

# Home Heart Hospital Associated with Reduced Hospitalizations and Costs Among High-Cost Patients with Cardiovascular Disease

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## Overview

We hypothesized that a Home Heart Hospital (H3), which provides longitudinal, at-home care, would improve care quality and reduce costs for high-need, high cost (HNHC) patients with cardiovascular disease.



## Methods

This retrospective within-subject cohort study used insurance claims and electronic health records data to evaluate unadjusted and adjusted annualized hospitalization rates, total costs of care, part A costs, and mortality rates prior to, during, and following H3. Ninety-four patients were enrolled in H3 between February, 2019 and October, 2021. Patients' mean age was 75 years, 50% were female, 7% were black, and 23% identified as Hispanic.



## Results

Common comorbidities included congestive heart failure (50%), atrial fibrillation (37%), coronary artery disease (44%). Relative to pre-enrollment, enrollment in H3 was associated with significant reductions in annualized hospitalization rates (absolute reduction: 2.5 hospitalizations/year,  $p < 0.001$ ); total costs of care (mean annualized reduction: \$67,370,  $p < 0.05$ ); and Part A costs (mean annualized reduction: \$81,600,  $p < 0.001$ ). Annualized post-treatment total costs and Part A costs were significantly lower than pre-enrollment costs (mean total cost reduction: \$87,530,  $p < 0.05$ ; Part A costs: \$67,450,  $p < 0.01$ ).

Comparison of Part A/Total Costs of Care During the Baseline, Treatment, and Post-Treatment Periods

