

Supplementary Material for National trends in hospital admission, case fatality, and sex differences in atrial fibrillation related strokes

Gordon A.E. Jewett MD¹, M. Patrice Lindsay PhD², Cristina Goia MStat², Brandon Zagorski MS PStat², Noreen Kamal PhD^{1,3}, Moira K. Kapral MD MSc⁴, Andrew M. Demchuk MD¹, Michael D. Hill MD MSc¹, Amy Y.X. Yu MD MSc⁵

¹Department of Clinical Neurosciences, Hotchkiss Brain Institute, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada.

²Heart & Stroke Foundation of Canada, Toronto, Ontario, Canada.

³Electrical and Computer Engineering, Schulich School of Engineering, University of Calgary, Calgary, Alberta, Canada.

⁴ICES and Department of Medicine, University of Toronto, Toronto, Ontario, Canada

⁵Department of Medicine, University of Toronto, Toronto, Ontario, Canada

Disclosures

This project was reviewed and approved by the Heart & Stroke Stroke Quality Advisory Committee. Funding for data analysis provided by Heart & Stroke as part of the Heart & Stroke Quality of Stroke Care in Canada annual performance measurement and improvement strategy.

Parts of this material are based on data and information provided by the Canadian Institute for Health Information. However, the analyses, conclusions, opinions and statements expressed herein are those of the authors and not those of the Canadian Institute for Health Information.

Supplementary Table 1. Absolute hospital admissions for ischemic stroke with AF as a secondary diagnosis in Canada by province.

Province ⁺	2007	2008	2010	2011	2012	2013	2014	2015	2007-2015
Canada									
Ischemic stroke with AF	3283	3569	4078	4092	4378	4431	4640		36874

% of all ischemic stroke	16.8%	18.3%	20.5%	20.9%	21.9%	21.6%	21.3%	20.4%	20.2%
British Columbia							6		
Ischemic stroke with AF	469	518	591	584	633	610	13	594	5157
	15.2%	16.3%	18.3%	18.2%	19.6%	17.8%	17	16.2%	17.4%
% of all ischemic stroke							5		
Alberta							5		
Ischemic stroke with AF	342	374	441	431	494	444	102	512	3961
% of all ischemic stroke							16		
	18.8%	20.4%	22.2%	20.8%	23.4%	21.4%	%	20.1%	21.1%
Saskatchewan							1		
Ischemic stroke with AF	142	137	128	145	134	149	41	119	1205
% of all ischemic stroke							8		
	17.5%	16.7%	16.9%	18.7%	16.6%	19.3%	0	15.0%	17.0%
Manitoba							2		
Ischemic stroke with AF	169	201	229	217	224	211	05	196	1843
% of all ischemic stroke	16.6%	20.1%	24.3%	23.5%	23.4%	22.6%	20	22.0%	21.6%

							. 8 %		
Ontario							2 8 0		
Ischemic stroke with AF	1876	2013	2358	2370	2505	2644	2 2 3	2819	21560
% of all ischemic stroke	17.8%	19.1%	22.0%	22.6%	23.4%	23.7%	. 3 %	22.6%	21.8%
New Brunswick							1 0 3		
Ischemic stroke with AF	82	103	81	84	89	86	1 3	117	823
% of all ischemic stroke	11.1%	14.0%	11.0%	12.1%	11.3%	12.0%	. 9 %	15.2%	12.4%
Nova Scotia							1 9 5		
Ischemic stroke with AF	127	154	1	171	183	201	2 1	185	1562
% of all ischemic stroke	15.7%	18.8%	20.2%	21.7%	23.8%	23.2%	. 1 %	20.7%	20.7%
Prince Edward Island							1 8 1		
Ischemic stroke with AF	27	24	22	22	17	24	3 .	16	191
% of all ischemic stroke	21.3%	19.7%	18.3%	20.4%	15.9%	18.9%		13.2%	17.6%

