological morbidity, cardiac morbidity, readmission to ICU, use of medication at discharge, amongst others. Comparison with the data from other centers or countries thus will become an incentive to improve its own outcomes, to rethink some protocols or procedures, or to improve patient management tools, thus improving quality at both an individual and surgical unit level.

The BACTS aims to implicate the majority of the Belgian cardiac centers, and will continue to do so during the years 2017 and 2018.