Breakthrough Results Won--and Lost

Building a Sustainable Program with over $2million at Stake

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ABSTRACT

Heart specialists at Saint Joseph HealthCare, Lexington, KY developed a program for heart failure Medicare patients that reduced LOS by 18% and readmissions by 73%, creating annualized savings of $2.3 million. The intervention included changes in staff procedures, a new drug for HF and an ethnographically-developed patient self management kit. The outcomes were achieved but then lost when the project champion was absent. The team has now enlisted the quality and process improvement departments to shift the program from "personality-dependent" to "process-dependent."

THE AIM

Goal #1: Reduce LOS to within the Medicare payment limit, 4.5 days
Goal #2: Reduce readmissions in <31 days by at least 50%
Goal #3: Reduce LOS for readmissions that can't be prevented

THE PROCESS

STAFF PATHWAY

Step One: Build a "Heart Failure Fast Track Team"

- Multi-disciplinary membership = 25
  - i. Champions for each discipline and function
  - ii. Core of implementers; larger group as resource
- Training:
  - i. Day-Long Seminar
    - a. Update on evidence-based testing and treatments
    - b. Overview of Careguide Self Management Kit
  - ii. 45-minute Inservice on Careguide content
    - a. Inpatient:
      - o Nurse unit leaders
      - o Unit leader assistants
    - b. Follow Up after discharge:
      - o Home Care representatives
      - o Respiratory Therapy Company

Careguide® Self Management Kits were chosen because they have achieved 54-74% reductions in readmissions in studies at other locations.

Step Two: Establish Standardized Order Sets for Clinicians

- Write guidelines and forms:
  - o ED orders for intake; CV discharge orders
  - o BNP testing; Natrecor infusion protocols
- Post guidelines and forms on hospital intranet.
- Insert Standardized Order Set in new-clinician orientation

Natrecor®, from Johnson&Johnson, was chosen because it has shortened length of stay in studies at other locations.

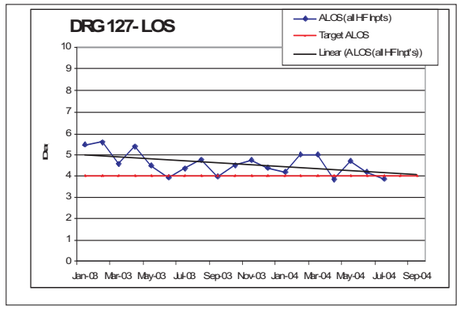
PATIENT PATHWAY

Step Three: Build a "Fast Track to Self Care Success"

- Send all HF patients to 2 floors with trained Fast Track Team
- Give Careguide Self Management Kit ASAP after admission
  - i. Encourage patients to read through independently
  - ii. Start patients immediately using their own scale and diary
- Coordinate education and counseling for each patient
- Have Implementation Champion deliver Careguide Kit
- Discharge patients with Careguide Self Management Kit
- Follow up: Home Care or Respiratory reviews Kit and procedures

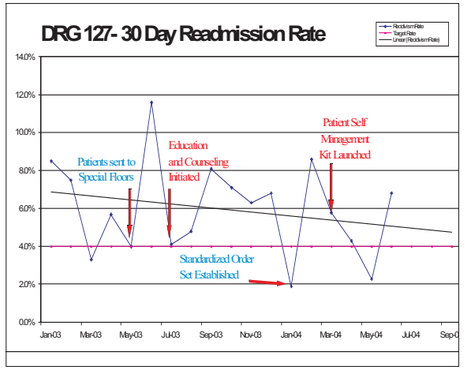
THE OUTCOMES

Goal #1: Reduce LOS to within the Medicare payment limit



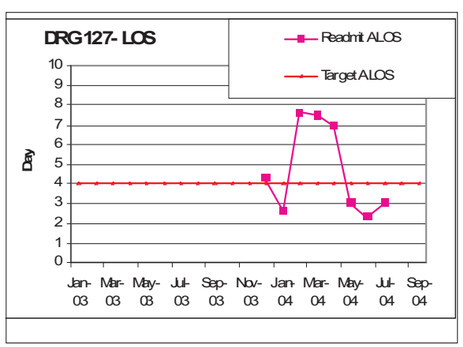
Success! The trend line is DOWN.. ALOS has dipped below 4 days four times. The average for the last six months has been 4.4, down from 5.5 at the beginning of the intervention--and below Medicare's assumed LOS of 4.5 days. Both Natrecor and Careguide contributed to the patients' readiness to go home.

