

Nursing Education and Redesigned Discharge Process: Effect on Congestive Heart Failure Patient Outcomes

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Introduction

- Not for profit acute care community hospital
- Part of 40 hospital system
- 121 Beds
- Semi-rural designation
- Population 97,751
- 18.6 % over 65 years
- 94.5% White



Background

- 27% CHF patients readmitted within 30 days
- 18% of all admissions have a 1° or 2° diagnosis of congestive heart failure
- Only 2 cardiologists on staff
- 26 bed telemetry unit
- Goal $\leq 10\%$
- Impacted CHAMP Program
- Below 60th percentile on HCAHPS



Problem Statement

The readmission rate at a semi-rural community hospital exceeds the state averages and the corporate goal. The majority of these inpatients have a diagnosis of CHF.

Nursing education and a redesigned discharge process will be implemented with the goal of reducing readmissions while improving patient satisfaction and improving reimbursement.

Literature

30-day readmission rates for Medicare enrollees with CHF:

- Public hospitals (27.9%)
- Nonprofit hospitals (25.7%)
- Counties with low median income (29.4%)
- Counties with high median income (25.7%)
- Hospitals without cardiac services (27.2%)
- Hospitals with full cardiac services (25.1%)
- Hospitals in the lowest quartile of nurse staffing (28.5%)
- Hospitals in the highest quartile of nurse staffing (25.4%)
- Small hospitals (28.4%)
- Large hospitals (25.2%)

Joynt & Jha (2011)

Literature

Readmission occurs due to the inability to secure a new prescription after discharge. This can be due to a number of reasons: transportation, cost, and misunderstanding of discharge instructions.

(Phillips, et al, 2004)

The congestive heart failure patient is at risk for readmission at day three to day four after discharge.

(5 Million Lives Campaign,
2008)

Literature

- A **standardized approach** to discharge planning, ...will decrease the number of post-hospital adverse events and rehospitalizations.

(Greenwald, J.L., Denham, C.R., & Jack, B.W, 2007)

- A comprehensive approach to discharge planning, requires **education to update the baseline knowledge of the unit staff** supporting the process.

(Kleinpell & Gawlinski,
2005)

Restating the Problem

- High Readmission Rate for CHF patients
- Variation in current discharge process
- Readmissions are due to misunderstanding of disease, medication, and access to follow-up care.

Project RED*

- Consists of 11 actions that hospital undertakes during and after a hospitalization
- RED is the result of 7 years of work supported by the AHRQ (Agency for Healthcare Research and Quality and the National Heart, lung and Blood Institute (NIH-NHLBI)
- Preliminary work included tools borrowed from engineering such as: process mapping, FMEA, RCA, risk assessment and qualitative analysis

*(re-engineered discharge)

12 Components of Project RED

- Education of unit nursing staff
- Educate the patient on his diagnosis
- Make follow-up appointments with community provider /labs
- Discuss all tests performed during hospitalization
- Organize discharge services
- Confirm the medication plan
- Reconcile the discharge plan with national guidelines
- Review the steps for the patient to follow if any problems arise
- Expedite transmission of the discharge summary to community provider
- Assess the patient's degree of understanding
- Give the written discharge plan
- Discharge Phone call within 48 hours for reinforcement and problem solving

Implementation

- Conducted CHF education for telemetry nurses (January 2011)
- Implemented new discharge planning process and software with APN (March-April 2011)
- Measured initial outcomes (June 2011)
- Analyzed findings (September 2011)
- Determined sustainable plan (October 2011)
- Expanded discharge process to all AMI, CHF, Pneumonia, Stroke/TIA patients (January 2012)

