

THE CHANGING FACE OF ORTHOPAEDIC TRAUMA SERVICES: A CITYWIDE EXPERIENCE

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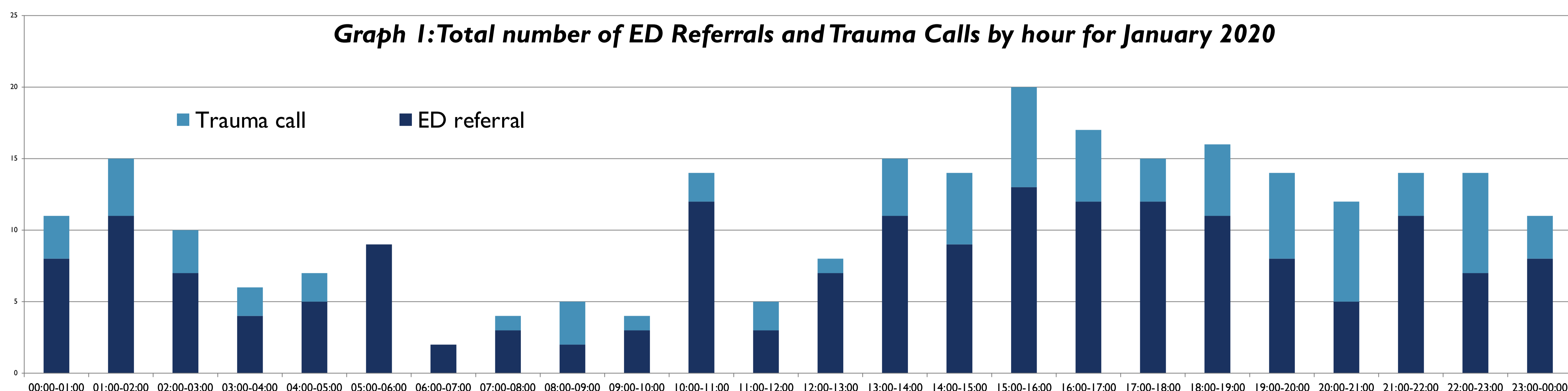
Background

In the last decade, the demand on UK trauma services has changed with the introduction of major trauma networks and specialist management pathways. We are seeing an increased demand on tertiary centres to accommodate the management of patients sustaining major trauma and open fractures, alongside 'routine' admissions. In our city, NHS services continue to be reorganised; two major hospitals have merged and orthopaedic trauma services are delivered from a single site. The 'one size fits all' traditional junior rota pattern no longer meets the demands of the service.

Methods

We conducted a retrospective review of all acute referral times and trauma calls during January 2020 following the department merger. Patients were identified using the acute take database. Diagnostic x-ray and ED attendance time were used as a surrogate marker for referral time; ward referrals were recorded to monitor workload. Significance was calculated using 2-sample t-tests.

