UHCE OXFORD REPORT CR 16
TRAUMA AND ORTHOPAEDICS:
CASE FATALITY AND HOSPITAL RE-ADMISION RATES

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Summary of objectives

The Department of Health and the Healthcare Commission commissioned NCHOD to work with the Royal College of Surgeons and the British Orthopaedic Association to develop for trauma and orthopaedics a set of outcome indicators that could help clinicians and the Healthcare Commission.

Abstract

The study is being carried in the following phases:

- Professional bodies contacted to nominate clinicians to work with NCHOD.
- Agreement reached between NCHOD and nominated clinicians about:
    - aggregations of activity and types of analysis to be done
    - specific operations and candidate indicators to be studied further.
- NCHOD develops detailed specifications for each of the candidate indicators to be agreed with the clinicians.
- NCHOD produces national figures for each candidate indicator to provide:
    - data about the number of events and admissions nationally so that the suitability of the indicator as a comparative measure could be assessed.
- NCHOD produces trust-based comparative figures for each of the candidate indicators considered suitable, with respect to numbers of events and admissions, to identify whether the measure is a useful comparative indicator.
- Agreement is reached between NHOD and nominated clinicians about a set of indicators to recommend to the Department of Health and the Healthcare Commission for implementation.

Following discussions of these results with the collaborating clinicians, it is recommended that:

- CFRs should not be used as outcome indicators to screen elective admission activity. There are insufficient deaths for the results to be clinically relevant. More clinically relevant outcome information about elective activity may be obtained from the national registers of hip and knee replacements.
- Three 0-89 day CFRs for screening emergency admissions could be used. They are for:
    - emergencies with an operation
    - emergencies without an operation
    - emergencies with hip/femur procedures.
- Further work should be done on CFRs for admissions that start with a transfer to see whether these might be a clinically relevant measure of specialist trauma unit activity.

It should be noted that:

- Admissions that have suffered serious trauma are admitted to multi-specialty trauma units.

- Death from trauma usually occurs because of a related head, chest or abdominal injury not the orthopaedic condition.
- National information about trauma outcomes is best obtained from data returned through the Trauma Audit Research Network.

It is recommended that the following emergency re-admission (ERA) indicators could be used for comparing trust performance:

- General indicators, ERA rates for:
  - day cases
  - elective admissions with an operation
  - emergency admissions with an operation
  - emergency admissions without an operation.
- High volume operations, ERA rates for:
  - elective hip replacements
  - elective knee replacements
  - emergency hip/femur procedures.

Great care is required in interpreting the results of comparative ERA rate analyses.