We Can Hear (and See) You Now!
Telestroke Increases Thrombolytic Use in Acute Ischemic Stroke

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Research Study

To determine the effect of delivery of fulltime telestroke services on the rates of IV tPA administration at a community hospital, we compared the rate of IV tPA administration in 2007 (prior to the implementation of telestroke services) with the rate of IV tPA administration in 2009 (1 year following the implementation of telestroke services).
# Results

<table>
<thead>
<tr>
<th>DATA</th>
<th>2007</th>
<th>2009</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td># of stroke patients discharged with IS</td>
<td>114</td>
<td>159</td>
<td>↑ 39%</td>
</tr>
<tr>
<td># of IV tPA cases</td>
<td>10 (7.35%)</td>
<td>26 (38.24%)</td>
<td>↑ 160%</td>
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<tr>
<td># of patients with contraindications to IV tPA</td>
<td>18</td>
<td>5</td>
<td>↓ 78%</td>
</tr>
</tbody>
</table>
Results

• There was a 160% increase in the administration of IV tPA in 2009 when compared to 2007.

• In 2007, 7.35% of those for whom a stroke code was called got IV tPA whereas in 2009, 38.24% of those for whom a stroke code was called got IV tPA.

• This difference was highly significant ($X^2 = 29.74$, df=1, $P<0.001$).
Conclusion

A HUB and SPOKE telestroke model for delivering acute stroke expertise at a community hospital is successful in treating a significantly larger number of patients eligible for tPA.

Studies to assess long-term functional outcome are needed.