The health care costs for heart failure are substantial. Studies indicate that hospital treatment constitutes 65-75% of these. The aim of this study was to assess total and heart failure related hospital days as well as safety and efficacy of biventricular pacing in 16 patients with severe heart failure and delayed intraventricular conduction (QRS duration >150 ms). They were implanted with a biventricular pacemaker and followed by NYHA class, 6-min walk test and quality of life for a mean of 291+/-76 days. Total number of hospital days and the need for hospitalisations were monitored. Thirteen responders improved by at least one functional class. After 6 months of pacing the 6-min walk test improved from 375+/-83 m to 437+/-73 m (P<0.001) and Minnesota Living with Heart Failure quality of life score from 41+/-19 to 24+/-17 (P<0.001) compared to baseline. The need for hospital care decreased significantly after biventricular pacing. The total number of hospital days in all patients was 253 the year before compared to 45 the year after biventricular pacing (P<0.01). For heart failure related hospital days the corresponding figures were 183 and 39 days, respectively (P<0.01). Biventricular pacing improved 13/16 patients with severe heart failure and wide QRS complexes in this open study. The improvement resulted in a reduced need for hospital care.