INWIDA – Results of IQM peer reviews on hip fracture mortality

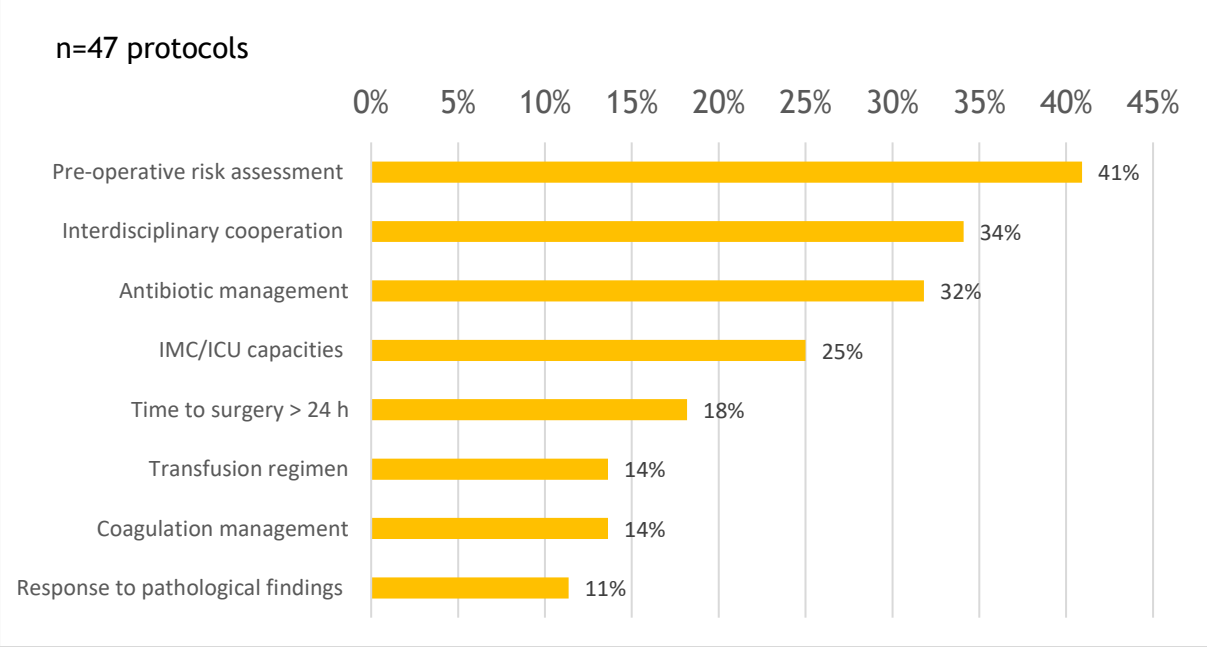
Between 2010 and 2019, 23 IQM peer reviews were conducted on patient mortality from hip fractures. In these reviews, 456 patient records were evaluated according to the IQM analysis criteria.

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.

The protocol data is of a qualitative nature. Categories were created from thise data and the responses counted. The summary of results is organised around the following questions:

- What are the top 5 to 6 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 hip fracture mortality



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

- **Optimising infection management and antibiotic therapy**
  - Develop and implement treatment standards, train medical staff in antibiotic stewardship
  - Develop and implement a concept for finding the source of infection (sepsis criteria, physician training)
  - Perform standardised post-operative laboratory tests for early detection of inflammation
  - Perform weekly microbiology rounds

- **Optimising interdisciplinary cooperation**
  - Consult early with internists/gerontologists and involve them in treatment planning (pre- and post-operative)
  - Define an algorithm for cases where surgery and anaesthesia disagree on suitability for surgery
  - Closely involve nursing staff by setting standards in case of dysphagia (abstinence from food, swallowing diagnostics, speech-language pathology)
  - Joint wound care rounds with nursing staff and doctors
  - Written transfer protocols between intensive care unit and normal ward
  - Develop a concept for interdisciplinary cooperation, especially with the internal medicine department, both for the duration of inpatient treatment and for the period surrounding inpatient/emergency admission

- **Insufficient IMC/ICU capacities**
  - Provide more post-operative monitoring resources (IMC) for multimorbid, elderly patients
  - Improve early post-operative monitoring of hip fractures in the ICU or the recovery ward with continuous physician presence
  - Transfer patients to IMC post-operation

- **Improving pre-operative determination of surgical risk**

- Pre-operative review of surgical risk (especially cardiovascular and concomitant diseases) with additional review during indication assessment and at time of surgery
- First contact with anaesthetist in accident and emergency so that a precise patient history and correct ASA classification can be obtained
- Use of forms to structure the admission process
- Earlier and more frequent cooperation between specialist departments, especially with internal medicine and geriatrics

➢ **Time to surgery longer than the recommended time window (24 hours)**

- Immediately notify the anaesthesia department that the patient has been admitted and emergency surgery is indicated within 24 h
- Establish an organisational structure to provide immediate care for patients requiring emergency surgery, including legally compliant education of the patient or carer
- Expand surgical capacities for trauma surgery (e.g. extended operating theatre hours) and treat patients as emergencies
- If surgery cannot be done on the day of admission, the patient should be the first slot on the surgery schedule for the next day
- Admit patients to IMC/ICU for pre-operative preparations – promptly consult with other specialities and define treatment regimen so that patient is ready for surgery within 24 h

➢ **Improving the transfusion regimen**

- Establish a standard for transfusion indication including SvO2, or implement one as recommended by guidelines
- Develop a standard to help decide when to administer erythrocytes.

Evaluation of the results by an expert physician

"The *areas for improvement are up to date and the proposed solutions, as formulated, are quite broad and cursory – corresponding to the current state of the art. From clinical experience, I can say that we are always discussing what to do with patients who are currently on anticoagulants. I think this issue should be added to the list, along with the recommendation that clinics should have internal SOPs for this situation. If the suggestions were implemented across the board, this would cover most (over 80%) of the clinical problems associated with inpatient treatment of hip fractures."*

Prof. Dr. Josef Zacher, medical advisory board of Helios Kliniken, spokesperson of the IQM expert group heads