“Better the Devil you know”
Few would argue that it is often better to work with someone you are familiar with and know than someone you don’t. This may be particularly true in the emergency department. Evidence from aviation research and other high-risk settings suggests that lack of familiarity between teammates is associated with worse outcomes. In this issue Patterson and colleagues from Pittsburgh University Hospital sought to characterise familiarity between clinician teammates in one urban teaching hospital emergency department over a 22 week study period. What they found was that very few clinicians had a high level of familiarity with teammates. They suggest that this may be a natural feature of emergency care delivery especially in academic settings partly because of the diversity of specialties and personnel that are called to attend. Nonetheless the emergency department is well recognised as a notoriously high risk environment and given the continuous challenges of crowding it behoves us in the interest of patient safety to explore this matter further. Patterson and colleagues’ approach to measurement may be a useful template for exploring team structure in our own departments.

A small price for effective pain relief
Effective pain relief for children in the emergency department continues to be variable and this is often due to anxiety about using opiates analgesia in young children. It would seem however that some of this fear is unfounded or perhaps misplaced as an observational study by Kendal and colleagues in the UK found. In their study 226 children aged 2-16 years with a fracture or other trauma needing strong analgesia and were given Diamorphine 0.1 mg/kg intra-nasally. No serious or severe adverse events occurred. The authors report that there were no safety concerns raised during this study apart from expected side effects but that intranasal Diamorphine can cause mild nasal irritation. This seems like a small price to pay for effective pain relief and infinitely preferable to both the parents and carers of the distressed child.

The Case for steroids
Bell’s palsy is a relatively rare but distressing condition particularly for children. In most cases the condition resolves spontaneously but if diagnosed within 72 hours of onset some children are treated with steroids. In some cases antiviral medicines may also be added to corticosteroid medicines but evidence for using antiviral medicines is weak. Some also question the value of steroids in children for a condition that may get better on its own. In order to improve practice in accordance with best available evidence and to try to standardise management Youshani and colleagues in Liverpool carried out a complete audit cycle reviewing the management of children with Bell’s Palsy. They assessed, documented of House–Brackmann score (HB) on presentation, initial treatment, follow up and recovery. They found insufficient evidence to discount the use of steroids and antivirals. They recommend steroids in children presenting within 72 hours of symptom onset and antivirals for children with a HB score of IV or higher.

Does age matter?
We would like to believe we are equitable in health care delivery but is this always true? Are older major trauma patients for example treated and responded to with the same alacrity and degree of urgency as younger trauma patients? Lukin and colleagues in Queensland Australia would argue that this is not the case. They carried out an observational study using data from the Queensland Trauma registry. They found that among patients with an ISS >15, older major trauma patients were less likely to be assigned an emergency triage category compared with younger patients. Their findings suggest we may be under triaging our older trauma patients. We need to reflect on this worrying finding given increasing longevity in our populations and the fact that the elderly are more vulnerable and constitute a sizeable proportion of our major trauma patients. They deserve better.

Trauma mortality rates
It has long been a concern that patients admitted to hospital out of hours may have a higher mortality rate than those admitted in hours. As major trauma centres become more ubiquitous and many severe trauma occur out of hours it is important to know if the mortality rate for this group of patients is also likely to be greater at night. Dybdal and colleagues in Copenhagen posed this very question. They undertook an observational cohort study to assess whether there were diurnal differences in mortality among severely injured trauma patients. Perhaps surprisingly the authors found no diurnal differences in a 30 day mortality for severely injured trauma patients with this 30 day mortality. Logistic regression analysis demonstrated that out of hours admission for severely injured trauma patients was not a significant predictor of mortality when adjusted for age, ISS and initial treatment facility.

The “Hotspot” approach
Violence in the community has a direct and negative impact on emergency departments worldwide thus any initiatives designed to address these ongoing problems to reduce violence related hospital attendances are worthy of our consideration. It was interesting therefore to read a paper in this issue by Ariel and colleagues from Cambridge. They undertook a descriptive study over a twelve month period to investigate whether police-ED inter agency data sharing could be used to reduce community violence using a hotspot methodology. They found that a “hotspot” approach to sharing data circumvents the perennial issues of disclosing person identifiable data between different agencies. At least half of ambulance hotspots are unknown to the police; if causal, it suggests that data sharing can lead to both reduced community-violence by way of prevention particularly of more severe assaults, and improved efficiency of resource-deployment. Well worth considering!

SIRS or sepsis?
Making the distinction between SIRS and sepsis can be difficult, identifying infection in the patient who ticks all the boxes for SIRS can be testing for ED clinicians.

Lee and colleagues from Korea hypothesized that the myeloperoxidase index (MPXI) which is elevated in infection could be used to differentiate between SIRS of infectious (sepsis) and non infectious etiology. They conducted a retrospective observational study of 444 consecutive patients who met the diagnostic criteria for SIRS from May 2012 to June 2012. They found that MPXI is higher in sepsis than in SIRS but there is no evidence that MPXI is any more beneficial in aiding diagnosis in the ED and differentiating sepsis from SIRS. They suggest further research is needed.

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Highlights from this issue

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