

# A CLINICAL COMPARISON OF AIR MEDICAL PROVIDERS

An independent study from Optum Health

## The Analysis

In 2024, a third-party comparative analysis of payer claims was completed by Optum to see if there was differentiation in outcomes for patients transported by different air medical providers. Specifically, the analysis focused on the whether there were differentiated outcomes between Air Methods, LLC, the nation's largest air medical provider and other air medical providers included in the analysis. This analysis was done on aggregate claims data over a two-year period (2021-2022).

The study found that there was, in fact, two key areas of differentiation that were statically significant. Compared to competitors:

- Air Methods teams treat a higher proportion of patients with severe, time-sensitive conditions such as stroke, trauma, and head injury
- Patients transported by Air Methods are associated with lower post-event healthcare costs, including 65 percent lower for trauma patients and 24 percent lower for all patients.



## Conclusion 1

### **Air Methods teams treat a higher proportion of patients with certain severe, time-sensitive conditions such as stroke, trauma, and head injury than our competitors.**

The study looked at select conditions present on the date of transport by the air medical provider. These conditions included: Acute MI, Acute Stroke, Acute Trauma, Closed Head Injury, Intracranial Hemorrhage, Metabolic Conditions, Pulmonary Trauma, Respiratory Distress, Sepsis, and Thoracic Aortic Dissection.

For comparison purposes, Air Methods was compared to an aggregate view of the competitive air medical providers. The study compared the proportion of patients that had each condition when transported by Air Methods and the aggregate competitive group. Based on this comparison, there were statically significant findings with four conditions:

|                      |                           |
|----------------------|---------------------------|
| Acute Stroke         | <b>Air Methods: 13.4%</b> |
|                      | Competitors: 7.9%         |
| Acute Trauma         | <b>Air Methods: 19.4%</b> |
|                      | Competition: 15.7%        |
| Closed Head Injury   | <b>Air Methods: 9.8%</b>  |
|                      | Competition: 1.5%         |
| Respiratory Distress | <b>Air Methods: 9.61%</b> |
|                      | Competition: 16.51%       |

It is important to note that this finding is about how many of patients in each condition Air Methods and the competition transport as a proportion of total transports. This does not speak to the quality of care these patients received the way clinical quality measures, such as GAMUT scores, do.

What can be said is that when it comes to acute stroke, acute trauma, and closed head injuries, all of which are severe, time-sensitive conditions requiring advanced clinical care, Air Methods teams treat a higher proportion than the competition, while maintaining the highest clinical quality scores in the air medical industry, per the GAMUT measures.

## Conclusion 2

### **Patients transport by Air Methods are associated with lower post-event healthcare costs, including 65 percent lower for trauma patients and 24 percent lower for all patients.**

The study also looked at the post-discharge all-cause healthcare costs for patients transported by Air Methods and the competition. The cost data was adjusted using the annual medical care component of the Consumer Price Index (CPI) to reflect inflation to 2022. Again, for comparison purposes, Air Methods was compared to an aggregate view of the competitive air medical providers. The analysis showed:

| All patients  |
|---|
| Post-event inpatient costs for competition: \$13,053.37             |
| Post-event inpatient costs for Air Methods: \$9,859.29              |
| <b>Air Methods patients post-event costs were \$3,194.08 lower.</b> |
| Trauma patients   |
| Post-event inpatient costs for competition: \$11,427.75             |
| Post-event inpatient costs for Air Methods: \$4,039.32              |
| <b>Air Methods patients post-event costs were \$7,388.43 lower.</b> |

The fact that Air Methods patients are associated with lower post-event inpatient cost could be the result of several factors, such as quality of hospital partners Air Methods transports patients to, as well as the quality of care provided by Air Methods. While the study is not able to attribute these lower costs to any of these factors, the fact remains that costs are lower for both healthcare systems and patients when a patient is transported by Air Methods, especially trauma patients.

## Conclusion

This analysis was conducted with a large, high-quality data set by a third party and showed positive, statistically significant results for the patients transported and cared for by Air Methods.

Air Methods teams treat a higher proportion of patients with severe, time-sensitive conditions such as stroke, trauma, and head injury than our competition and patients transported by Air Methods are associated with lower post-event costs than our competition—24 percent less for all patients and 65 percent less for trauma patients.

Hospitals and EMS across the country trust the clinical prowess of Air Methods to care for the sickest trauma, stroke, and head injury patients and because Air Methods clinicians treat a higher proportion of these patients, they get more experience, which can also lead to better outcomes and reduced risk for sending hospitals. In addition, lower post-event costs are better for both hospitals' bottom line and patients' wallets.

| Analysis Patient Inclusion Criteria |   |
|-------------------------------------|---|
| <b>Data Source</b>                  | <p>Optum dataset: 951,039 claims for air and ground transport.</p> <ul style="list-style-type: none"> <li>• n=945,373 claims excluded for ground transport encounters.</li> <li>• n=5,666 claims included for air medical transport encounters</li> </ul>   |
| <b>Claim Type</b>                   | Commercial  |
| <b>Inclusion and Time Period</b>    | Patient has an index event with $\geq 1$ medical claim with a procedure code for transport during the identified period of 01 Jan 2021 to 31 Dec 2022 (two full years).   |
| <b>Pre-/Post-index Timing</b>       | Patients with at least six months of continuous enrollment before the index date (baseline period) and at least six months of continuous enrollment on and after the index date (follow-up period).   |
| <b>Entities Included (n=9)</b>      | <ul style="list-style-type: none"> <li>• Air Methods</li> <li>• GMR: MedTrans, AirEvac, Reach, Guardian</li> <li>• PHI Health</li> <li>• Intermountain Healthcare</li> <li>• Stat MedEvac</li> <li>• Memorial Hermann</li> </ul>  |
| <b>Medical Conditions Included</b>  | <ul style="list-style-type: none"> <li>• Acute MI</li> <li>• Acute Stroke</li> <li>• Acute Trauma</li> <li>• Closed Head Injury</li> <li>• Intracranial Hemorrhage</li> <li>• Metabolic Conditions</li> <li>• Pulmonary Trauma</li> <li>• Respiratory Distress</li> <li>• Sepsis</li> <li>• Thoracic Aortic Dissection</li> </ul> |