

sleeves were equally uncommon among boys (9.1%) and girls (11.1%;  $p=1$ ). **Conclusion:** Observed sun protection behaviours were inadequate to protect spectators from over-exposure to ultraviolet radiation and risk of skin cancer.

### Do music and dance improve recall?

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**Background / Aims:** Since 2008, the Gait Arms Legs and Spine (GALS) Screening Tool is taught to Year One medicine students at James Cook University (JCU), as part of the musculoskeletal (MSK) examination. GALS is a sequence of concise movements that assesses the range of motion of major joints in the body. Strategies including small group teaching, instructional video, practical demonstration and simulated volunteer patients are utilised in the two hour workshops, to teach GALS. Written and audio visual resources are available to students on JCUs online learning platform. Post-workshops, students are assessed on the application of the GALS Screening Tool. With the dual intentions to enhance student learning and to improve short/long term recall, educators created a GALS music and dance video. This intervention applies both neuroscience and learning principles, by linking the GALS sequence to the rhythm and melody of a popular song. **Methods:** A pilot longitudinal study will evaluate this initiative, comparing the control group (Year One cohort 2010) with the intervention group (Year One cohort 2012). **Results:** Interim results show: Watching either video, the instructional or the GALS music and dance, increased the likelihood of passing the Year One OSCE assessment. On average, the control group documented half of the GALS sequence, two years post-workshop. 58% of students of the control group reported less confidence in their knowledge regarding the GALS sequence, two years post-workshops. **Conclusion:** This presentation will illustrate the teaching perspectives, interim results and future directions of this research.

### An Evaluation of the research capacity of Emergency Department Clinicians at The Townsville Hospital

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**Background / Aims:** This study aimed to assess the baseline research capabilities of emergency department (ED) clinicians at The Townsville Hospital (TTH). **Methods:** A survey was sent to clinicians working in the ED of TTH over a one month period in 2012. Participants were asked to provide information on demographics, interest in participating in future research, research experience and support needs, and attitudes and beliefs about research. **Results:** Of the 13 allied health, 109 medical and 223 nursing staff working in the ED at the time of the survey, 212 clinicians (13 allied health, 88 medical and 111 nursing) responded yielding an overall response rate of 61.5%. A minority of clinicians reported participating in research activities such as publications (11.8%) and conference presentations (12.3%) in the preceding 3 years, however the majority of clinicians (68.3%) were interested in getting involved in future research. In general clinicians had more experience and required less support with earlier stages of the research process such as searching and critically reviewing literature. The four barriers that were identified as most influential on research involvement were insufficient time (71.2%), lack of support such as training or supervision (61.8%), not having a relevant or interesting (42.0%), and being unable access to adequate funding or resources (23.6%). **Conclusion:** Research involvement of TTH ED clinicians was only small, with more sup-

port required for more complex research tasks. Attitudes towards research were generally positive with reported interest in future involvement likely to facilitate research capacity building efforts in the ED.

### Impact of Transformational Change in the Medical Admission Process in Townsville Hospital

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**Background / Aims:** A new admitting module was introduced in the Medical Emergency Department (ED). A senior registrar was posted in the ED during the maximum rush hours 2 pm to 10 pm from Monday to Friday for 3 months to accept all referrals and allocate the patients to other registrars and RMO depending upon the severity of the problem. The aim of this study is to determine the efficacy of implementing a new medical admission module at the Townsville hospital. **Methods:** February to May 2013 data of all the medical admissions through the ED was compared with the corresponding 3 months of 2012 to analyse the difference in the number of patients admitted time taken from referral to admission. Data was analysed using SPSS 20, for normality; non-parametric Mann-Whitney U tests to determine the difference in means. A  $p<0.05$  was considered statistically significant. **Results:** The number of patients admitted during 2013(1225) was significantly higher than the corresponding period of 2012 (1166);  $p=0.009$ . There was a significant increase in the day time (8 am to 10 pm) admissions in 2013 (970) as compared to 2012 (941)  $p=0.01$ . However in the night (10 pm to 8 am) no significant difference was observed (255 in 2013 versus 225 in 2012,  $p=0.5$ ). In both years, the number of admissions were significantly more on Mondays (22% in 2013, 25% in 2012). In spite of the increase in the number of admissions, the mean time taken from referral to admission was significantly less (89 minutes) in 2013 than in 2012 (212 minutes)  $p<0.0001$ . **Conclusion:** The new medical admitting module significantly reduced the admitting time in spite of the increased number of admissions.

### Incidence of Normal Modified Allens Test in Newborn Babies

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**Background:** Radial artery cannulation, a common procedure in the NICU, can be associated with complications which include ischemia. The Modified Allens test (MAT), assessing the collateral circulation in the hand, is recommended before the radial artery cannulation. The incidence of normal MAT in adults is 73% and 11% in neonates. **Aim:** The aim of our 6 month prospective study is to determine whether there are any difference in the incidence of normal MAT based on the babies gender, birth weight and gestation. We also studied the inter-observer variation. **Methods:** All babies admitted to the unit were eligible for the study. Two examiners independently performed the MAT on the first day of admission. A normal Allens is when reperfusion time is under 10 seconds. **Results:** A total of 151 babies were recruited: mean gestation 36.7 weeks (range 23 to 41.3 weeks); 37% of babies <37 weeks gestation, 63% term; 55.6% male, 44.4% female; 37% were <2500g and 67% were >2500g. The incidence of normal MAT was 26.5% for examiner A, and 19.2% for examiner B ( $p$  value 0.7). The incidence of normal MAT was: 47.4% for term and 21.4% for preterm babies ( $p=0.001$ ), 21.4% in low birth weight group babies compared to 47.4% for >2500g babies ( $p=0.001$ ). There was no difference between male and female, right and left hands. **Conclusion:** The incidence of normal MAT in newborn babies is lower than adult population and is lower in babies who are preterm and low birth weight.