# **AGEISM OR APPROPRIATENESS?**



Results of a nationwide indicator-based measurement system continuously monitoring the technical/medical quality of hospital care

Paul D. Bartels¹; Søren P. Johnsen²; Kaare D. Palnum²; Jan Mainz³; Anette Bunk¹; Anne-Marie Hansen¹; Annette Ingeman¹; Brigitte R. Krog¹; Anne Nakano¹ The Danish National Indicator Project (fagligkvalitet@rm.dk).; ²Department of Clinical Epidemiology, Aarhus University Hospital. ³North Denmark Region

#### **Outline of context and problem**

This study is based on data from The Danish National Indicator Project and the Department of Clinical Epidemiology, Aarhus University Hospital.

The Danish National Indicator project was initiated in 2003 and covers 8 diseases (stroke, diabetes, hip fracture, schizophrenia, acute gastrointestinal surgery, heart failure, COLD and lung cancer) each with 5-15 process indicators together with a few outcome measures. The project was primarily designed for quality improvement and accountability of individual providers. However the mandatory participation of the relevant Danish hospitals means that is possible to characterize important aspects of the quality of care in the Danish healthcare system.

Equity of access to treatment is considered to be a fundamental value in the Danish healthcare system.

It is therefore natural to include this dimension of quality in the yearly national report from the Danish Indicator Project. Based on earlier reports we have initially chosen to report differences associated with patient age and sex together with geography and timing of the healthcare deliverance (1) (2) (3).

#### **Results**

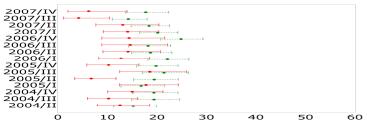
Below is listed which indicators show age related differences with regard to two surgical and two medical conditions with a high incidence in the elderly population.

To show the effect of the age related differences on the overall quality of care given to the patients the percentages of patients receiving the complete treatment package over time are shown in the graphs.

Condition	Indicators <u>with</u> significant age related differences	Indicators <u>without</u> significant age related differences
	Echocardiography, NYHA Classification; Exercise training; medication; Patient education	No indicators without age related differences
	No indicators show significant age related differences	Assessment of nutritional status; Pain assessment; Evaluation of ADL (Activity of Daily Living); Prevention measures against fractures.
	Medication with anticoagulants; CT/MR scan; Assessment of nutritional status	Admittance to specialized stroke unit; Medication with platelet inhibitor; Assessment by physiotherapist and occupational therapist respectively
Acute gastrointestinal surgery (bleeding ulcer)	Timely endoscopies	Therapeutic endoscopy; Therapeutic endoscopy; Surgical treatment of primary or recurrent bleeding episode

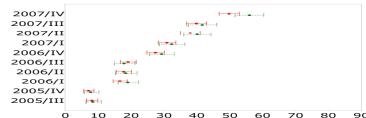
#### **Heart Failure**

Proportion of patients receiving complete package (Kode: AGE > 80 AGE < 80 )



## **Hip Fracture**

Proportion of patients receiving complete package (Kode: AGE>80 AGE<80 )

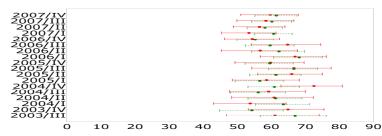


Acute Gastrointestinal Surgery (bleeding ulcer)

### **Stroke**

Proportion of patients receiving complete package (Kode: AGE>80 AGE<80 )





## Conclusion

Significant lower levels of provision of care to the aged patient population are found in the two medical conditions. The difference was manifest over a range of indicators covering simple clinical diagnostic assessment, imaging diagnosis, drug treatments and rehabilitation interventions making it likely that age per se and not for example severity of illness was responsible. In the two surgical conditions no such differences were seen.

One may speculate if this is caused by the manifest presentation of these conditions as an abnormal emergence, while signs and symptoms in medical conditions are interpreted as 'normal' for old age.

When performance measurement system has its sole focus on provider quality, broader issues of population-related quality problems tend to be overlooked. The quality dimension of equity should be prioritized to a greater extent.

<sup>(1)</sup> Palnum KD et al., Older patients with acute stroke in Denmark: quality of care and short-term mortality. A nationwide Follow-up study, Age Ageing. 2008 Jan;37(1):90-5. Epub 2007 Oct 25

<sup>(2)</sup> Tran CT et al, Effect of age on the use of evidence-based therapies for acute myocardial infarction, American Heart Journal, Volume 148, Issue 5, Pages 834 – 841

<sup>(3)</sup> South et al, The under use of thromboprophylaxis in older medical in-patients: a regional audit, QJM 2007 100(11):685-689