BENCHMARKING EMS COMPASS PERFORMANCE MEASURES USING A NATIONAL DATASET: PEDIATRIC CARE

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DISCLOSURES

- No disclosures

BACKGROUND

- 10% of all EMS transports
- Airway complaints are common
- Medications are often weight based
- EMS Compass Performance Measures
- Actual performance of these measures is unknown
STUDY AIM(S) / HYPOTHESES

- Using a large, national dataset, calculate actual performance (as documented) on proportion of 911 transports < 15 y/o:
  - With documented weight
  - => 1 documented SpO2 and RR for those with respiratory impression
  - => 1 dose of beta-agonist for those with impression of asthma
  - => 1 dose of beta-agonist for those with impression of asthma AND SpO2 < 90%

METHODS

- 941 ESO consenting customers
- 6 ½ years of data
- Blinded to patient or agency-identifying data
- For measures requiring medication administration, only looked at ALS agencies.

METHODS

- Calculation done using documented fields only (no chart review)
- Calculated proportion meeting metric and 95% CI
- Graphically calculated “high” and “low” performing agencies
- 95% CI completely above/below mean proportion
RESULTS

Proportion of children with a documented weight

287,719/524,856
54.8% (95% CI 54.7 to 55.0%)

RESULTS

Proportion of children with a primary impression of a respiratory complaint with at least one SpO2 and RR documented.

37,689 / 43,067
87.5% (95% CI 87.2 to 87.8%)
RESULTS

Proportion of children with a primary impression of asthma with at least one dose of a beta-agonist documented.

4,336 / 6,202
69.9% (95%CI 68.8 to 71.1%)
RESULTS

Proportion of children with a primary impression of asthma AND an SpO2 < 90% with at least one dose of a beta-agonist documented.

4,336 / 6,202
69.9% (95%CI 68.8 to 71.1%)

DISCUSSION

- Current performance on pediatric EMS Compass measures is unknown.
- We provide first estimates on real-world performance.
- Performance varied with agency.
- Improvement is needed on these measures.
- Common “metric-centric” documentation standard could help documentation better reflect presumed actual performance.
- Impression of Asthma alone may need to be more specific.
LIMITATIONS

- Retroactive electronic chart audit
- No common documentation standard
- Documentation not done with metrics in mind
- No universal data validation rules
- Patients not getting medication may be different than those that do
- Not all patients with asthma need a beta-agonist

CONCLUSIONS

- Performance measures can help provide benchmarks
- These results are 'starting point', not 'final word'
- Improvement need in both measures and performance
- Common documentation standards are needed
- ePCR platforms with common data validation rules could improve performance