admissions across NSW, of which 815 met inclusion criteria for HFREF.

Cost estimates were calculated from the Pharmaceutical Benefits Scheme (PBS) data for the cheapest agent within a drug class. The cost of hospital admission for heart failure was estimated using The National Efficient Price (NEP) 2018 calculator issued by the Independent Hospital Pricing Authority (IHPA) in Australia.

Of the 815 patients that met inclusion criteria for hospital admission due to HFREF, the annual rate of readmission for heart failure was 52%, with all cause mortality rate being 14%. We found a 77% average reduction in mortality benefit and a 71% average increase in rehospitalisation due to suboptimal pharmacotherapy. In our cohort, 28 deaths and 123 rehospitalisations could have been prevented by pharmacotherapy optimisation. The annual cost per patient of optimising pharmacotherapy was $135.35, resulting in a total projected cost of $303,387.48 to optimise HFREF pharmacotherapy across NSW.

The gap in optimal pharmacotherapy prescription for heart failure is a major contributing factor to hospital readmissions, thus posing a significant economic burden to the NSW healthcare system. More comprehensive Australia-specific cost-benefit analyses including recommended device therapies will better elucidate this major public health burden.

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Decline in Left Ventricular Ejection Fraction in Patients Undergoing Pacemaker Implantation

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Background: RV pacing has been associated with impaired left ventricular function resulting in heart failure. Prediction of patients susceptible to this condition is important as implantation of an LV lead may prevent it.

Aim: The aim of this study was to identify clinical, ECG and echocardiographic predictors of decrease in LV function in patients undergoing pacemaker implantation.

Methods: Retrospective analysis of 106 consecutive patients with preserved LVEF receiving a pacemaker at a tertiary hospital from 2010 to 2018 with follow up echo >6 months post implantation. We stratified the patients into groups based on tercile of LVEF change.

Results: Mean ± SD age was 72.7 ± 12.6 yrs; 34.9% were female; baseline mean LVEF was 58 ± 9%. Pacing indication was sinus node diseases (39%) or AV conduction diseases (61%). After a median (25–75 percentile) follow up of 3 (1–4) yrs, LVEF decreased by 8.4 ± 11.2%, ranging from −20% to −4% (first tercile), −4−12% (second), and −12−45% (third).

Patients with greatest LVEF decrease (n = 72; 4–45% drop) were less likely to have atrial fibrillation: 41% pre-implant (49% vs 79%; p = 0.003), had a higher pre-implant LVEF (60% vs 54%; p < 0.05) than patients with LVEF being no change or increase (n = 34).