

THE EFFECT OF A HEART ASSIST DEVICE CLINICAL STUDY ON HOSPITAL REFERRALS AND REVENUES

Background: From May 1998 to July 2001, chronic end-stage heart failure patients ineligible for transplantation were recruited for a clinical study to evaluate long-term use of a left ventricular assist device (LVAD). The Randomize Evaluation of Mechanical Assistance for the Treatment of Congestive Heart Failure (REMATCH) study enrolled 129 patients, and randomized 68 patients for LVAD implantation.

Objective: The objective of our study was to evaluate revenues that resulted from referrals of patients to the REMATCH Study.

Methods: At LDS Hospital, we retrospectively reviewed clinical report forms for all referred patients to determine the number and types of patients referred to the REMATCH study. We determined which patients were randomized for LVAD implantation, and which were referred to other services in the hospital. For patients who received LVAD implants, we collected data on follow-up care. For patients who were referred to other services in the hospital, we determined revenue using standardized fee schedules.

Results: Approximately 150 end-stage heart failure patients were referred to LDS Hospital and underwent screening evaluations: two outpatient clinic visits (\$50 per visit) and an echocardiography (\$200). About 50 percent of patients underwent follow-up diagnostic procedures: oxygen consumption (\$30), right heart pressure monitoring (\$2,100), and pulmonary function tests (\$250). Several patients not enrolled in the REMATCH study were referred to other departments for other procedures: transplantation (\$145,000), coronary artery bypass grafting (\$28,000), and pacemakers (\$12,000). Ultimately, 12 percent (n=18) were enrolled in the REMATCH study. Median follow-up for LVAD patients was over one year. Patient screenings and evaluations led to referrals to other departments, and other incremental services. Referrals leading to services yielded significant revenues (approximately \$850,000).

Conclusions: The REMATCH study had a positive effect on referrals and follow-up care at LDS Hospital. The increased number of referrals yielded increased revenues from screening services, more intensive patient work-ups, and subsequent referrals to other hospital departments. LVAD services had an impact on hospital revenues not only in offering the actual implantation and related services, but also in other hospital departments who received patients referred away from the LVAD services.