Continuous quality improvement (CQI) is critical for improving patient care and outcomes by informing EMS provider clinical decision-making. One element of CQI is performance feedback. Limited studies have suggested that EMS providers are not given feedback regularly, but little is known about the extent of this gap, type of feedback that is provided, and factors associated with receiving feedback in the prehospital setting.

Variables associated with receiving feedback:
- Higher call volumes
- Consultant
- Years of EMS experience

Odds of receiving feedback decreased with
- Odd ratio (OR) estimates displayed with 95% confidence intervals. OR to the left of the red line favor the referent, while those that cross the red line are non-significant. Significant factors denoted with asterisk (p<0.05).

## RESULTS

- Responses from 32,114 EMS providers were received (response rate = 10.4%) with 15,766 meeting inclusion criteria.
- 31% of respondents reported receiving no feedback in the previous 30 days.
- The final multivariable logistic model included:
  - Certification level
  - Years of EMS experience
  - Agency type
  - Service type
  - Weekly call volume

Model displayed good calibration ( Hosmer-Lemeshow Goodness-of-Fit Test: \( \chi^2 = 7.41, p = 0.4935 \)).

### Figure 1: Forest plot of odds ratios for factors associated with receiving feedback among nationally-certified EMS professionals. Odds ratio (OR) estimates displayed with 95% confidence intervals. OR to the left of the red line favor the referent, while those that cross the red line are non-significant. Significant factors denoted with asterisk (p<0.05).

Abbreviations: ALS = advanced life support (Advanced EMT, paramedic); BLS = basic life support (EMT).

## LIMITATIONS

- Bias from self-reported data possible.
- The content of feedback and resulting practice changes were not assessed.
- Non-response bias: a non-responder survey showed no significant differences with regards to receiving feedback among respondents and non-respondents.

## CONCLUSIONS

- Nearly one-third of EMS professionals did not receive any feedback in a 30 day period.
- Variables associated with receiving feedback:
  - Respondents providing air medical services had an almost four-fold increase in odds of receiving feedback, whereas those providing medical transport/convalescent services had a 39% decrease in odds.
  - ALS-level respondents had increased odds of receiving feedback.
  - Increased odds of receiving feedback were observed for respondents working at non-fire based agencies.
  - Odds of receiving feedback decreased with years of experience in EMS.
  - Higher call volumes were associated with increased odds of receiving feedback.

## REFERENCES