

AME oversight based on deviation points and online aeromedical competency exam



Main Key Performance Indicators for AME-oversight

1. Aeromedical competency

- knowledge and understanding of flight medicine and relevant regulations
- a prerequisite for good performance
- can be tested in advance

2. Aeromedical practice

- actual performance in unsystematic (random) samples of cases
- also influenced by daily routines, personality and motivation
- can be checked afterwards



AME Inspection visits/audits – drawbacks

- Time consuming for CAA
- High costs for CAA
- Income loss for AME
- Inherent limitations of audits, including inspector dependency, risk of communication failure and human error

Alternative measures to assess the risks?

- **Aeromedical competency of the AME**
 - > Exam, validated by comparing all AMEs
- **Aeromedical practice and proper aeromedical decisions**
 - > Continuous review of the AME's work (mainly in EMPIC)



Aeromedical exam

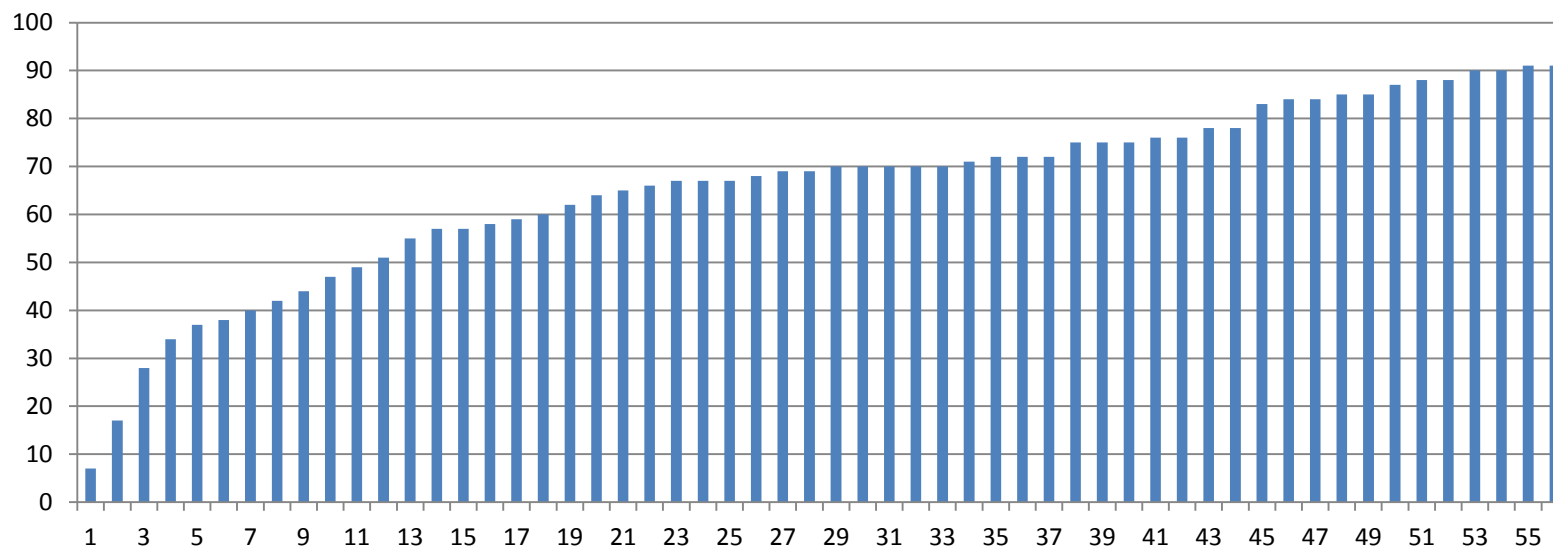
- Online, personal log-in (within 1 month)
- Time limitation (2 hours)
- Wide testing of aeromedical knowledge, routines, use of regulations and aeromedical assessments
- Allowed aids like regulations and aeromedical literature during the exam
- Voluntary, but use of motivators:
 - ☐ Credits
 - ☐ Optimal results on the exam may lower frequency of audits through site inspections
 - ☐ Individualized guidance of AME



A few examples of questions...