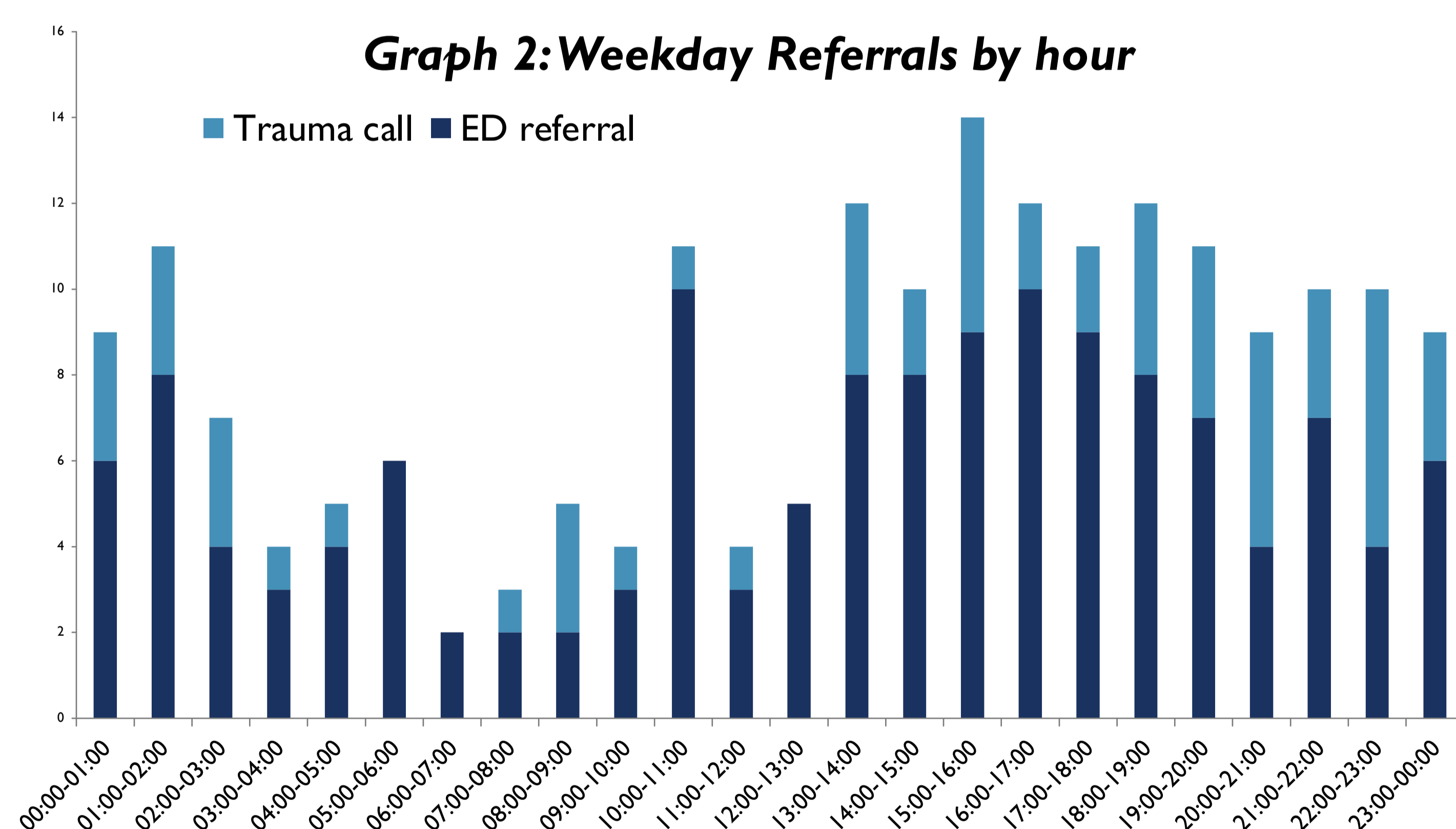
Graph 1: Total number of ED Referrals and Trauma Calls by hour for January 2020



