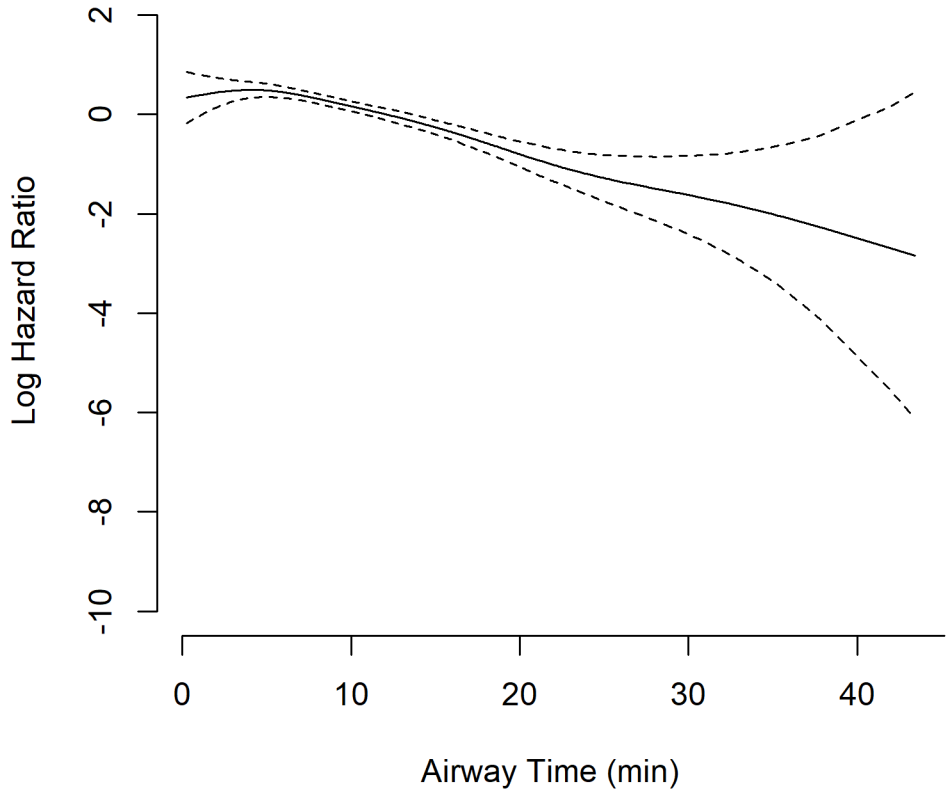
Supplemental Content

Timing of Advanced Airway Placement after Out-of-Hospital Cardiac Arrest

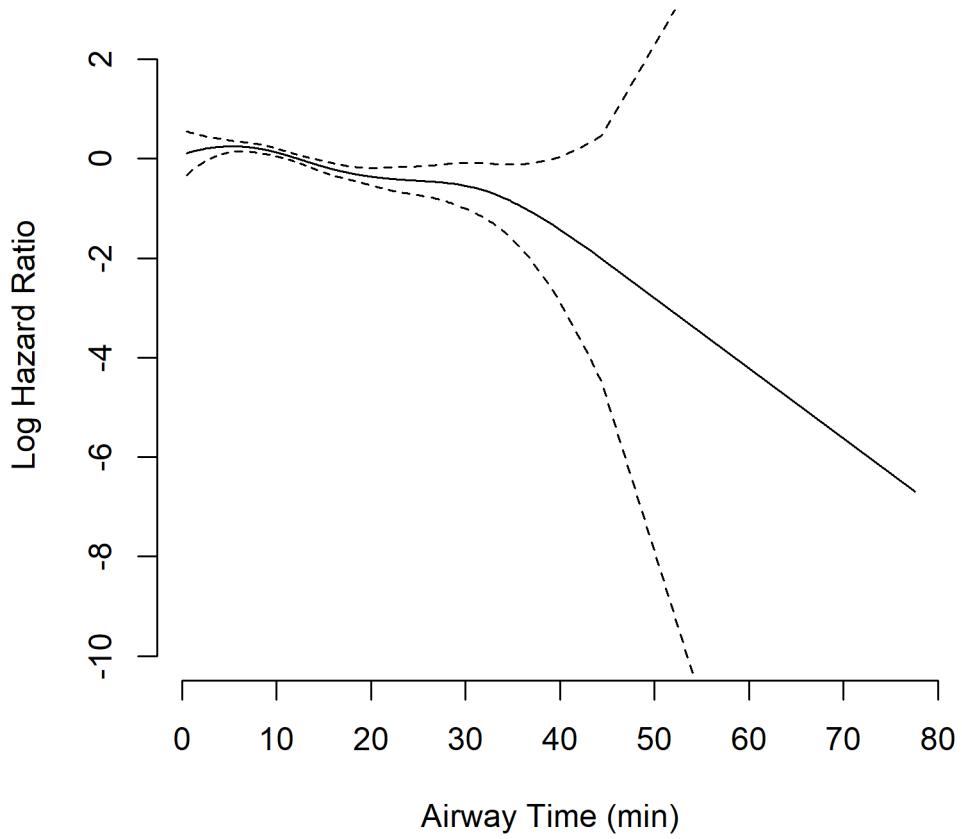
Figure S1: Sensitivity Analysis for Impedance Threshold Device in Initial Shockable Rhythms



