

INWIDA - Results of IQM peer reviews on heart attack mortality

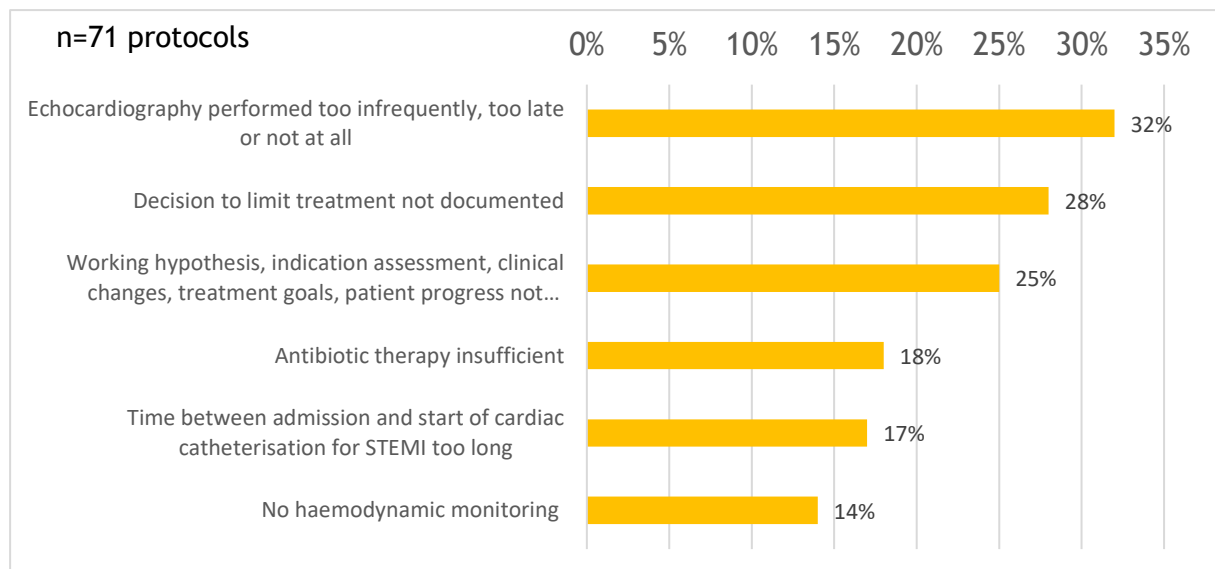
Between 2010 and 2017, 71 IQM peer reviews were conducted on patient mortality from heart attacks. In these reviews, 1,136 patient records were evaluated according to the IQM analysis criteria.

Below are the results, which are based on the protocols from these IQM peer reviews. A protocol contains the aggregated results from 16 patient records analysed in the respective peer review.

Since the protocol data is qualitative in nature, categories were created from the data and the responses counted. The summary of results is organised around the following questions:

- What are the top 5 areas for improvement identified during the record analysis?
- What 3 to 5 suggested solutions or measures were developed together with the audited clinic for each area of improvement?

Areas for improvement most frequently mentioned in the peer reviews on heart attack mortality



The following solutions were proposed for the top areas of improvement:

- **Echocardiography performed too infrequently, too late or not at all**
 - Use echocardiography as a “bedside” diagnostic in accident and emergency and the ICU - use a mobile echocardiography machine
 - Train more staff in echocardiography and sonography to avoid bottlenecks - train physicians in basic emergency echocardiography
 - Incorporate echocardiography with standardised indication and uniform documentation into SOPs for acute heart failure, myocardial infarction, atrial fibrillation and pulmonary embolism

- **Decisions to limit treatment not traceable**
 - Ethical guidelines for implementing the patient’s wishes - mark/label in the ICU chart
 - Discussions and research to determine the patient’s presumed wishes
 - Discussions about any resulting changes to treatment goals should be conducted by a specialist
 - Standardise protocols for limiting treatment and making changes to treatment goals
 - Introduce SOP for limiting treatment

- **Antibiotic therapy insufficient**
 - Implement “antibiotic stewardship” professional development to optimise microbiology diagnostics and antibiotic therapy. Any expenditures will be quickly made back from savings on antibiotic therapy.
 - An in-house antibiotics commission develops treatment pathways for patients who come to hospital with acute coronary syndrome and corresponding comorbidities/differential diagnoses. Store these recommendations in accident and emergency in the form of a manual or similar
 - After intensive intravenous antibiotic therapy, quickly switch to oral therapy when the situation improves

- **Interface between ambulance service and start of therapy**
 - Institute a local on-call service (24/7) for cardiac catheterisation
 - Transfer emergency ECG from the ambulance and non-transporting EMS vehicle via a server to a standardised smartphone at the cardiac catheterisation on-call service with joint follow-up discussion
 - Advance administering of ASA during/after resuscitation by emergency physician - cross-departmental discussions or additional professional

development with participation of cardiology and emergency physicians with the aim of establishing treatment standards

- Cardiac emergency treatment standards for in-house on-call physicians
- Bypass accident and emergency (A&E) and/or ICU and transfer patients to the cardiac catheterisation laboratory

➤ **Working hypotheses, indication assessment, clinical changes, treatment goals and patient progress not documented**

- Train employees to document working hypotheses and treatment goals
- Structured documentation and transfer reports to minimise information loss
- Review of medical documentation by senior physicians
- Daily explanations of decision to change/continue treatment in the chart with signature or name of the decision-maker
- Improve documentation discipline by establishing reliable oversight mechanisms
- Institute documentation of daily treatment goals during morning team rounds in the ICU.