DATA

• Report is based on data currently received by OCEMS for 2016

• Data is reported by the nine Orange County Stroke-Neurology Receiving Centers (not all 24 acute care hospitals)

• Database is double entry format with entry from:
  – Orange County Base Hospitals
  – Orange County Stroke-Neurology Centers
Demographics

• Of total database entries:
  – Female = 52.9%
    • Median female age = 78 yrs (Q25=63; Q75=86)
    • Average female age = 74.0 yrs (=/- 16.3 yrs)
  – Male = 47.1%
    • Median male age = 69 yrs (Q25=58; Q75=81)
    • Average male age = 68.3 yrs (+/- 15.2 yrs)
  – Total population
    • Median age = 74 yrs (Q25=60; Q75 = 84)
    • Average age = 71.2 yrs (+/- 16.1 yrs)
System Performance

- EMS Transport to SNRC within 7 hours of onset of symptoms = 51% of total EMS transport cases with complete data
- Mortality rate = 7.0% of total cases in full database with complete data
CASE BASED DISTRIBUTION

2219 Cases Entered to Date
(December 1, 2016)

- 843 Ischemic (37.5%)
- 291 Hemorrhagic (13.1%)
- 92 TIA (4.1%)
- 292 Other (13.2%)
- 815 Awaiting Final Data Report or Missing Data (36.7%)
Mode of Arrival

2219 Cases in Database

- 1854 Arrived via EMS (83.5%)
- 239 Arrived via POV (10.8%)
- 77 Incomplete or Missing Data (3.5%)
Ischemic Stroke Treatment Interventions

843
Ischemic Cases in Database
(40.0%)

187
IV TPA
(22.2%)

49
IV TPA + Mechanical
(5.8%)

34
Mechanical
(4.0%)

2
IA TPA
(0.1%)

6
IV TPA + IA TPA
(0.1%)

Total Intervention Rate = 33.0%
Mechanical Intervention Rate = 9.8%
DIAGNOSIS = OTHER
TOP 7

• Seizure and seizure variants
• Sepsis / systemic infections
• Headache variants (vascular)
• Cardiac etiologies (37.5 % acute MI)
• Syncope variants
• Hypoglycemia (diabetic)
• Intracranial mass
NIH Scores

• Total ischemic cases

<table>
<thead>
<tr>
<th></th>
<th>Arrival to SNRC</th>
<th>Discharge from SNRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>(quartiles: 25%= 2, 75%= 13)</td>
<td></td>
<td>(quartiles: 25%= 1, 75%= 8)</td>
</tr>
<tr>
<td>Average</td>
<td>8.2</td>
<td>6.0</td>
</tr>
<tr>
<td>(95% CI: 7.6, 8.8)</td>
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<td>(95% CI: 5.5, 7.6)</td>
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</tbody>
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NIH Scores

• Ischemic cases with intervention

<table>
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<tr>
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<th>Discharge from SNRC</th>
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</thead>
<tbody>
<tr>
<td>Median</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>(quartiles: 25%= 3, 75%= 14)</td>
<td></td>
<td>(quartiles: 25%= 1, 75%= 11)</td>
</tr>
<tr>
<td>Average</td>
<td>9.0</td>
<td>6.7</td>
</tr>
<tr>
<td>(95% CI: 8.0, 10.0)</td>
<td></td>
<td>(95% CI: 5.8, 7.6)</td>
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</table>
NIH SCORES

• For most serious ischemic stroke cases:
  – Admit NIH ≥ 13
  – Received intervention (IV TPA, IA TPA, Mech)

74 cases thus far in 2016

<table>
<thead>
<tr>
<th></th>
<th>Admit</th>
<th>D/C</th>
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<tbody>
<tr>
<td>Median NIH Score</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Q 25/75 = (23, 27)</td>
<td></td>
<td>(8, 24)</td>
</tr>
<tr>
<td>Median (95% CI)</td>
<td>25.1 (24.0, 26.2)</td>
<td>15.6 (13.5, 17.7)</td>
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