

ACADEMY FOR EXCELLENCE IN HEALTHCARE

IMPACT ASSESSMENT PAPER

Executive Summary

Reducing Communicator Errors at Air Evac Lifeteam

Air Evac Lifeteam is the largest independently owned and operated air medical service provider in the United States, with more than 125 air medical bases across 15 states. The company provides helicopter emergency medical services to communities in need of rapid medical transport to advanced emergency healthcare facilities. An improvement team from Air Evac attended lean training at the Academy for Excellence in Healthcare at The Ohio State University in February 2016.

Air Evac had experienced an increase in customer complaints, which affect call volumes because customers (e.g., emergency responders) have choices in whom they use to transport patients — increased complaints lead to decreased customer satisfaction and decreased requests. The team had scoped their improvement project to reducing the time for a communication center to process a call (call received in center to notify a helicopter team), which was 20 seconds above the industry average. The team listened to and assessed more than 100 calls, but they realized that most calls were of an acceptable length; their objective was, indeed, customer satisfaction, but it did not necessarily correlate with length of calls.

The improvement team examined customer complaints for 2015 and found that 29 percent of complaints were related to a communications error. The highest volume of complaints were targeted at the Ohio/West Virginia communications pod (25.3 percent of flight requests resulted in a complaint). In addition, 45.5 percent of the complaints in that pod were attributed to communicator error, and 3.95 percent of customers indicated that they “strongly disagree” that their call to request the transport was handled professionally and courteously. If each “strongly disagree” response was associated with just one lost flight, the total revenue lost by that pod for 2015 would equate to \$594,000.

The improvement team set a 90-days-from-launch goal to reduce the communicator error rate to 40.5 percent and improve the Ohio/West Virginia customer satisfaction rate by 5 percentage points (from 87.09%). The improvement team examined the many types of errors that contributed to the problem, and then developed a cause map for the errors that drove the most complaints:

- *Aircraft sent to wrong location:* inconsistency within tracking software; computer system only updates every 15 minutes with a “position check”; and assumptions made by communications specialist about pickup location.
- *Alerts not being read:* computer system didn’t show alert; communication specialist assumed they knew alert; and no forced confirmation of alert.

The team developed multiple recommendations to address each error type, and also surveyed communication specialists for their ideas in order to engage them in any changes to come. The team weighed the ideas (high, medium, and low) based on cost to implement, time and effort to implement, and the ability to impact error rates, customer complaints, and process time, respectively. After setting aside two ideas that called for a new or upgraded communications system (already being studied by Air Evac), they selected the following countermeasures and planned for their implementation:

- *Increase training for customer and communicators:* create regional knowledge packets for communicators to increase their awareness of the regions they are assigned (communicators are not physically located in the regions they service); increase frequency of coaching and monitoring of employees; and create visual cue cards for customers (prepare them for questions that will be asked by communicators, such as the receiving hospital’s name, city, and state).
- *Accountability for communicators:* Investigate errors and identify repetitious errors; create a point-based error system to assist in coaching and disciplinary procedures; and create visual cues for communicators to check alerts (cues placed at each workstation in communications center and tracking of alert-error rate to determine if the countermeasure is effective).
- *Restructure call volumes by region to more evenly distribute calls:* evaluate 2015 call volumes; identify states that can be rerouted to other region pods in order to more evenly distribute call volumes; restructure phone routings; and each quarter monitor flight volumes to determine if workload is evenly distributed.

The improvement team’s A3 documented the overall project activities and identified follow-up metrics that would help them to gauge the effectiveness of countermeasures: customer satisfaction score, communicator error rate, flight volume distribution, and process times. The improvement team reported their progress to AEH in April 2016, at which time they had begun to redistribute call volumes and were beginning to roll out the other countermeasures. Improvements achieved by August 2016 included a reduction to 30% in the complaints in the Ohio/West Virginia pod that were attributed to communicator error, despite the institution of an entirely new process that was mandated by the Federal Aviation Administration (which has a potential high risk for errors).

[About the Academy for Excellence in Healthcare:](#) AEH blends in-person class time with hands-on project work, interactive simulations, and recurrent coaching, all aimed at helping healthcare teams spark actionable change at their organization. To learn more about AEH, contact [Margaret Pennington](#), Faculty Director, or [Beth Miller](#), Program Director.