

Morbidity and mortality associated with pre-hospital "lift assist" calls

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Introduction

- When an individual requires assistance with mobilization, emergency medical services (EMS) may be called
- A "lift assist" (LA) call is recorded when a patient is assisted up but does not receive treatment on scene and is not transported to hospital for medical attention
- It is possible this need for assistance represents a subtle-onset of a disease process or decline in function
- Without recognition or treatment, the patient may be at risk for recurrent falls, repeat EMS visits or worsening illness

Objective

 To determine the 14 day morbidity and mortality associated with LA calls

Methods

- A retrospective chart review was performed for all LA calls from a single EMS agency over a one-year study period (Jan – Dec 2013)
- Calls were linked with hospital records to determine if LA patients had subsequent visits to the emergency department (ED), hospital admission, or death within 14 days of the LA call

Results

- Between January and December 2013 there were 42,055 EMS calls; 808 (1.9%) were LA calls
- These calls were for 411 individuals; 272 (66.2%) patients had 1 LA call; 139 (33.8%) had more than 1 LA call
- The number of LA calls per patient ranged from 1 to 34
- Patients were 45% male with a mean age of 74.8 years (SD 14.1)
- 76.5% of admissions were to medicine with a median LOS of 7 days (IQR = 4 15.5 days)

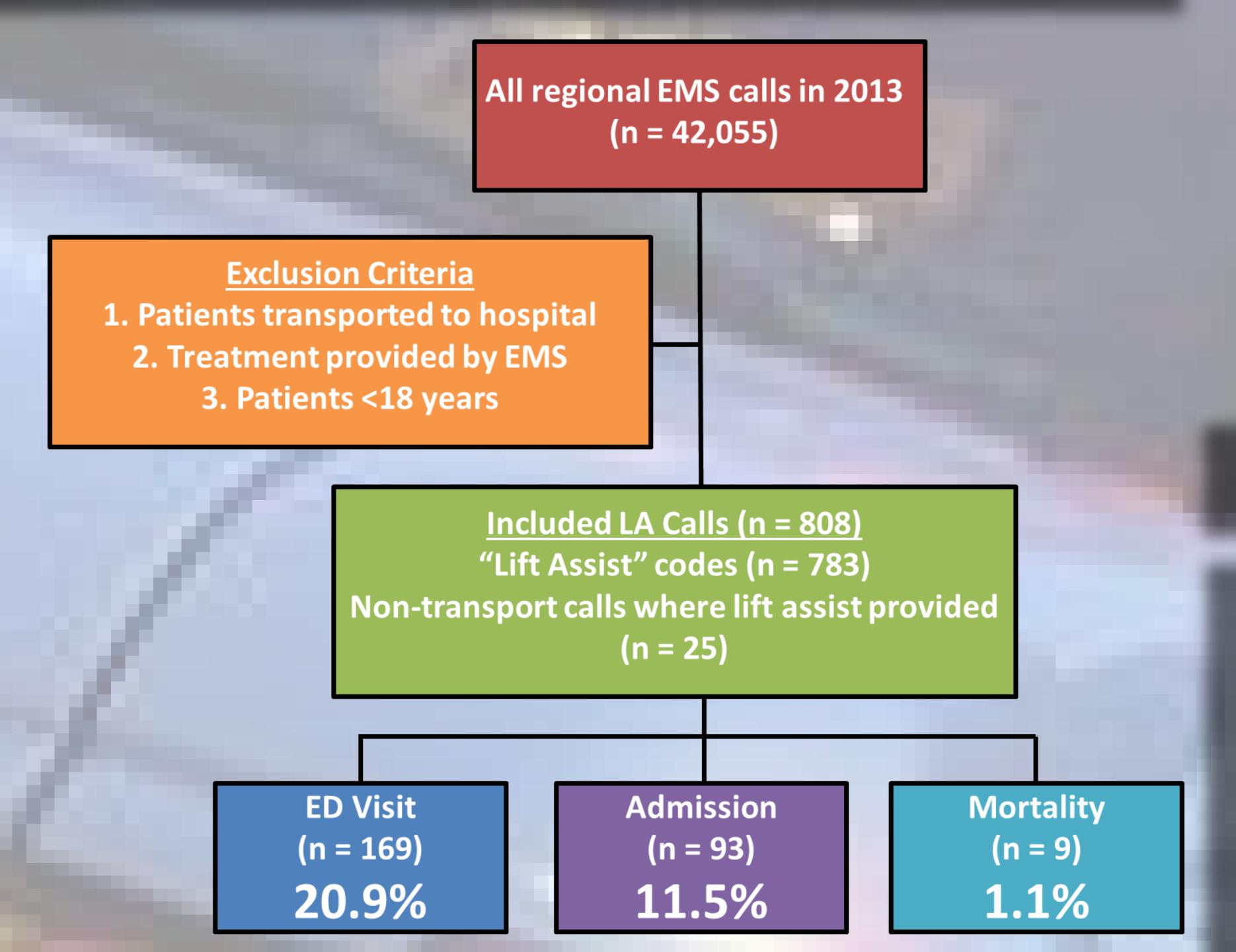


Figure 1. Study flow diagram with morbidity and mortality outcomes 14 days after LA call

