How should we measure ambulance service quality and performance?

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Lack of consensus about what to measure

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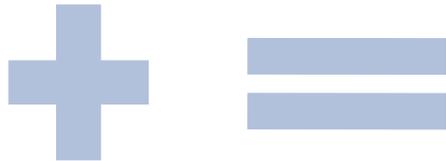
Lack of data

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Difficult to measure ambulance quality and performance

PhOEBE

Pre-hospital Outcomes for Evidence Based Evaluation

Pre-hospital Outcomes for Evidence Based Evaluation (PhOEBE)

- PhOEBE is a 5 year research programme designed to addresses these issues

- Linked ambulance, hospital and national mortality routine dataset

- Evidence review and consensus methods with a range of patients, public and professional stakeholders to develop potential pre-hospital ambulance performance indicators

PhOEBE

Pre-hospital Outcomes for Evidence Based Evaluation

- Delphi study (Dec 2013 – Feb 2014) – 2 rounds
- Ambulance clinical, operational and management staff, national ambulance research and clinical audit groups, NHS service commissioners, emergency medicine physicians, academic research groups
- 67 measures generated from 2 systematic reviews and a consensus event:
    - categorised into 3 groups
    - patient outcomes (n=25); whole service measures (n=32); clinical management measures (n=10)
- Is this measure a good reflection of the quality of care/service provided by the ambulance service and is likely to be a good indicator of the quality of the 999 ambulance service care pathway – 9 point Likert scale

Results

Measures reaching consensus as good measures of quality of care

Measure description
Proportion of patients who report pain who are given pain relief
Proportion of all 999 calls referred for telephone advice only re-contacting the ambulance service within 24 hours
Time of call to time of definitive care
Proportion of category A calls correctly identified as category A
Number of patient safety incidents reported as a proportion of all requests for 999 ambulance care
Proportion of all cases with a specific condition who meet the established criteria for transfer, who are transported to an appropriate specialist facility, for example a heart attack, stroke or major trauma centre
Proportion of cases that comply with end of life care plans where these are available
Proportion of all cases with a specific condition who are treated in accordance with established protocols and guidelines, for example stroke, heart attack, diabetes, falls

Conclusions

- Our expert panel reached consensus on a set of measures that better reflect the whole ambulance population

- Can be measured beyond the pre-hospital component of care using routine data with appropriate permissions

- Provide more useful data to ambulance services and highlight where changes can be made to improve both performance and patient experience

- For example, if timely definitive care is provided, accuracy of triage decisions and effectiveness of patients reported pain management

- The next step in our project is to build a risk adjusted predictive model for these potential measures using the linked dataset