Use of impedance threshold device versus sham was added as a covariate. No other changes were made to the model.

The hazard of prehospital return of spontaneous circulation divided by the baseline hazard (y-axis) at different times from Emergency Medical Services arrival to advanced airway placement (x-axis) is shown. Dashed lines indicate 95% confidence intervals. The y-axis uses a log scale to better visualize the negative association and has no units because it is a ratio. A value of 0 on the y-axis has no meaning because the intercept was not specified. Initial shockable rhythms are ventricular tachycardia or ventricular fibrillation.

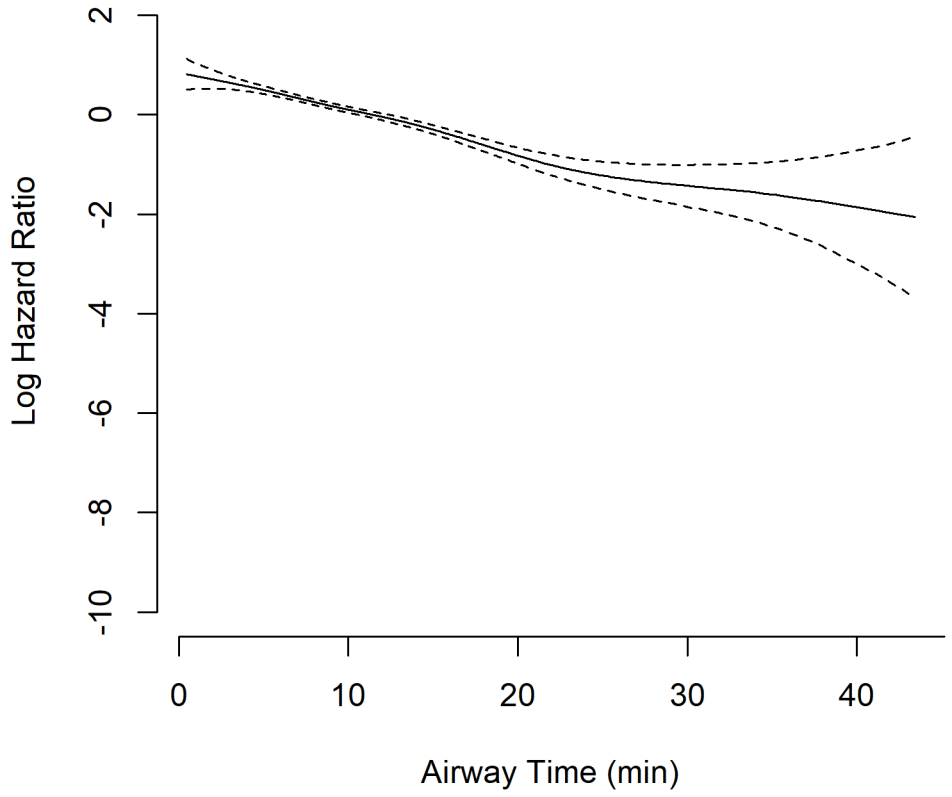
Figure S2: Sensitivity Analysis for Impedance Threshold Device in Initial Non-Shockable Rhythms



Use of impedance threshold device versus sham was added as a covariate. No other changes were made to the model.

