2012 Helicopter Review Summary

The 2012 review of the utilization of air medical resources in San Luis Obispo County in 2012 identified air medical resources were requested 58 times, excluding the rescue only operations conducted by the CHP helicopter. Of the 58 requests, 21 patients were transported to a hospital with 16 taken to a hospital in San Luis Obispo (SLO) County. The five (5) patients transported outside of the county were patients meeting specialty care center criteria and such centers were identified as the closest facility. Of the 16 patients transported to a hospital in SLO County 12 (75%) patients were admitted. Six (6) of the admissions were to an ICU or DOU service with one (1) going directly to the OR and the other three (3) were admitted to MS. Of the four (4) patients discharged three (3) of the patients met the field trauma triage criteria Step 3 or 4 for mechanism/special consideration denoting a higher index of suspicion for critical injury (PSI > 12", transient paralysis, extremity fractures with neuro-vascular compromise) and one patient had a medical condition (severe abdominal pain – later identified as a kidney stone) with a ground transport time to the hospital of one hour. In all cases reviewed there was a time savings over ground of greater than 10 minutes and in one case a savings of 3 hours.

Measures:

- ED admission rates:
  In an effort to benchmark our performance, a literature review of EMS related articles noted that the admission rates in ranged from 66.5% to 84% (*). The admission rate for patients transported by air medical helicopters in SLO County was within the national ranges.

- Time: A savings of greater than 10 minutes of over ground transport
  In all cases reviewed the helicopter saved greater than 10 minutes over ground:

- Need:
  15 patients met at least one of the field trauma triage criteria
  Patients meeting trauma triage consult criteria had base contact with the trauma center for destination
  1 patient identified with severe abdominal pain with unknown etiology and a ground transport time of 1 hour
  16 patients transported to SLO hospital
  75% of transports were admitted – similar to other programs in the nation (*)

All cases were reviewed with patient treatments and outcomes shared with provider agencies

Action:

Continue to review all calls and revise the helicopter utilization tool


(*) Journal of Trauma and Acute Care Surgery: Pediatric trauma patients are more likely to be discharged from the emergency department after arrival by helicopter emergency medical services March 2013 - Volume 74 - Issue 3 - p 917–920
2012 Helicopter Utilization Review

2012 SLO EMS Helicopter Calls

<table>
<thead>
<tr>
<th>Number of EMS Requests</th>
<th>Number of Patient Transports</th>
<th>Cancellations/No Aircraft</th>
<th>Unable to Respond Due to Weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>21</td>
<td>34</td>
<td>3</td>
</tr>
</tbody>
</table>

EMS Helicopter Dispatch Review

<table>
<thead>
<tr>
<th>Average time of 911 to Request</th>
<th>12 min</th>
<th>(0-51 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time from 911 to dispatch</td>
<td>15 min</td>
<td>(3-39 min)</td>
</tr>
<tr>
<td>Time of request to dispatch</td>
<td>6 min</td>
<td>(0-23 min)</td>
</tr>
<tr>
<td>Dispatch to enroute</td>
<td>5 min</td>
<td>(0-15 min)</td>
</tr>
</tbody>
</table>

EMS Helicopter Call Types

- Trauma - 18
- Medical - 2
- MCI - 1
- 5%
- 9%
Patient Outcome

Disposition of Patients Admitted to SLO Hospitals