Outcomes/Goals

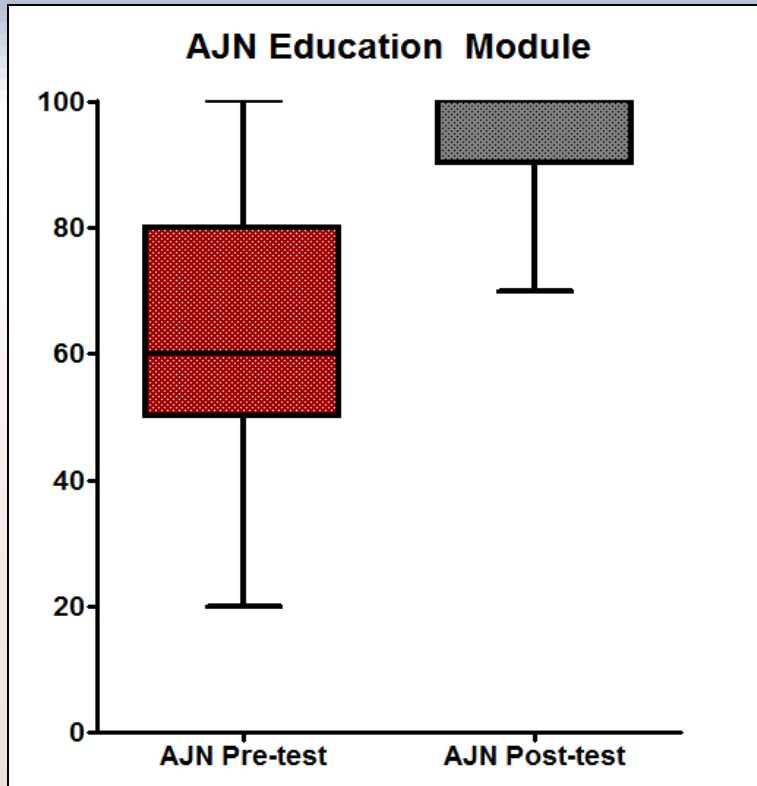
- To improve management of the CHF patient by increasing nursing knowledge
- To improve patient satisfaction
- To reduce readmission rates of patients with CHF
- To reduce risk/cost of uncovered hospitalizations in the future

Nursing Knowledge

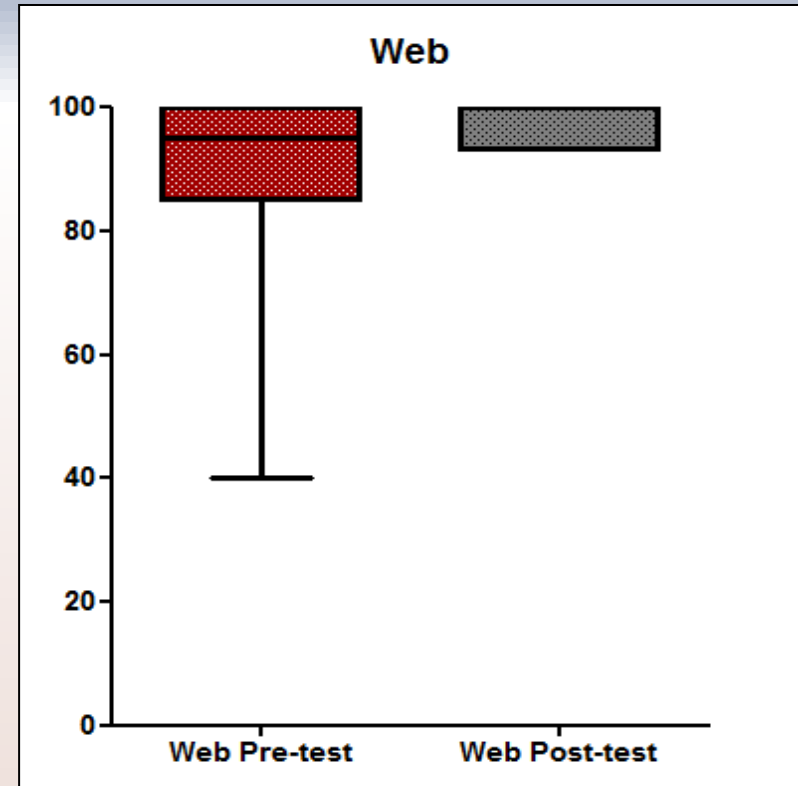
- Improvement in nurse's knowledge of CHF after education (pre and post test scores)