The hazard of prehospital return of spontaneous circulation divided by the baseline hazard (y-axis) at different times from Emergency Medical Services arrival to advanced airway placement (x-axis) is shown. Dashed lines indicate 95% confidence intervals. The y-axis uses a log scale to better visualize the negative association and has no units because it is a ratio. A value of 0 on the y-axis has no meaning because the intercept was not specified. Initial non-shockable rhythms are pulseless electrical activity, asystole, or no shock from Emergency Medical Services' automated external defibrillator.

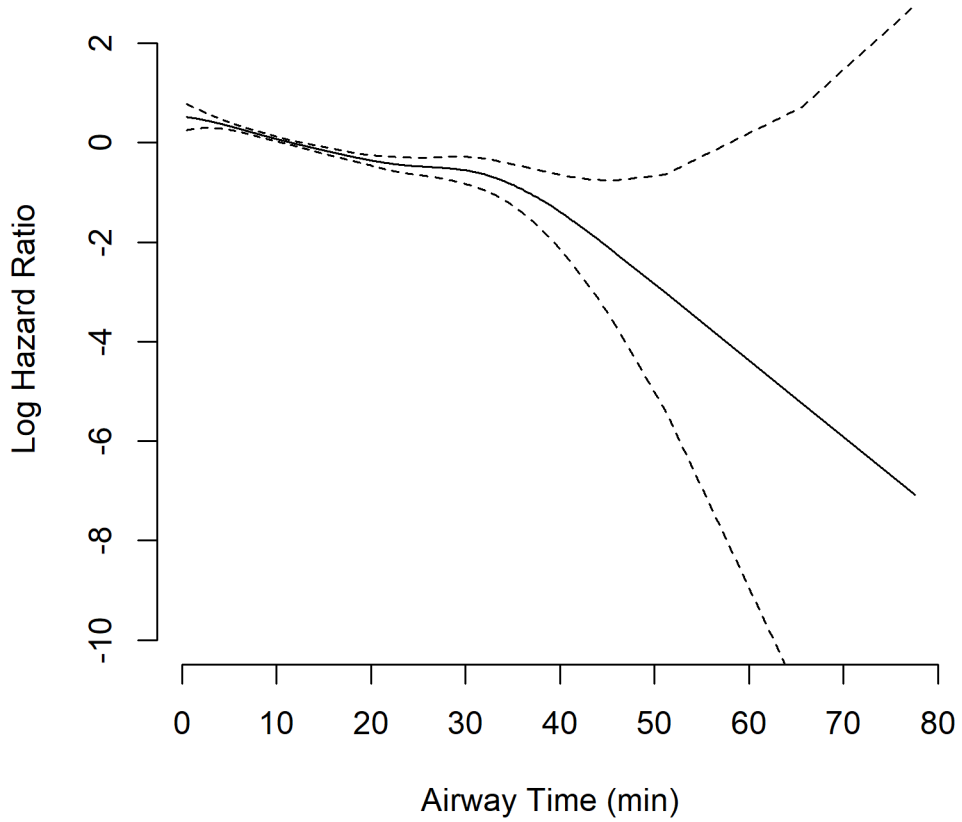
Figure S3: Sensitivity Analysis for Advanced Airway Type in Initial Shockable Rhythms



Use of endotracheal tube versus supraglottic airway was added as a covariate. No other changes were made to the model.

