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#### SYMPOSIUM EDITION

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ROBERT DOUGLAS AUDITORIUM,
THE TOWNSVILLE HOSPITAL, AUSTRALIA

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for the year prior to the opening of the new ED (19 July 2010 to 18 July 2011) and the year after the opening (19 July 2011 to 18 July 2012) was retrieved from the emergency departments information system (EDIS). Access block was defined according to the Australian Council on Healthcare Standards (ACHS) and the Australasian College of Emergency Medicine (ACEM) as the percentage of all patients admitted, transferred or dying in the ED where their total time exceeds eight hours and compared across the two time periods. Secondary comparisons examined performance on the recently implemented 4-hour National Emergency Access Target for the two time periods. Results: More patients attended the ED during the 2011/2012 period than during 2010/2011 (N=57,585 vs. N=51,815). There was an overall decrease in the proportion of patients experiencing access block from 55.1% to 48.8% (p<0.001). There was also a reduction in the median length of stay in ED by 17 minutes for all patients seen, from 224 to 207 minutes, and by 58 minutes for patients admitted to hospital from 526 to 468 minutes (both analyses p<0.001). Statistically significant results were also obtained for the 4-hour National Emergency Access Target. **Conclusion**: Within the limitations of this retrospective study, the new emergency department did appear to favourably affect ED access block. It must be noted that this was only one aspect of a complex system, and we were unable to control for all potential confounding factors.

#### Clinical Audit of Children with Empyema and Parapenumonic Effusion Admitted to a Major Referral Centre in North Queensland

Britta Baade<sup>1</sup>, Brooke Miegel<sup>1</sup>, Edward Shi<sup>2</sup>, Harry Stalewski<sup>2</sup>, Andrew White<sup>1</sup> and Vana Sabesan<sup>1</sup>

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Background / Aims: The Townsville Hospital (TTH) is a major referral centre for children with empyema for North Queensland. We compared its clinical approach with the current position statement the Thoracic Society of Australia and New Zealand (TSANZ). Methods: A retrospective clinical audit was performed. Between January 2009 and June 2011 patients were identified via ICD-10 coding for pyothorax and pleural effusion. The search was limited to the age range 3 months to 16 years. Results: We identified 22 patients. Nearly half of the patients (10/22) were Aboriginal and/or Torres Strait Islander (ATSI). Most (16) were transferred from other hospitals. The most frequently identified organisms were Staph aureus (8) and Strep pneumonia (4). A high number of different antibiotics were used: 5 in surgical patients (range 2-9) and 3 in the conservatively managed patients (range 2-4). Changes to antibiotics prescribed most often occurred at the time of operation and on transfer to ICU. A regularly used investigation was chest X-rays, but less frequently used were chest CTs (5) and chest ultrasounds (3). 18/22 patients required a surgical procedure; 15/22 required thoracotomy. 4 patients did not have a diagnostic tap and were classified as parapneumonic effusion. Children transferred to TTH had longer pre-operative and total hospital stays than those admitted from Townsville (mean 5 days). **Conclusion:** Compared to the position statement from the TSANZ, the management of empyema differed in many areas. The differences in care are multi-factorial. However, earlier transfer from other centres and adopting the TSANZ guidelines may help to improve outcome.

#### Using the Dutch Resident Educational Climate Test to Assess the Learning Climate of Interns at The Townsville Hospital

### Paul Welch<sup>1</sup>, Hilary Taylor-Evans<sup>2</sup>, Ralph Pinnock<sup>3,4</sup> and Frances Quirk<sup>4</sup>

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**Background / Aims:** Government regulators and medical boards place a high degree of importance on intern learning. In all clinical settings there is a balance between service provision and medical education. Evaluating the learning climate is a means of determining the educational function-

ing within the clinical environment. The aim of the study was to assess the learning climate of interns at The Townsville Hospital and determine whether it differs between departments using the Dutch Residency Educational Climate Test (D-RECT). The method has previously been validated in Holland and was adapted for an Australian hospital. Methods: Interns at The Townsville Hospital completed the D-RECT survey and returned it anonymously. At the end of the questionnaire there was space for additional comments. Results: The D-RECT questionnaire was completed by fifty three of sixty three interns (84% completion rate). The questionnaire was easy to use and took less than ten minutes to complete. Internal consistency was good, as indicated by the Cronbachs alpha for each of the eleven subgroups within the questionnaire. The additional comments did not provide additional information not already gleaned from the questionnaire. The strengths and weaknesses of the major rotations were analysed and provide an opportunity for improvement. Conclusion: Interns overall perceived the learning climate at The Townsville Hospital positively but the significant areas for improvement must be addressed.

## Cannabis Withdrawal among Indigenous Detainees and Inmates Bernadette Rogerson and Alan Clough

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Background / Aims: Cannabis Withdrawal Syndrome is proposed in the DSM-5 due for release 2013. Problematic cannabis use among remote Indigenous communities has been reported and 'stressing out' has been reported when cannabis is not available. Sudden cessation of cannabis use by remanded/sentenced inmates could further increase risk of 'stressing out' however, the experience of withdrawal has not been considered. Methods: Indigenous inmates aged 18-40 years were recruited from a far north Queensland Correctional Centre. Retrospective cannabis use, dependence and withdrawal measures prior to incarceration were self-reported. Assessments included other drug use, Time Line Follow Back, Severity of Dependence Scale, Indigenous Risk Impact Screen and Cannabis Withdrawal Checklist. Results: From 101 males inmates, 89% (n=90) reported lifetime use and 70% (n=70) used cannabis <3 months before prison. Of the 70 current cannabis users, 57% (n=41) believed use was excessive, 63% (n=44) met dependence criteria and reported an average of 2.9 withdrawal symptoms (most likely: irritability/anger/aggression, nervousness/anxiety, sleep difficulties, depression and physical symptoms). Conclusion: Results reveal heavy and problematic cannabis use and dependence symptoms however, withdrawal is not well defined. To improve assessment and timely treatment of cannabis withdrawal within custodial settings, studies are needed to document onset, time course and severity of symptoms and to assist in management of withdrawal. Findings from this study contributed to NHMRC#1020514 (commencing October 2012) to interview new entrants to prison on eight occasions over 28 days. Assessments validated with biological markers, will examine onset and severity of cannabis withdrawal and psychological distress.

#### Effect of using Standardised Queensland Statewide Diabetic Ketoacidosis Management Protocol

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**Background / Aims:** Diabetic Ketoacidosis (DKA) is a serious acute complication of diabetes mellitus and causes significant morbidity and mortality if not effectively managed. A standardised statewide DKA management protocol was introduced at the Townsville hospital in 2010, but its effect on clinical outcomes has not been reviewed. This study aimed to analyse whether using the standardised protocol improves clinical outcomes compared to previous non-standardised practice in the acute management of DKA. **Methods:** A retrospective hospital record audit was carried out on 71 DKA admissions between 1 January 2008 and 14 March 2012. Patients younger than 16 years were excluded. The protocol group consisted of eligible admissions managed as per protocol (from 01/01/2010 to 14/03/2012).

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