Goal #2: Reduce readmissions <31 days by at least 50%



Success! But…The most significant outcome is the readmission bounce: readmissions went down immediately after launching the Careguide Self Management Kits and continued down, achieving 73% reduction in three months, as expected. However, in June, the Implementation Champion was absent. Distribution of Kits was suspended-and the readmission rate spiked up.

Goal #3: Reduce LOS on readmission



Success! But…Tracking re-admission LOS began 11/03. Readmits usually stay longer--they return sicker, with LOS of 7-7.6, numbers confirmed as typical in the literature.

A sharp drop in LOS followed the launch of the Careguide Self Management Kit, which teaches patients to recognize symptoms early when recovery is more quickly accomplished.

THE SAVINGS

Savings from Achieving Goal # 1: Shorten the original LOS

First, subtract the Medicare limit from ALOS. Multiply the excess time per day by the daily cost. Multiply the excess cost per patient by the average number of patients per month. The top line shows *total dollars behind* under the old system. The second line shows *total dollars ahead* under the new system.

	Average Length of Stay	Time beyond limit	Cost of a telemetry bed/day	Average # of patients per month	Total Dollars
1/03--6/03	5.5 days	1 day	$2300	60	--$138,000
1/04--6/04	4.4 days	-.1 day (2½ hours)	$2300	60	+$ 13,800

SIGNIFICANCE
The program prevented a loss of $138,000/mo. The program gained $13,800/mo. by being able to turn off the telemetry beds 2 ½ hours before reaching the Medicare limit.

Financial gain from reducing LOS =
$151,800/month

ANNUAL SAVINGS = $1,821,600

Savings from Achieving Goals #2 and #3 Reduce readmits and shorten readmit LOS

Multiply the readmission rate by the number of patients and you have the number of patients readmitted. Multiply the number of patients by the ALOS on readmission and you have the number of days unreimbursed by Medicare.

	Readmit rate	Average # of patients per month	LOS on readmit	Total # of days	Loss to the Hospital
12/03--2/04	6%	60	5.9 days	21.2 days	$48,760
4/04--6/04	4%	60	4.1 days	2.8 days	$ 6,440

SIGNIFICANCE
Rates dropped to 2% and should persist, increasing gains over time.
Financial gain =
$42,320/month

ANNUAL SAVINGS = $507,840

TOTAL ANNUAL SAVING = $2,329,440 on 720 patients/year
COST OF NATRECOR DRUG = $ 15,000 or less *net of reimbursement*
COST OF CAREGUIDE SELF MANAGEMENT KIT = $ 40,000
TOTAL ANNUAL NET SAVING = $2,274,440

THE SAVINGS

Healthcare tends to believe that putting a person in charge of a program will ensure implementation. But in fact depending on "champions" makes programs vulnerable to absence and turnover. Interventions at Saint Joseph to reduce heart failure outcomes were dramatically successful-but only while the champion was present. The program must now change from "Personality-Dependent" to "Process-Dependent."

The Director of Process Improvement will conduct a Functional Flow Analysis and create checklists that Quality Assurance managers can enforce. However, to make a process enforceable, senior management must require it. Otherwise--especially if doctors are independent practitioners--adherence will be hit-or-miss, with the hospital suffering the financial cost of inconsistency and the patients suffering the loss in quality of life. **Our goal at Saint Joseph is now to ensure that no matter what the turnover, the process keeps going.**

Saint Joseph Healthcare

Since 1877, Saint Joseph Hospital, a 446-bed tertiary medical center has offered the highest quality patient care to the community of central and eastern Kentucky. Lexington's first hospital, also known as Lexington's "heart hospital" has pioneered in the health care community. Saint Joseph has been nationally recognized for cardiology, orthopedics and stroke by U.S. News &World Report and Solucient.

Services at Saint Joseph East, a 166-bed community hospital, include a comprehensive women's health program: the Breast Center, maternity and OB/GYN.

Saint Joseph East has Lexington's only after-hours pediatric emergency center, Kid Traxx. In 2003 and 2004, Saint Joseph Hospital and Saint Joseph East were each recognized as distinguished for patient satisfaction and service excellence by J.D. Power and Associates. In 2004, Saint Joseph received the Consumer Choice Award from the National Research Corporation.

Communication SCIENCE

Communication Science Inc., formerly Careguide System, is a materials-based disease management program. Using extensive ethnographic research and the highest standards of health literacy, CSI patient self managment tools achieve radical reductions in utilization, even when follow-up is limited or unavailable.

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