Improving the percentage of patients receiving thrombolysis within 60mins of arrival at the emergency department – optimisation of the tele-stroke service.

Singapore Healthcare Management 2017

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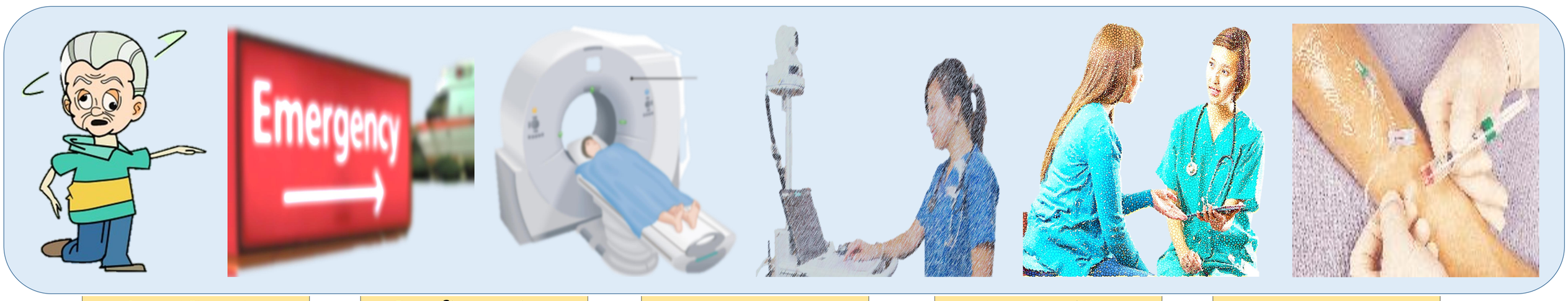
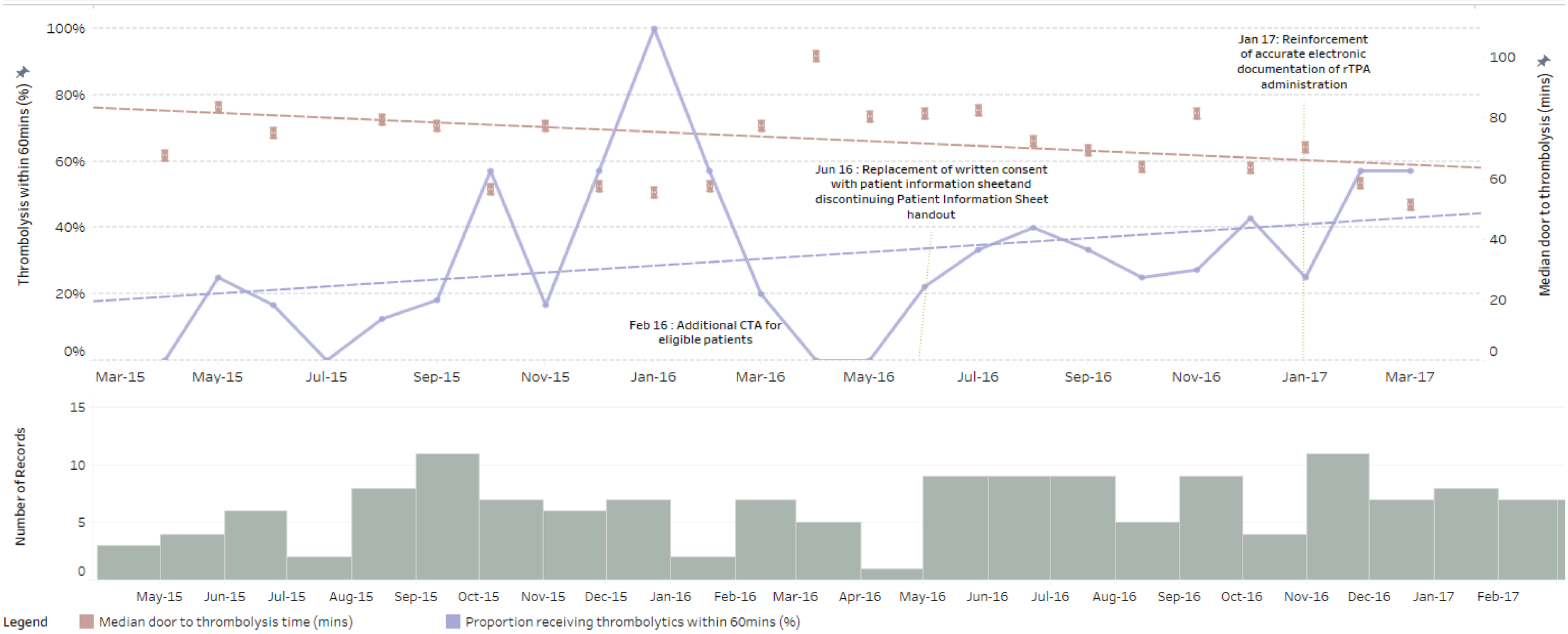
With no in-house neurologist, CGH adopts the tele-stroke service where neurologists from National Neuroscience Institute (NNI) assess patient's condition via teleconferencing before deciding patient's suitability for thrombolysis. The aim of the study was to improve door-to-needle (DTN) time for Acute Ischemic Stroke (AIS) patients who received thrombolytic drug (in the form of recombinant tissue plasminogen activator (rTPA) through the tele-stroke service.



All work processes in the different phases of the tele-stroke service were studied for opportunities to reduce DTN time. Where hot spots were detected, initiatives were applied to improve performance. Additional time was required for Computed Tomography Angiography (CTA) to rapidly assess patient suitability for endovascular thrombectomy (EVT)

RESULTS OVER 24 MONTHS



Median DTN was over 24 months achieved a downward trend (using linear trend line). Median DTN was over 24 months achieved a downward trend (using linear trend line). Albeit a 22% increase in demand (86patients in Apr 16 – Mar 17, vs 67patients in Apr 15 – Mar 16) and additional investigations required (i.e. addition of CTA), median time taken for DTN and proportion of AIS patients receiving DTN within 60 mins has remained stable (74mins vs 72mins, & 31.3% vs 31.4%).

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