- What is the max validity period for a Class 2 medical to a 39 year old applicant?
- Which investigations should be performed in a commercial pilot with newly diagnosed type 2 diabetes mellitus?
- Which applicants are required pure tone audiometry before initial issue of a medical?
- Which limitations should be applied for a class 1 medical for an otherwise qualified applicant with myopia and refractive error -4 on both eyes?
- How is the procedure for comparing with previous ECGs in EMPIC?
- Why is ear pain more frequent during landing than ascending?
- Which of the following factors may reduce tolerance for G-forces in the direction from the head towards the seat (+ Gz) : low blood pressure, infection, cataract (.....etc)?
- Describe the techniques you have to reduce the risk of the applicant underreporting medical relevant information.
- Why must AME always check the applicant's previous medical certificate prior to revalidation?

Results on the netbased exam

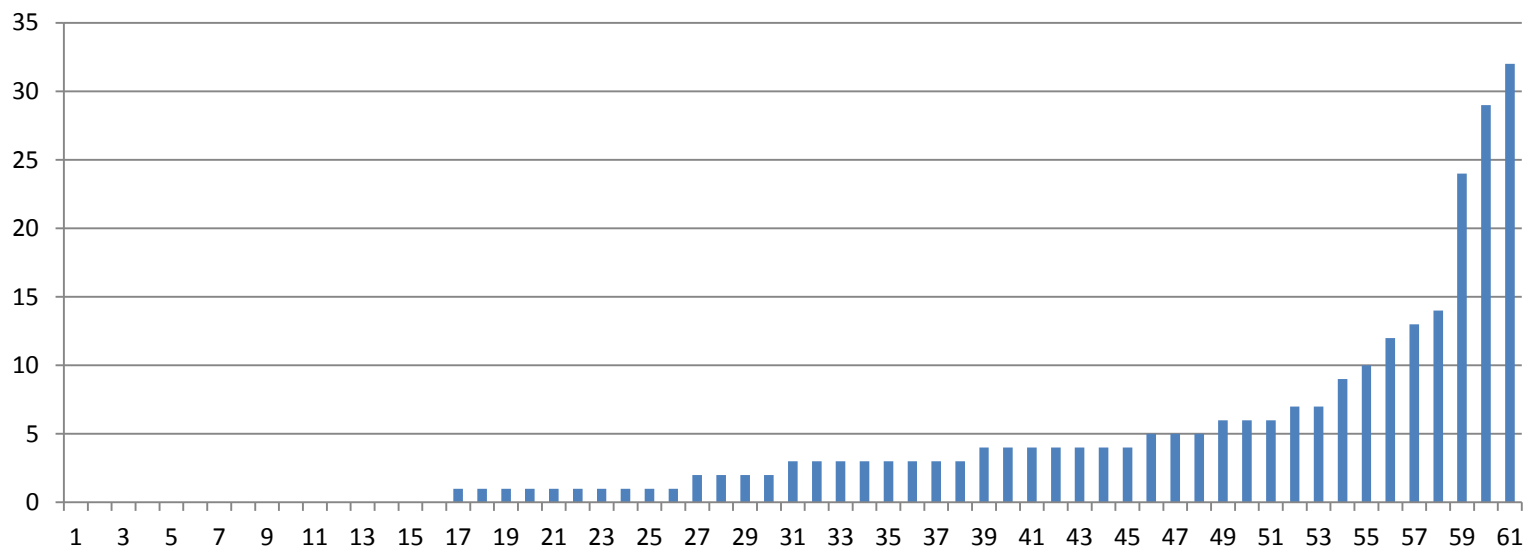


- 92% of active Norwegian AMEs participated on the exam
- Wide variation in competency

