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### Stroke Care Delivery Before vs After JCAHO Stroke Center Certification

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INTRODUCTION: A number of advances in the treatment of stroke lead to certification of Stroke Centers by JCAHO. The University of California Irvine Medical Center (UCIMC) was in the initial group of hospitals certified, in January 2004. The current study evaluated trends in stroke care delivery for the 1.5 years following, as contrasted with the 3 years preceding, JCAHO certification. METHODS: Data were obtained from several sources, including medical records, discharge summaries, and a prospectively collected emergency room-based database of acute stroke consultation requests. RESULTS: There were 565 patients with acute ischemic stroke. Comparing the 12 quarters before, vs. the 6 quarters after, there was a significant (p<.0001) increase in the proportion of patients receiving (a) lipid profile testing (71% vs. 86%) and (b) DVT prophylaxis (80% vs. 98%). Furthermore, with establishment of an inpatient stroke service 6 months after certification, the fraction of patients undergoing lipid profile testing rose to 92%; for DVT prophylaxis, to 99%. The rate of i.v. tPA has increased since stroke center certification (from 3 to 10 patients/year), as has the rate of all (i.a. & i.v.) thrombolytics (from 4 to 14 patients/year). Since UCIMC became a stroke center in 2004, there has been an increase in the admission rates for intracerebral hemorrhage (137%), subarachnoid hemorrhage (50%), and ischemic stroke (20%), while the rate for patients discharged as having a TIA has decreased by 31%. The length of stay has not changed over time for patients with ischemic stroke. However, the length of stay for patients with intracerebral hemorrhage has increased from 6.7 to 8.1 days, while for patients with TIA it has decreased from 2.7 to 1.6 days. Of the 66 patients suspected of having an ischemic stroke at the end of the ER evaluation, median NIHSS score was 7, and median time from door to CT read was 28.0 minutes. CONCLUSIONS: Since JCAHO Stroke Center certification, admission rates have increased for all stroke subtypes, particularly for patients with intracerebral hemorrhage, among whom length of stay has increased as well. Stroke Center certification was associated with improved rates of DVT prophylaxis, lipid panel testing, and thrombolytic administration.