

D.8 Evidence tables

Reference	Alameda ⁵
Study type and analysis	Retrospective cohort study. Multiple regression for length of stay; logistic regression for mortality and serious adverse events.
Number of participants and characteristics	n=243 Outliers n=109 Non outliers n=134 Inclusion criteria: patients discharged from the Department of Internal Medicine with the All Patients Diagnosis-Related Group 544 (congestive heart failure and cardiac arrhythmia with major complications or comorbidity). Exclusion criteria: patients admitted to departments other than Internal Medicine or the Intensive Care Unit. Data from the minimum basic data set, discharge summaries and test records from La Princesa University Hospital, Madrid, Spain, 2006.
Prognostic variable	Medical outlier (admitted to a ward different from the internal medicine ward; outliers transferred to the internal medicine ward were included) Versus. No medical outlier (admitted to the internal medicine ward)
Confounders	Age, sex, diabetes mellitus, hypertension, coronary heart disease, cerebrovascular disease, chronic obstructive pulmonary disease, cancer, cognitive impairment before admission, serum creatinine, haemoglobin, PaO ₂ , serum albumin at admission, nursing home resident, previous hospital stay within 12 months, weekend/bank holiday admission.
Outcomes and effect sizes	Mortality: RR 0.8 (95% CI 0.4 to 1.6) Length of stay: Mean difference 2.6 days higher (95% CI 0.6 to 4.6) Serious adverse events (infection): RR 1.5 (95% CI 0.8 to 2.81) Serious adverse events (haemorrhage): RR 1.2 (95% CI 0.4 to 3.6)
Comments	Risk of bias: High (no adjustment for comorbidity)
Reference	Perimal-Lewis 2013 ¹⁵⁶
Study type and analysis	Retrospective cohort study. Poisson regression.
Number of	n= 19,923

Reference	Perimal-Lewis 2013 ¹⁵⁶
participants and characteristics	Outliers n=2,592 Non outliers n=15, 213 Inclusion criteria: patients admitted and discharged by the general medicine service Exclusion criteria: patients discharged from the ED, patients staying in hospital over 30 days Data extracted from Flinders Medical Centre patient journey database (1 Jan 2003 to 20 September 2009)
Prognostic variable	Outlier (not treated within a 'home ward' for the general medical unit allocated to care for the patient) Versus. Inliers (treated within a 'home ward' for the general medical unit allocated to care for the patient; patients under the care of GM but housed in the intensive care, high dependency or coronary care units were included as inliers)
Confounders	Age, charlson index, gender, length of time spent waiting for a bed in ED
Outcomes and effect sizes	Mortality: RR 1.41 (95% CI 1.16 to 1.71) Length of stay: 0.77 (95% CI 0.74 to 0.80)
Comments	Risk of bias: High (no adjustment for case mix)

Reference	Santamaria 2014 ¹⁷³
Study type and analysis	Prospective cohort study. Zero-inflated negative binominal regression.
Number of participants and characteristics	n= 58,158 Outliers n= 11,034 Non outliers n= 47,124 Inclusion criteria: all admitted patients Exclusion criteria: patients admitted for outpatient testing, mental health care, rehabilitation or palliative care Consecutive patients admitted to St Vincent's Hospital, Melbourne between 1 July 2009 and 30 November 2011
Prognostic variable	Outlier (any time spent outside the home ward) Versus. Non-outlier (no time spent outside the home ward; time spent in an intensive care or coronary unit was included as non-outlier)
Confounders	Age, predicted mortality (calculated using diagnostic codes and Charlson Comorbidity index), interhospital transfer, same-day admission, neurosurgery unit, cardiothoracic surgery unit, general surgery unit, nephrology unit, general medicine unit

Reference	Santamaria 2014¹⁷³
Outcomes and effect sizes	Serious adverse events (emergency calls): RR 1.53 (95% CI 1.32 to 1.77)
Comments	Risk of bias: Low. Population indirectness – all patients including surgical

Reference	Serafini 2015¹⁷⁹
Study type and analysis	Cohort study. Multivariate analysis (method not reported)
Number of participants and characteristics	n=3,828 Outlier n=339 Non-outlier n=3,489 Inclusion criteria: patients admitted to internal medicine or geriatrics Exclusion criteria: not reported Consecutive patients admitted to medicine and geriatrics of a hub hospital in Italy during 2012
Prognostic variable	Outlier (patients admitted in beds outside of medicine or geriatrics) Versus. Non-outlier (in-ward patients)
Confounders	Total number of admissions Gender Age Degree of dependence Length of stay Outlying location (medical or surgical) Diagnosis related group at discharge Readmission within 90 days
Outcomes and effect sizes	Mortality (hospital mortality): HR 1.8 (95% CI 1.28 to 2.53)
Comments	Risk of bias: High (no adjustment for comorbidity)
Study type and	Matched pair cluster study

Reference	Serafini 2015 ¹⁷⁹
analysis	
Number of participants and characteristics	<p>n=483</p> <p>Outlier n=245</p> <p>Non-outlier n=238</p> <p>Inclusion criteria: any patient outlying in one ward but under the responsibility of another ward</p> <p>Exclusion criteria: refusal to take part, persons under judicial protection or guardianship, persons under 18 years, patients hospitalised directly in intensive care units from the ED</p> <p>Patients selected from a period from February to May 2010 (outlying patients). Control group were consecutively included among all patients hospitalised during the study period.</p>
Prognostic variable	<p>Outlier (patients outlying in one ward but under the responsibility of another ward)</p> <p>Versus.</p> <p>Non-outlying patients</p>
Confounders	Matched for age, sex and reason for admission
Outcomes and effect sizes	<p>Mortality (90 day): RR 0.75 (0.51 to 1.11)</p> <p>Serious adverse events (transfer to intensive care): RR 1.05 (0.5 to 2.18)</p>
Comments	Risk of bias: High (no consideration of comorbidity). Population indirectness – all patients including surgical and trauma