Continuous review and oversight of AME

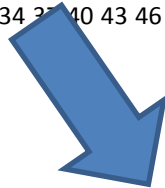
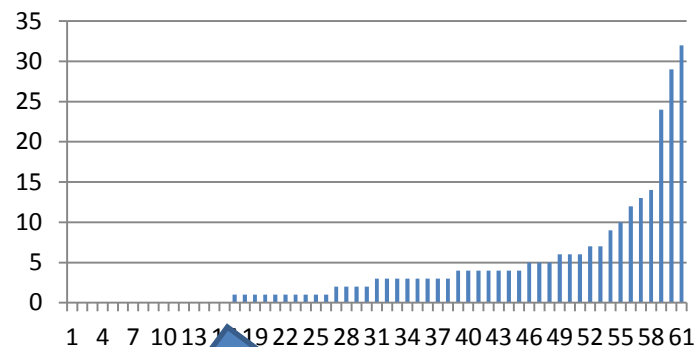
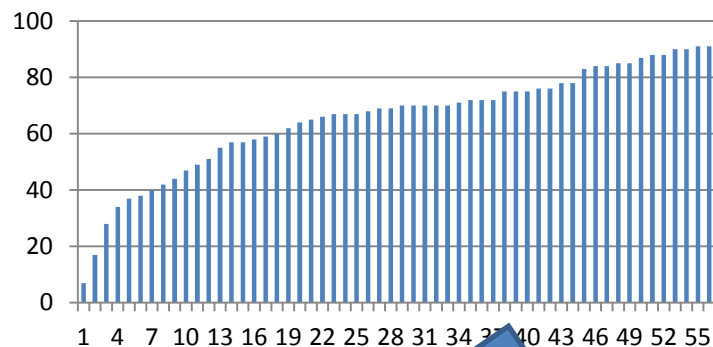
- **Continuous oversight of aeromedical assessments in EMPIC**
 - Registration of any deviations, including repeated “sloppiness” even if this doesn’t effect aviation safety directly
 - 1-5 points per deviation, depending on severity
 - Saved in excel format, comments on the underlying cause
- **Letter of concerns**
- **Previous history (oversight, participation in courses, number of aeromedical assessments per year etc)**

Deviation points among Norwegian AMEs 140415



Common deviations

- Lack of documentation or comments on significant medical data
- Incorrect expiration date in the medical certificate
- Missed continuation of appropriate limitations during revalidation
- Issued medical certificate without completed ophthalmologist examination when required by RXO or specialist examination when required by SIC
- Lack of case referral to the AMS when this is indicated in Part-MED



Priority in planned AME inspection:

Calculation of risk score based on competency exam and deviation points

Other potential use of competency exam (not implemented)?

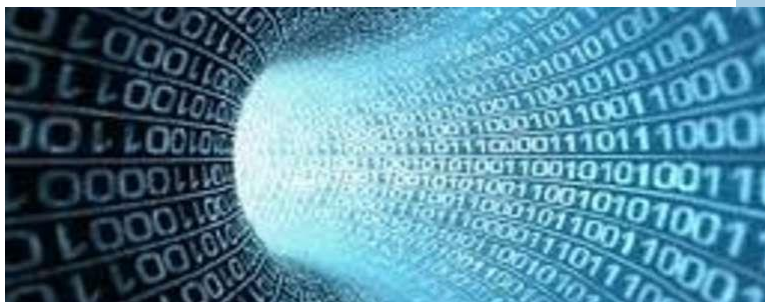
- Application for initial AME certificate and >3 years since basic/advanced AME course?
- Application for revalidation of AME certificate despite < 10 documented aeromedical examinations every year?
- High number of minor/moderate deviations in the aeromedical practice?
- Application for renewal after previous loss of AME-certificate due to lack of aeromedical competency?

Will such indications require updates of the Regulation?

ARA.MED.200(b): When satisfied that the AME is in compliance with the applicable requirements, the competent authority shall issue, revalidate, renew or cange the AME certificate(...).



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Questions? Opinions?

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