							8		
							%		
Newfoundland									
Ischemic stroke							7		
with AF	44	40	52	51	77	65	9	76	524
							1		
% of all ischemic							6		
stroke							.		
	8.5%	8.6%	10.6%	11.7%	18.3%	14.5%	1		
							%	14.0%	12.3%
Territories									
Ischemic stroke									
with AF	*	*	*	*	*	10	*	6	48
% of all ischemic									
stroke	*	*	*	*	*	18.9%	*	14.0%	14.3%

* data censored due to small number of events (< 6) +Data from Province of Quebec not available
Ischemic stroke with AF: Total number of admissions for ischemic stroke with secondary diagnosis of AF
% of all ischemic stroke: Percent of all ischemic stroke admissions with secondary diagnosis of AF
Calendar years April 1 to March 31, all data April 1, 2007 to March 31, 2016.
AF: atrial fibrillation; yr: year; prov: provincial.

Supplementary Table 2. Absolute hospital admissions for intracerebral hemorrhage with AF as a secondary diagnosis in Canada by province.

Province ⁺	2007	2008	2009	2010	2011	2012	2013	2014	2015	2007-2015
Canada										
ICH with AF	426	408	421	431	474	429	433	432	478	3932
% of all ICH	10.1%	9.7%	10.0%	10.2%	11.2%	10.0%	10.1%	9.3%	10.0%	10.1%
British Columbia										
ICH with AF	46	42	46	47	62	43	39	42	45	412
% of all ICH	6.2%	5.8%	6.7%	6.6%	8.5%	5.9%	5.6%	5.3%	5.6%	6.2%
Alberta										
ICH with AF	38	49	59	71	60	65	59	34	45	456
% of all ICH	10.0%	11.6%	13.8%	11.6%	13.3%	14.2%	11.7%	7.1%	8.4%	11.2%
Saskatchewan										
ICH with AF	11	*	17	18	11	6	6	11	7	86
% of all ICH	9.5%	*	12.6%	12.5%	7.5%	5.0%	5.0%	8.0%	5.6%	7.3%
Manitoba										
ICH with AF	26	27	15	28	30	20	24	21	30	221
% of all ICH	12.7%	12.9%	7.2%	13.3%	14.0%	9.6%	11.9%	10.4%	13.2%	11.7%

				5 %							
Ontario											
ICH with AF	277	246	252	26511	285	267	268	284	316	2460	
% of all ICH	11.5%	10.6%	10.6%	13%	12.5%	11.4%	11.4%	11.1%	11.9%	11.4%	
New Brunswick											
ICH with AF	13	10	10	64	6	11	11	7	*	78	
% of all ICH	9.2%	7.2%	8.1%	3%	4.0%	6.7%	7.2%	5.3%	*	6.1%	
Nova Scotia											
ICH with AF	7	18	16	169	11	6	16	25	17	132	
% of all ICH	5.1%	11.7%	10.8%	9%	6.9%	4.4%	10.9%	13.2%	10.0%	9.4%	
Prince Edward Island											
ICH with AF	*	*	*	*	*	*	*	*	*	17	
% of all ICH	*	*	*	*	*	*	*	*	*	15.9%	
Newfoundland											
ICH with AF	7	8	*	89	8	8	9	6	10	67	
% of all ICH	8.2%	8.0%	*	0%	7.8%	7.5%	8.7%	4.8%	7.7%	7.4%	
Territories											
ICH with AF	*	*	*	*	*	*	*	*	*	*	
% of all ICH	*	*	*	*	*	*	*	*	*	*	

* data censored due to small number of events (< 6) +Data from Province of Quebec not available
 ICH with AF: Total number of admissions for intracerebral hemorrhage with secondary diagnosis of AF
 % of all ICH: Percent of all intracerebral hemorrhage admissions with secondary diagnosis of AF
 Calendar years April 1 to March 31, all data April 1, 2007 to March 31, 2016.
 ICH: Intracerebral hemorrhage; AF: atrial fibrillation; yr: year;