Welcome to the December edition of Emergency Medicine Journal, the final one for 2020. This has been an ‘interesting’ year for Emergency Physicians and their departments, with many changes to working practices. We hope you are keeping well in these uncertain times.

Vascular access
The Editor’s choice this month is a randomised controlled trial (Chauvin et al) wherein patients requiring blood gas measurement were randomised to arterial or venous sampling. While the findings of less pain and increased ease for venous sampling might not be surprising, it is surprising that the clinical utility of the biochemical data (as assessed by treating physician) is equivalent. This provides further evidence to support the move to venous blood gases for most patients.

Vascular access in paediatric patients is the focus of Girotto et al’s paper, which validates predictive rules (DIVA and DIVA3) for difficult venous access. Of interest are the additional factors (nurse assessment of difficulty, and dehydration status of moderate severity or more) which identified difficult access when the rule had not predicted difficulty in siting a venous cannula.

Targets: achievement and effects
There has long been intense debate regarding the use of quality metrics to assess performance of Emergency Departments (cf the ‘Goodhart principle’). A number of papers in this month’s EMJ look at ‘targets’- the effect the presence of targets can have, and the ramifications of attempts to achieve targets.

Sethi et al have used a ‘before and after’ study design to retrospectively assess the effect on Emergency Department Clinical Quality Indicators of hospital-wide interventions to improve patient flow through the hospital (the ‘Reader’s choice’ for this month). An improvement in the Emergency Department quality indicators was demonstrated when a programme designed to improve patient flow through the hospital was undertaken. The authors suggest that this programme may have resulted in a hospital-wide focus on the issue of ‘exit block’ and this may have had a significant effect, by changing the ‘culture’ of the hospital.

This is complemented neatly by two further papers in this month’s EMJ. First, Paling et al, looks at waiting times in Emergency Departments, using routinely collected hospital data. This paper suggests that higher bed occupancy, and higher numbers of long stay patients, increases the number of patients who remain in the Emergency Department beyond the ‘4 hour target (for England)’. Second, Man et al studied the long waiting times for Emergency Medical Services (EMS), due to delayed handover from ambulance to the Emergency Department (referred to as ‘ambulance ramping’). The interventions within the Emergency Department designed to improve achievement of the ‘4 hour target (for Australia)’ also reduced EMS wait times. As with the Sethi paper, improving patient flow has a wider reaching impact.

Another paper related to this topic is a validation of the NEDOCS overcrowding score, by Hargreaves et al. This paper assesses this tool against clinician perception of crowding and patient safety. The relationship between changes in overcrowding score and clinician’s perception was assessed, and refinements to the score suggested. The differences between physician and nurse perceptions of crowding and safety are intriguing, however the ‘bottom line’ may be that the search continues for the perfect scoring system for crowding.

Mental health in the emergency department
A cross-sectional study of Emergency Department attendances across England (Baracaia et al) is discussed in Catherine Hayhurst’s commentary. This reminds us of the high prevalence of patients presenting with mental health symptoms to our departments, and stimulates thought about how we can better meet their needs. This is further illustrated by the papers looking at care pathways for patients with self-harm who use ambulance services (Zayed et al), and the mental health triage tool derived using a Delphi study by Mackway-Jones.

Emergency departments and COVID
This month sees three papers related to COVID-19. Walton et al describe some of the key themes from an operational perspective, faced by UK Emergency Departments. These themes will be familiar to many readers, as will some of the suggested solutions to the challenges.

Choudhary and colleagues have looked at changes in clinical presentation of cardiovascular emergencies (acute coronary syndromes, rhythm disturbances and acute heart failure) and their management during the pandemic. While the changes in patient behaviour (eg, reduced attendance) are well known, the changes in clinician behaviour (eg, increased use of thrombolysis) are not.

The third paper describes changing patterns of Paediatric attendances to Emergency Departments in Canada during the pandemic (Goldman et al); the findings here will chime with us all.

A simple communication tool
A personal favourite of mine (notwithstanding a conflict of interest!), is a report on a quality improvement initiative by Taher and colleagues. This project looked at reducing patient anxiety and improving patient satisfaction in the ‘rapid assessment’ area of a busy Emergency Department. This paper has much to commend it: involvement of patients in the analysis of the issue, patient-centred metrics, and a neat description of control charts and their use. Moreover, the simple ‘AEI’ communication tool described is one that I find elegant, effective and have adopted into my practice.