

# Change in Cardiology Practice in the Management of Critical Coronary Artery Disease in NL

## Practice Point

1. The advent of drug eluting stents has increased the use of percutaneous angioplasty (PCA) and decreased use of coronary artery bypass surgery (CABG) in the management of critical Coronary Artery Disease (CAD).

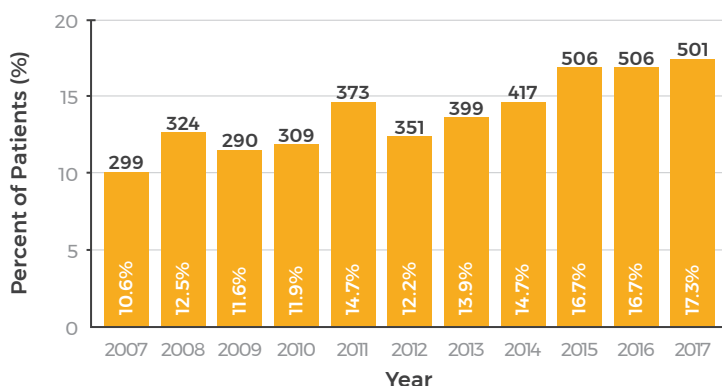
## Method

1. All patients in the APPROACH database who had cardiac catheterization (CC) from 2007-2017 were analyzed to determine the recommendations made after diagnosing critical CAD.

## Results

- The average annual number of CCs was 2,902 over the 11 year period. The mean age increased from 61.3 ± 10.4 in 2007 to 64.5 ± 10.5 years in 2017.

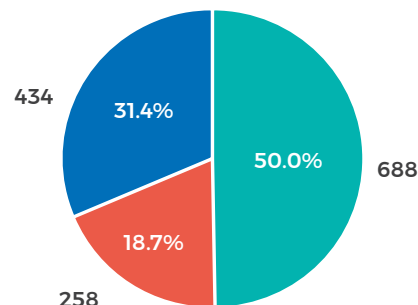
### Percentage of Total Patients Who Had CC Aged ≥ 75 Years (2007-2017)



- Critical CAD was diagnosed in 1,356 procedures annually. The mean age of those diagnosed with critical CAD increased from 62.1 ± 10.2 in 2007 to 65.7 ± 10.1 in 2017. The percentage ≥ 75 years was 11.3% in 2007 and 20.2% in 2017.
- Little change in preponderance of males with critical CAD was observed: 73.2% in 2007 vs 72.2% in 2017.

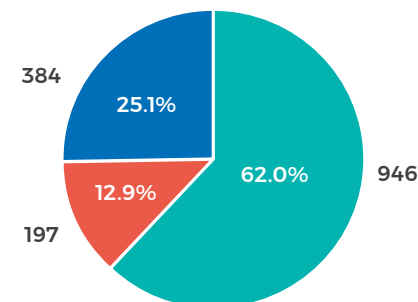
## Management of CAD (2007-2010 and 2014-2017)

2007-2010



PCA  
CABG  
Medical Management

2014-2017



- Recommendation for PCA in 2014-2017 increased by 37.5% compared to 2007-2010, whereas recommendation for CABG decreased by 23.6% and recommendation for medical management decreased by 11.5%.

## Conclusion

1. Cardiology practice in the management of critical CAD has changed over the past 11 years with an increase in age of diagnosis, substantially greater use of PCA and concomitant less use of CABG and medical management. Whether this change in practice has led to improved clinical outcomes without increased hospitalization is under investigation.