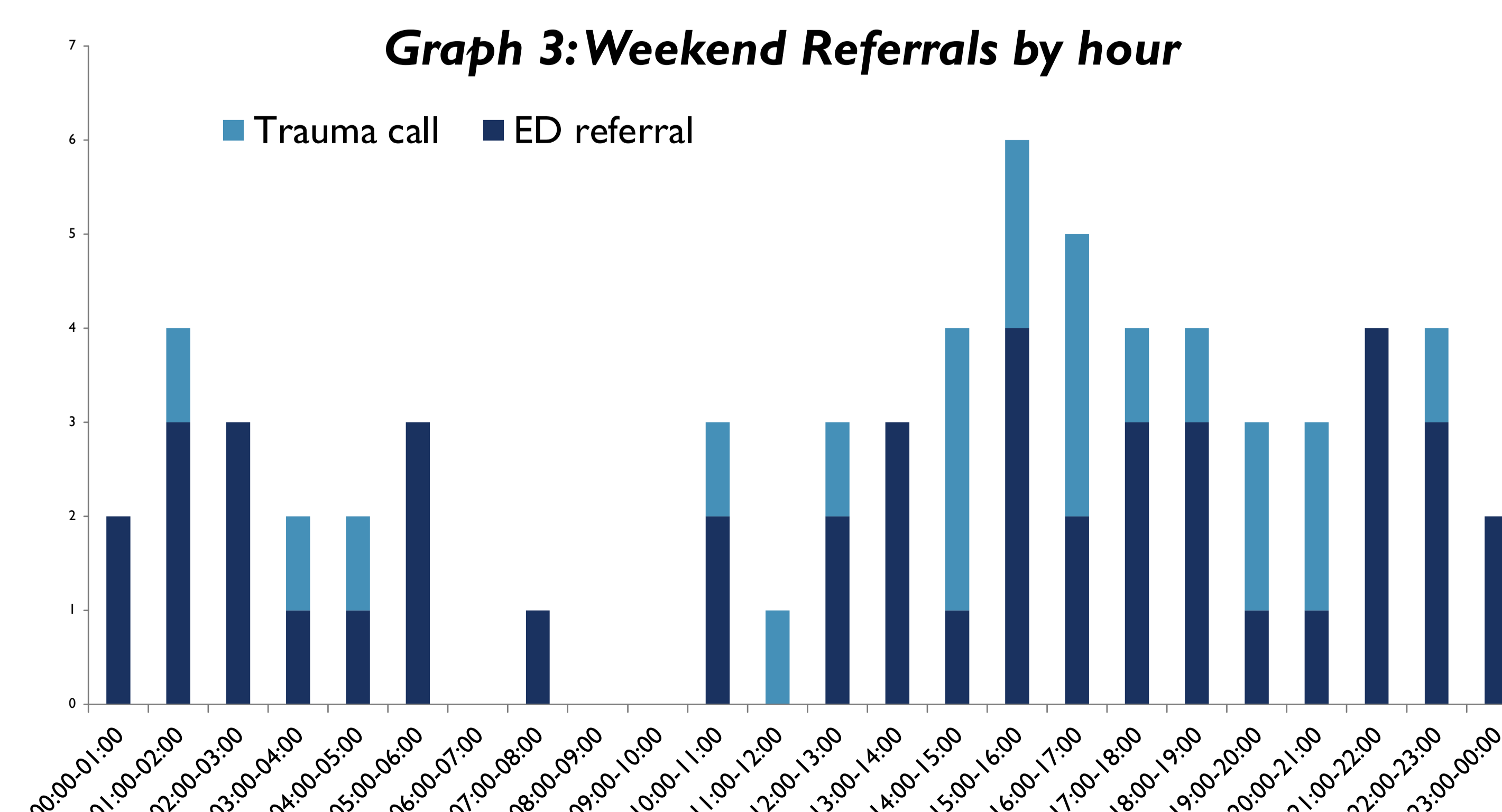
Results

314 patients were identified. There were 183 A&E referrals (mean=5.9/day, range 3-12), 79 trauma calls (mean=2.55/day, range 0-8) and 52 ward referrals (mean=1.68/day, range 0-6). Peak times for A&E referrals were between 15:00-16:00, with 47.5% being made between 15:00-00:00; 58.2% of trauma calls occurred over the same time period (Graph 1). There was no significant difference between weekend and weekday A&E referrals ($p=0.65$) and trauma calls ($p=0.91$) (Graph 2 and 3), but there was a significantly difference in weekend ward referrals ($p=0.025$).

Graph 2: Weekday Referrals by hour



Graph 3: Weekend Referrals by hour



Conclusion

The biggest burden on the on-call team occurs in the afternoon and into the traditional handover period and night shift, with a large variation in daily activity. Weekends show little change in intensity of the workload.

Implications

Rotas should be organised to cover the demands of the service, and additional twilight cover during the traditional handover period and at weekends to continue to work through patient reviews should be considered in busier centres.

Declarations

None