Title	**Sex differences in management and outcomes after stroke in the Australian Stroke Clinical Registry (AuSCR)**
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Summary	We examined all first-ever stroke cases registered in the AuSCR database from 2010-2014 to model sex differences in in-hospital management, health-related quality of life (HRQoL) using the EQ5D at 3 to 6 months and survival up to 12 months after stroke from the National Death Index. Central to our aims were the examination of a range of factors, mostly at the level of the patient, which might explain the sex differences. These included socio-demographic and stroke-related factors, stroke severity, stroke type, and clinical management.
Outcomes	We included first-ever strokes admitted to 39 hospitals in the AuSCR during 2010-2014. Data were available for 14,118 strokes (46% women, 81% ischaemic, median age: 75). Women were 7 years older and less able to walk on admission (29% vs 37%, p<0.001) than men. **Sex differences in access to evidence-based therapies in hospital** • It appeared that slightly fewer women than men were admitted to a stroke unit (79% vs 81%, p=0.001). Compared to men, women were slightly less often discharged home (47.6% vs 39.6%, p<0.001) and more often discharged to aged-care setting (9.0%, vs 3.8%, p<0.001. • Women and men were equally likely to receive thrombolysis (12.7% vs 12.0%, p=0.311), antihypertensive agents (71.1% vs 70.3%, p=0.415) or a care plan at discharge (65.8 vs 68.5, p=0.050). • The only difference in evidence-based therapy was that women were less often administered aspirin ≤48 hours (51% vs 58%, p=0.014) in a Queensland subset (n=5,224). **Sex differences in long-term mortality after stroke** • Mortality was greater in women (mortality rate ratio; MRR_{crude} 1.45 [95% CI 1.33, 1.59]) by 1 year compared to men. The difference was explained by women's greater age and more severe stroke with the adjusted MRR attenuated after accounting for these factors (MRR 1.00; 95% CI 0.92-1.09) **Sex differences in long-term health-related quality of life after stroke** • About 60% (n=6852) of people in AuSCR had HRQoL assessments. The association between sex and HRQoL depended on age, with only older women having poorer HRQoL than older men (EQ5D utility mean difference [MD] -0.103 [-0.160, -0.047]) independent of severity. Evidence-based care measures did not contribute to the difference. **Summary** Worse outcomes in women compared to men after stroke were associated with age, severity and aspirin administration suggesting targets to reduce sex differences in outcomes.
Publications	**Published/presented:** Phan HT, Blizzard L, Reeves MJ, Thrift AG, Cadilhac D, Sturm J, Heeley E, Feigin V, Parmar P, Krishnamurthi R, Barker-Collo S, Parag V, Konstantinos V, Anderson C, Bejot Y, Cabral N, Carolei A, Sacco S, Chausson N, Olindo S, Silva C, Correia M, Magalhães R, Appelros P, Korv J, Vibo R, Minelli C, Otahal P, Gall S. **Differences Between Men and Women in Long-term Participation Restriction After Stroke**: **The International Stroke Outcomes Study**

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Phan HT, Cadilhac D, Thrift AG, Blizzard L, Anderson C, Kim J, Gall S. **Differences in Stroke Management do not Account for the Greater Long-term Mortality After Stroke in Women Compared to Men: Australian Stroke Clinical Registry (AuSCR).** *Stroke*. 2017;48(suppl 1):ATP171. International Stroke Conference, Houston, Texas, USA, 2017 (Oral presentation)

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Phan HT, Cadilhac D, Blizzard L, Lannin N, Thrift AG, Anderson C, Kim J, Grimley R, Gall SL. **Differences in stroke care and outcomes after stroke for women compared to men: Australian Stroke Clinical Registry (AuSCR).** The 27th Annual Scientific Meeting of the Stroke Society of Australasia, August 2017, Queenstown, New Zealand (Oral presentation)

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Phan HT, Gall SL, Blizzard CL, Lannin NA, Thrift AG, Anderson CS, Kim J, Grimley R, Castley HC, Cadilhac DA* on behalf of the AuSCR Consortium. **Sex difference in specific-cause of excess death rates after stroke: the Australian Stroke Clinical Registry (AuSCR).** *International Journal of Stroke* 2018 13 (S2):WSC18-0527.

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