The hazard of prehospital return of spontaneous circulation divided by the baseline hazard (y-axis) at different times from Emergency Medical Services arrival to advanced airway placement (x-axis) is shown. Dashed lines indicate 95% confidence intervals. The y-axis uses a log scale to better visualize the negative association and has no units because it is a ratio. A value of 0 on the y-axis has no meaning because the intercept was not specified. Initial shockable rhythms are ventricular tachycardia or ventricular fibrillation.

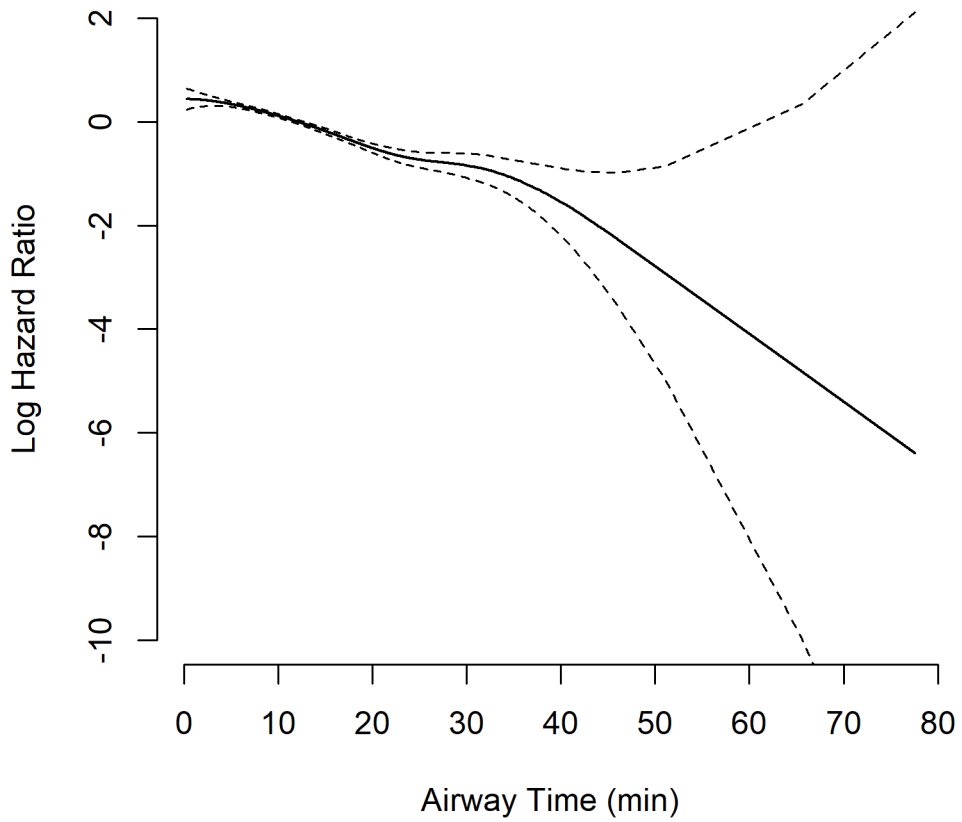
Figure S4: Sensitivity Analysis for Advanced Airway Type in Initial Non-Shockable Rhythms



Use of endotracheal tube versus supraglottic airway was added as a covariate. No other changes were made to the model.

The hazard of prehospital return of spontaneous circulation divided by the baseline hazard (y-axis) at different times from Emergency Medical Services arrival to advanced airway placement (x-axis) is shown. Dashed lines indicate 95% confidence intervals. The y-axis uses a log scale to better visualize the negative association and has no units because it is a ratio. A value of 0 on the y-axis has no meaning because the intercept was not specified. Initial non-shockable rhythms are pulseless electrical activity, asystole, or no shock from Emergency Medical Services' automated external defibrillator.