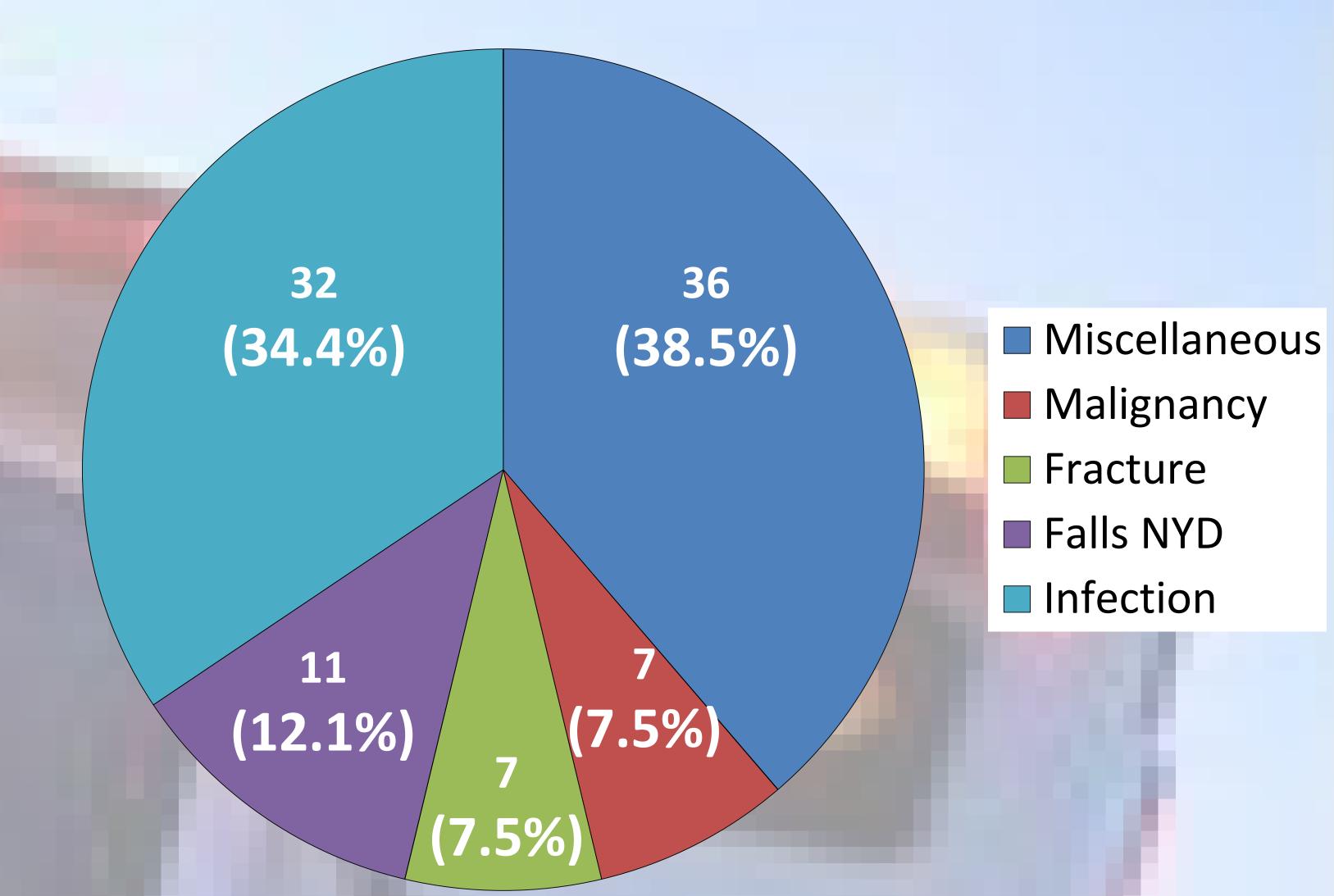


Figure 2. Discharge diagnosis of patients admitted within 14 days of LA call

Conclusions

- LA calls are associated with short-term morbidity, mortality and considerable use of EMS resources
- These calls may be early indicators of problems requiring comprehensive medical evaluation
- Further research is required to identify predictors associated with high risk of morbidity and mortality in LA patients