Introduction
Unplanned emergency medical readmissions are being targeted by health authorities because of quality of care concerns and economic burden. The predictability of readmissions within 7 days of discharge would appear to be an essential prerequisite for any reduction strategy. We examined predictors of 7-day medical readmissions in our institution spanning a 10-year period (2002 - 2011).

Aim
The aim of this study is to evaluate the predictability of 7-day readmission rates and question the misnomer that these readmissions represent “failed discharges”.

Methods
Hospital in-patient enquiry (HIPE) dataset for all emergency admissions to St James’s Hospital, between 1st January 2002 and 31st December 2011. We examined readmissions occurring within 7 days of discharge. Multivariate Logistic Regression with Area under Receiver Operating Curve (AUROC) determined predictability.

Results
Of 53,091 episodes over the 10 year period, there were 31,882 total readmissions with 1,684 occurring within 7 days of discharge. The average 7 day readmission rate was 3.17%
Positive predictors of 7-day readmission were: previous readmission (OR 2.31), alcohol dependency (OR 1.46), respiratory diagnosis (OR 1.45), CCF (OR 1.29), anaemia (OR 1.28), illness severity score (OR 1.09), and uraemia (OR 1.01). The AUROC was 0.66.
Older age (OR 0.99), female (OR 0.84) and longer LOS (OR 0.97), were associated with reduced odds of a readmission within 7 days (95% Confidence Interval).

Conclusions
We showed weak predictability for readmissions within 7 days of discharge. This suggests that 7 day readmission rates should not be used as an outcome indicator and that penalties to Trusts in this patient cohort cannot be justified.

References