thrombolysis. Data collected included age, baseline National Institute of Health Stroke Scale (NIHSS) score, onset time, arrival time, CT imaging & reporting time and outcomes of the event.

Results From 656 admissions, 70 cases of thrombolysis were recorded 56 cases of endovascular thrombectomy. The mean time from onset to arrival was 85 minutes, from arrival to CT was 31 minutes and from door to needle time (DNT) was 108 minutes. Multiple regression analysis revealed an inverse linear association between onset to arrival time and DNT. Age, stroke severity and gender were not shown to impact treatment times. The results showed that there was a paradoxical association between arrival time and DNT. The cause for this was not clearly identified but similar to previous studies is likely to be contributed by a lack of urgency when initiating management.^{1 2}

Conclusion For every 30-minute delay in hospital arrival, there was a 13-minute reduction in DNT. In light of this, education trials to promote 'time equals brain' understanding amongst stroke first responders is being implemented to aim to reduce DNT to less than 80 minutes. The results of this are anticipated to be available in mid 2019.

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030

MANAGEMENT AND ATTITUDES TOWARDS PERSONS WITH EPILEPSY IN GENERAL PRACTICE: HOW FAR HAVE WE COME?

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Introduction Previous surveys of general practitioners (GP) attitudes regarding epilepsy and people with epilepsy (PWE), conducted 20–30 years ago^{1 2}, identified the need for further education in epilepsy care for GPs. This follow up study of GPs in Sydney, Australia, was conducted to determine the degree of changes in knowledge, attitudes and management of PWE, to evaluate if there had been significant improvement during this period.

Methods A piloted questionnaire addressing epilepsy investigations, preferred care provider and attitudes towards epilepsy was developed and completed by a representative sample of Sydney GPs.

Results A total of 52 completed responses were received. 36 out of 47 GPs (77%) chose neurologists as the most important care giver, followed by the GP (9/47; 18.7%), 25/51 respondents (49%) mentioned they never personally initiated anti-epileptic medication (AEM) and another 27% (14/51 GPs) rarely commenced AEM therapy. 6/50 GPs did not mention EEG as a routine investigation and 21/50 did not

mention MRI as routine for PWE. The five most commonly prescribed AEMs, according to frequency were sodium valproate (42), carbamazepine (37), levetiracetam (31), lamotrigine (16) and phenytoin (15). Newer AEMs, available for over a decade in Australia were not mentioned. Emotional, behavioral psychosocial issues were perceived to be more common amongst PWE.

Conclusion The study indicates little perceptual shift regarding GP's attitudes to epilepsy, and significant deficiencies in knowledge, particularly with regards to investigations and management. The findings reinforce a need for more formal training of GPs caring for PWE.

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033

CLUSTER OF CREUZFELDT-JAKOB DISEASE IN THE SOUTH WESTERN SYDNEY LOCAL HEALTH DISTRICT POPULATION IN THE PAST 5 YEARS

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Introduction Noting a perceived increased case-load of Creutzfeldt-Jakob disease (CJD) patients at Liverpool Hospital, in the South-Western Sydney Local Health District (SWSLHD), the authors questioned the accepted death from CJD incidence of 1 per million.

Methods We reviewed the District Health-Information-Exchange (HIE) database for all admissions with CJD diagnoses in SWSLHD hospitals, over a 5-year period 2014–2018. The SWSLHD services a population of 1,001,437. The HIE identified cases were reviewed according to World Health Organization (WHO) diagnostic criteria as used by the Australian national CJD registry. Definite and probable CJD cases were included in the study. Incidence per year was calculated from the final case number across the 5-year SWSLHD population.

Results 26 patients coded with a diagnosis of CJD were identified from HIE database over the period. These cases were critically reviewed and 20 confirmed as definite (n=4) or probable CJD (n=16) cases. The diagnoses of excluded patients (n=6) were herpes simplex encephalitis, paraneoplastic encephalitis, delirium, and 2 with progressive multifocal leukoencephalopathy. Calculated incidence based on 5-year SWSLHD population was 4.16 cases per 1 million population/year.

Conclusions In the 5-year period, we note an incidence of definite and probable CJD cases in the SWSLHD population, four times the national and worldwide reported rates. Cases from the last 2-months of 2018 are pending at the time of submission, which may alter these observations. These findings

most likely represent a cluster of cases in the SWSLHD area but may alternatively reflect either better recognition or increased incidence of CJD.