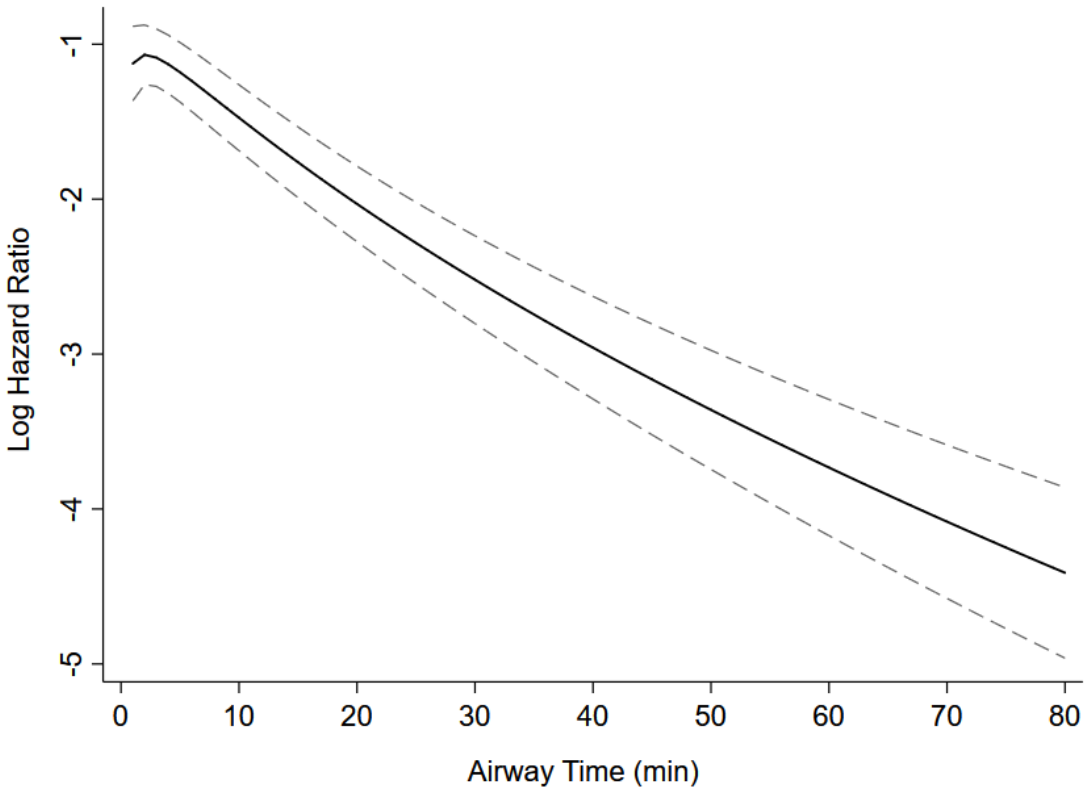
Figure S5: Sensitivity Analysis for Initial Cardiac Rhythm



Study patients were combined into a single cohort and initial cardiac rhythm was added as a covariate instead of a stratifying variable. Initial cardiac rhythm was defined as (A) ventricular tachycardia or ventricular fibrillation, (B) pulseless electrical activity, (C) asystole, or (D) no shock from Emergency Medical Services' automated external defibrillator. No other changes were made to the model.

The hazard of prehospital return of spontaneous circulation divided by the baseline hazard (y-axis) at different times from Emergency Medical Services arrival to advanced airway placement (x-axis) is shown. Dashed lines indicate 95% confidence intervals. The y-axis uses a log scale to better visualize the negative association and has no units because it is a ratio. A value of 0 on the y-axis has no meaning because the intercept was not specified.

Figure S6: Sensitivity Analysis for Multiple Imputation of Missing Data



Multiple imputation was performed on patients that met inclusion and exclusion criteria but had missing data. Study patients were combined into a single cohort and initial cardiac rhythm was added as a covariate, instead of a stratifying variable. Fractional polynomials were used instead of cubic splines. No other changes were made to the model.

The hazard of prehospital return of spontaneous circulation divided by the baseline hazard (y-axis) at different times from Emergency Medical Services arrival to advanced airway placement (x-axis) is shown. Dashed lines indicate 95% confidence intervals. The y-axis uses a log scale to better visualize the negative association and has no units because it is a ratio. A value of 0 on the y-axis has no meaning because the intercept was not specified.