REVISING EMS DISPATCH PROCEDURES TO MANAGE GROWING DEMAND IN VICTORIA, AUSTRALIA

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Aim The Advanced Medical Priority Dispatch (AMPDS) system is used to triage emergency medical calls in Victoria, Australia. However, the level of response assigned to each AMPDS Event Type (ET), which may include triage away from an emergency medical service (EMS) attendance, is determined by Ambulance Victoria. This study aimed to increase the proportion of low-acuity calls diverted to secondary triage and onto an alternative service provider (ASP), ultimately reducing EMS demand.

Methods A review of the level of EMS response assigned to AMPDS ET was conducted using research, audit and clinical expertise. Existing ‘time-critical’ and ‘acute but not time-critical’ ETs were assessed for suitability against the assigned level of EMS response and existing dispatch rules. An analysis of events occurring pre-reform (8 Feb–8 May 2016) and post-reform (9 May–8 Aug 2016) was conducted.

Results A total of 105 ‘time-critical’ ETs were assessed as suitable for downgrade to an ‘acute’ response, while 221 ‘acute’ and ‘time-critical’ ETs were deemed suitable for diversion to secondary triage. The changes were implemented using staged approach, commencing in October 2015. The proportion of cases receiving a ‘time-critical’ EMS response decreased from 53.1% pre-reform to 48.9% post-reform (p<0.001). The proportion of emergency calls avoiding EMS dispatch increased from 8.8% pre-reform to 14.1% post-reform (p<0.001). Of the cases diverted to secondary triage post-reform, 32.4% were referred to an ASP, 30.2% were referred to a non-emergency transport service and 41.8% were returned for EMS dispatch.

Conclusion This study provides a sound methodological approach for revising EMS dispatch protocols. Ongoing monitoring of the dispatch changes aims to identify areas that may benefit from further optimisation.

Conflict of interest None declared.

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CHARACTERISTICS OF THUNDERSTORM ASTHMA EMS ATTENDANCES IN VICTORIA, AUSTRALIA

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Aim Thunderstorm Asthma (TA) occurs when a dangerous mix of pollen and severe weather trigger acute respiratory distress symptoms in people with allergic rhinitis and asthma. We sought to describe the characteristics of patients attended by emergency medical services (EMS) during the largest global epidemic of TA which occurred in Melbourne on 21/11/2016.

Methods A retrospective observational study of electronic EMS patient care records was conducted for all cases occurring during TA, between 1800hrs on 21/11/2016 and 2359 hours on 22/11/2016 (30 hours). Results were compared with a standard comparator period defined as the seven days prior to the event (14/11/2016 to 20/11/2016).

Results EMS responded to 3631 cases during the TA event, compared with an average of 2419 cases per 30 hours during the comparator period. During TA, the final paramedic diagnosis was acute respiratory distress in 28.3% of patients (Asthma = 18.0%, Shortness of Breath = 10.3%), compared with 3.6% of patients during the comparator period (Asthma = 0.6%, Shortness of Breath = 3.0%, p<0.001). Whilst there was an absolute increase in the number of time-critical cases, the proportion of acute respiratory illness patients considered time-critical after initial paramedic assessment remained stable between the two periods (42.0% vs. 43.5%, p=0.6).