Stroke care system of Japan

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Stroke is a major leading cause of disability in Japan. Over-65 population stands at 29 million, more than 20 percent of the total in Japan. This rate is the highest in the world and will continue to expand. The first Stroke Guidelines issued in 2004 strongly recommended for establishing Stroke Care Unit (SCU) and iv-tPA therapy for the acute ischemic stroke. Stroke care system of Japan has been drastically changed after the approval of iv-tPA therapy in 2005. In 2006, a special medical fee for SCUs was established. In 2007, Japan launched a major reform in Regional Health Plan that emphasized the development of local collaboration among acute hospitals, convalescent rehabilitation wards, and long-term care facilities with public disclosure of the function of each facilities. A concept of disease-oriented regional inter-provider critical pathways was introduced and a special medical fee for this cooperation was established.

Previously, rehabilitative services were provided only on weekday in almost all acute stroke hospitals and it was evident that a reduction in the weekday ratio during the initial 3 weeks after admission due to the weekends and Holidays resulted unfavorable outcome. To overcome this weekend effect, a special medical fee was established for rehabilitation provided on a holiday in 2010. Now, the 7days a week rehabilitation for acute and subacute stroke patients gradually spread among hospitals. Japan has the highest number of MRI and CT units in the world and citizens can freely access to any hospitals or clinics. Because of this unique resources and health care system, establishment of a triage system for patients with suspected minor stroke or TIA is a challenging task in Japan. A recent study using the geographic information system (GIS) analysis showed that 0.6%-8.3% of the population lived in areas where they could not reach a hospital for acute stroke treatment within 60 min, implying significant disparities in accessing acute hospitals for stroke in Japan. Low volume facilities located in rural areas do not perform iv-tPA therapy in 24/7 fashion. The concept of telestroke networks has been proposed to overcome regional disparities in stroke treatment. Such networks do not yet operate in Japan, except several pilot studies.

The implementation of standardized, cross-institutional quality assurance programs may improve the process and outcome of stroke care. The clinical indicators for the quality assurance monitoring has been developed and a pilot evaluation was performed in 44 hospitals in 2010. Establishment of a quality monitoring system for stroke care is strongly desired.