



# Townsville Health Research Showcase

28<sup>th</sup> – 30<sup>th</sup>  
October  
2019

**Program  
&  
Abstracts**

28<sup>th</sup> – 30<sup>th</sup> October 2019  
Showcase Presentations &  
Workshops

29<sup>th</sup> October 2019  
Research Networking Dinner

31<sup>st</sup> October – 1<sup>st</sup> November 2019  
JCU – My Research Rules

# Dogs as medicine: Shedding light on the use of psychiatric assistance dogs

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A psychiatric assistance dog (PAD) is a service dog that is trained to assist its handler (owner) who has been diagnosed with a mental health condition such as PTSD, depression, anxiety, or bipolar disorder. Little is known about the population of people who own PADs, the type of dogs used or the functions they provide. One third ( $n = 199$ ) of PAD owners registered with the charity 'mindDog' (that assists people procure, train and certify PADs) participated in an online survey to explore these matters. Results show that owners have differing mental health diagnoses, and their dogs performed different tasks to support them in daily life. PAD usage decreased (46%), increased (30%) or did not change (24%) participants' use of psychiatric or other healthcare services. Decrease in service use was mainly due to reduced suicide attempts, and less requirement for hospitalisation and medication; increased use was mainly due to enhanced ability to attend appointments. Results also suggest that successful person-dog teams do not require the dog to have been bred, raised and trained for the role by assistance/service dog provider organisations. These findings will inform clients and medical professionals, who play a pivotal role regarding their patients' application for a mindDog, about how dogs may be of assistance.

# Incidence and Outcomes of Inpatient Hypoglycemia at The Townsville Hospital: A Retrospective Chart Audit

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**Background:** Studies have shown Caucasian patients with inpatient hypoglycaemia are associated with increase in length of stay (LOS), mortality and cost. But there are no similar studies on indigenous Australians diabetic patients despite having higher prevalence of diabetes and its complications. The aim of the study was to evaluate pattern and outcomes of diabetic inpatient hypoglycemia among Aboriginal and Torres Strait Islander (ATSI) compared to Australian Caucasian patients. **Method:** A retrospective audit of diabetic patients aged >18 years admitted at The Townsville Hospital medical and surgical wards was analysed for a period between 1st April 2015 and 31st March 2016. The database contains clinical information at the time of admission and initial discharge and readmission within 4 weeks thereafter. **Results:** 1618 (of total 6027) patients were admitted with diabetes representing 23.7% of the total ward admissions of which 484 (29.9%) had inpatient hypoglycaemia. Of the data analysed ATSI origin with inpatient hypoglycaemia was associated with longer length of stay (LOS) (HR=2.072, 95%CI: 1.219-3.485) while severe hypoglycaemia (<2.8 mmol/L) in both ATSI and non-ATSI was significantly associated with longer LOS (HR: 1.878, 95CI%: 1.123-3.128). **Conclusions:** We reported high rate of inpatient hypoglycemia in our study population. Indigenous Australian diabetic patients with inpatient hypoglycemia had significantly longer LOS compared to non-Indigenous Caucasian counterparts. Over all our results are significant for promoting awareness of the effect of ethnic background on inpatient hypoglycemia risk. Further prospective studies on a larger population are needed to confirm our findings.