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Title	Predictors of diagnostic neuroimaging delays in adult Ontario patients presenting with symptoms suggestive of acute stroke — a prospective cohort study
Authors	Kirsteen R. Burton MD, Moira K. Kapral MD, Shudong Li PhD, Jiming Fang PhD, Alan R. Moody MBChB, Murray Krahn MD, Andreas Laupacis MD
Reviewer 1	Ashfaq Shuaib
Institution	University of Alberta, Departments of Medicine andNeurology, Stroke Program, Edmonton, Alta.
General comments (author response in bold)	This study is from the Canadian Stroke Registry where data on 3984 patients presenting to emergency within 4 hours of onset of symptoms was evaluated. The key question was the time from admission to emergency to the completion of the first brain imaging test. The basic imaging of CT (majority of patients) or MR was done within 25 minutes in 27% of patients. These numbers are disturbingly low as the mean time to imaging was 1.49 hours. This is a large systematic review of prospectively collected data that shows the very low rate of getting imaging completed within the acceptable times as recommended by the Canadian Stroke Network or the American Heart Association. It may be useful to show various medical centres that are academic versus non-academic. Also, it may be useful to show data of centres that have thrombolysis in place versus those that do not have protocol for acute stroke therapies.
Reviewer 2	Santanu Chakraborty
Institution	Department of Radiology, University of Ottawa, The Ottawa Hospital, Civic Campus, Ottawa, Ont.
General comments (author response in bold)	This is a well-written observational study using provincial registry data on acute stroke imaging in Ontario. I agree with the conclusion that there is urgent need for more quick and timely imaging of acute stroke patients. There are few information that will enhance this manuscript as below. 1. 'Neuroimaging' can be really variable and any information or grouping info on 'type' of neuroimaging (NCCT, CTA, Perfusion etc.) would be helpful. 2. Results section: "mean" time to imaging: It might be better to use median time with IQR or both. 3. What percentage of pt. had tPA? Between the groups. 4. Any had tPA without imaging? 5. 'Women' are having delay in their imaging. Are there any explanation for this gender gap here in Ontario? Are there any clue related to the age of the patient in this subgroup or nonspecific symptoms? 6. Page 12 line 25 'principle' to principal.
Reviewer 3	Sudeep Gill
Institution	Department of Medicine, School of Medicine, Queen's University, Kingston, Ont.
General comments (author response in bold)	The investigators report a cohort study examining how commonly there are delays of neuroimaging in patients who present to hospital with suspected acute stroke and risk factors for this delay. They identified 3984 patients from the Ontario Stroke Registry (April 2010 to March 2011) who presented within 4 hours of symptom onset, and found that only 1087 of the 3984 (27.3%) had neuroimaging (CT or MRI) done within 25 minutes of presentation (which would allow thrombolysis within the recommended 4.5 hours of symptom onset). Thus, up to three quarters of patients presenting with acute stroke may not receiving recommended urgent neuroimaging within time to permit potentially valuable treatment. Variables independently associated with delays in neuroimaging are identified and discussed in the context of previous studies. The study addresses an important clinical topic and possible contributors to suboptimal management of acute stroke. The manuscript is generally well organized and well written. The authors highlight the measurement of "door-to-imaging" time as an important component of "door-to-needle" time. While the Introduction suggests that little information is available on "door-to-imaging" time, the Discussion compares and contrasts the findings of this study with previous articles (e.g. references 19 to 23 in the manuscript). Overall, the manuscript might be better targeted to a journal that focuses on neurosciences (in particular stroke) or diagnostic radiology. This study's findings will be of greatest relevance to stroke neurologists and radiologists who are hoping to reduce systemic barriers to rapid access to neuroimaging in the acute stroke setting. COMMENTS: 1. It was unclear why the authors chose to focus on data from April 2010 to March 2011. Does this time align with the most recent guidelines suggesting "door-to-needle" time of less than 4.5 hours for thrombolysis? Are most recent (and/or older) data available? It would have been interesting to examine trends over time in the proportion of individuals who received neuroimaging within 25 minutes.

	2. In both the Abstract and the Results (line 37 of page 7 of 23), the number 1087 should accompany the percentage 27.3% (i.e. the number/percentage of the 3984 who received neuroimaging within 25 minutes). 3. On page 11 of 23 (line 35), the acronym OSA is used. What is the OSA? Is it the Ontario Stroke Registry? 4. The Reference List needs revision. For example: a) Reference formatting is inconsistent – different formats used for references 1 and 2 b) Reference formatting is inconsistent. Reference 3 does not list year of publication, source/journal, pages, etc c) Reference 9 – what is “Group T”? d) References 21 and 27 – no source/journal or year is provided for ref 21, and no page numbers are given for both references 21 and 27