

00286 Factors Associated With Inappropriate Attendances at Emergency Department of a Tertiary Hospital in Singapore

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Aims: Inappropriate attendances (IA) at emergency departments (ED) are contributed by patients with mild or moderate medical conditions which can be effectively managed by primary care physicians. IA strain limited ED resources, and have adverse impact on their efficiency. This study aimed to identify factors associated with IA at ED of a tertiary hospital in Singapore.

Methodology: We conducted a retrospective cohort study on all eligible visits to an ED of a tertiary hospital between 1 January 2015 and 31 December 2015. Appropriateness of each attendance was estimated using criteria which were based on investigations or procedures being performed on the attendee and discharge type of that attendance. Using univariate analysis, IA were then compared against appropriate attendances (AA) on attendee demographics, referral sources, hours of visit, proximity to ED and 24-hour general practitioner (GP) clinics and ED visit history in 2014. Multivariate logistic regression was subsequently performed to study the combined effects of the identified significant factors.

Result: Among 120,606 attendances in 2015, 11,631 (9.6%) were IA. Multivariate analysis showed that factors were associated IA included gender, ethnicity, referral source, hours of visit, nationality and history of being frequent ED visitors. Moreover, the odds of attending ED inappropriately were found higher among attendees who were younger, or self-referred, or contributed to at least one IA in 2014.

Conclusion: We identified subgroups in the population who were more likely to contribute to IA at ED. These findings suggest that more research needs to be done to understand the factors influencing the choice of ED over a GP for non-emergency conditions so that interventions to address these factors could be designed to reduce the workload attributable to IA. Such understanding would be crucial for development of relevant measures or policies which could effectively reduce avoidable IA.