034 PROSPECTIVE STUDY OF 24-HOUR LEVODOPA-CARBIDOPA INTESTINAL GEL THERAPY FOR UNRESPONSIVE FREEZING OF GAIT

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Introduction We report a prospective, open-label study of 24-hour levodopa-carbidopa intestinal gel (LCIG) as treatment for levodopa 'unresponsive' freezing of gait (FOG) associated with Parkinson's disease.

Method 14 patients with disabling FOG, documented as being levodopa 'unresponsive' following dose cycle assessment, were commenced on continuous 24-hour infusion LCIG therapy with the night-time rate at 50–80% of the daytime infusion rate. Patients underwent baseline and 6 months gait assessments, documentation of their falls frequency and completed FOG questionnaires. The statistical analysis was performed with SPSS 25 software (IBM), using Wilcoxon Signed Rank test and $p < 0.05$ was set as statistically significant.

Result The fall frequency score reduced from 3 to 1 at 6 months ($p=0.011$). The FOG questionnaire was 19.3 ± 1.5 at baseline and reduced to 16.0 ± 1.7 , at 6 months, respectively ($p=0.039$). The mean 360 degree turn time was not significantly changed ($p=0.77$). The daytime LCIG infusion rate was not significantly different before and after 24-hour LCIG therapy ($p=0.315$). 7 subjects developed visual hallucinations, one required temporary withdrawal from 24-hour LCIG, but as FOG worsened on 16-hour LCIG, he elected to recommence 24-hour LCIG infusion with improvement in FOG with a reduction in falls. 1 subject had postural hypotension which was ameliorated after adjustment of LCIG infusion rate.

Conclusion We provide further evidence that 24-hour LCIG therapy can reduce levodopa 'unresponsive' FOG and associated falls.

035 VALPROATE-INDUCED PARKINSONISM 'AN EARLY WARNING': CASE REPORTS AND REVIEW OF LITERATURE

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Introduction We describe two cases of valproate-induced parkinsonism, where the parkinsonian features develop after commencing valproate (VPA), in a time frame and manner well described by previous publications.¹ In contrast to the published literature, that has short duration of follow-up, we have had a prolonged follow-up of these two cases, who initially improved on ceasing valproate, but then after a period progressed again, with the development of levodopa-responsive asymmetrical Parkinson's disease.²

Cases 67 years old man, on VPA 500 mg twice a day for seizures since 2008, developed new rest, re-emergent left hand tremor and hypomimia in 2012. Within months, the parkinsonism progressed to decremental bradykinesia, cog-wheel rigidity and hypophonia. The symptoms initially improved with changing VPA to levetiracetam; however, the disease reappeared after 6 months and although levodopa-responsive, it has been progressive since then.

88 years old man, on VPA 700 mg twice a day for seizures since 2010, developed upper limb decremental bradykinesia, cog-wheel rigidity, camptocormia and rest, re-emergent tremor in hands in 2011. The parkinsonism improved significantly with cessation of VPA; however, the disease re-emerged after 2 years and has been progressive since then.

Conclusion VPA may be responsible for unmasking underlying subclinical parkinsonism and these patients represent an earlier onset of Parkinson's disease related to VPA exposure, rather than a purely drug related parkinsonian dysfunction. These cases also highlight the importance of long-term follow up in VPA-induced parkinsonism. These observations are an important consideration for clinicians treating patients with parkinsonian features secondary to VPA exposure.

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036 THE IMPACT OF A CLINICAL SUPPORT TOOL ON STROKE KEY PERFORMANCE INDICATORS

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Introduction Adherence to key performance indicators (KPIs) in stroke care is associated with better outcomes.^{1–6} The complexity in management of acute strokes, however, has created barriers towards delivering best care with plateauing of KPIs as measured by The National Stroke Foundation Clinical Audit.

We examined the impact on stroke KPIs in our local health district of a web-based decision support stroke platform which provides clinicians with up-to-date information about the patient's management flagging potential areas for improvement, allowing treatment to be optimised in real time.

Methods Six months following the introduction of the platform we performed a retrospective analysis of Electronic medical records of patients admitted to Gosford hospital with acute stroke between June 2018 and September 2018 assessing access to the stroke unit as well as being discharged on appropriate secondary prophylactics, including antihypertensives and correct antithrombotic therapy. Patients whose direction of care was palliative and patients with documented contraindication to secondary prophylactics were excluded.

Results Over four months, 136 patients presented with acute ischaemic stroke and 11 patients had a haemorrhagic stroke. 49 ischaemic stroke patients had atrial fibrillation. Stroke unit access was higher following its introduction in 2018 compared