Results: RN Education



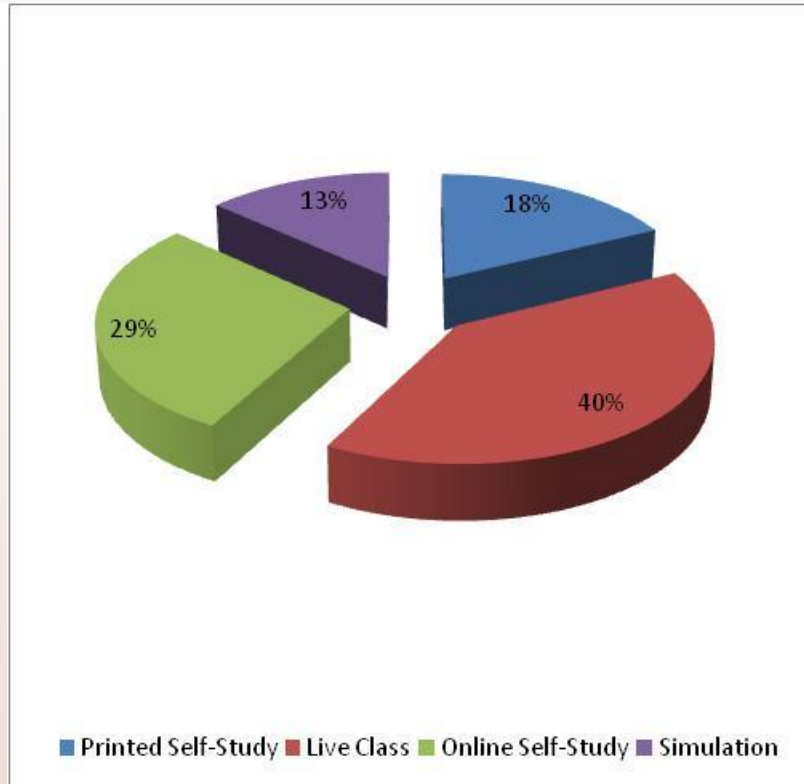
n= 31
P value is < 0.0001
95% confidence interval
Mean difference = -31.935



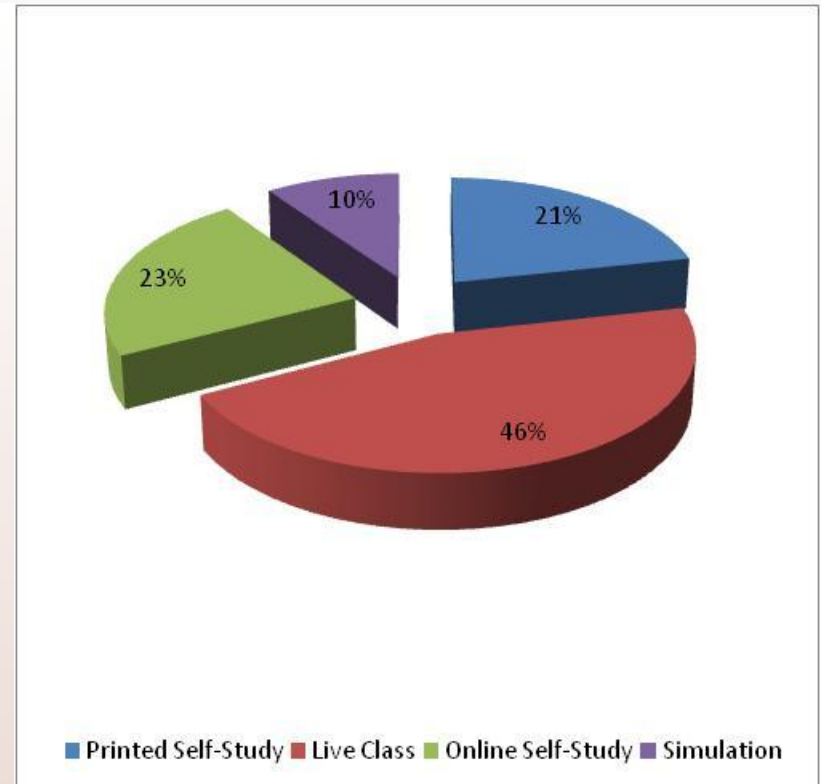
n= 31
P value is < 0.0036
95% confidence interval
Mean difference = -8.000

Results: Nurses' Learning Preference

Learning style you prefer:



Teaching method that helps you acquire and retain information:



n = 32

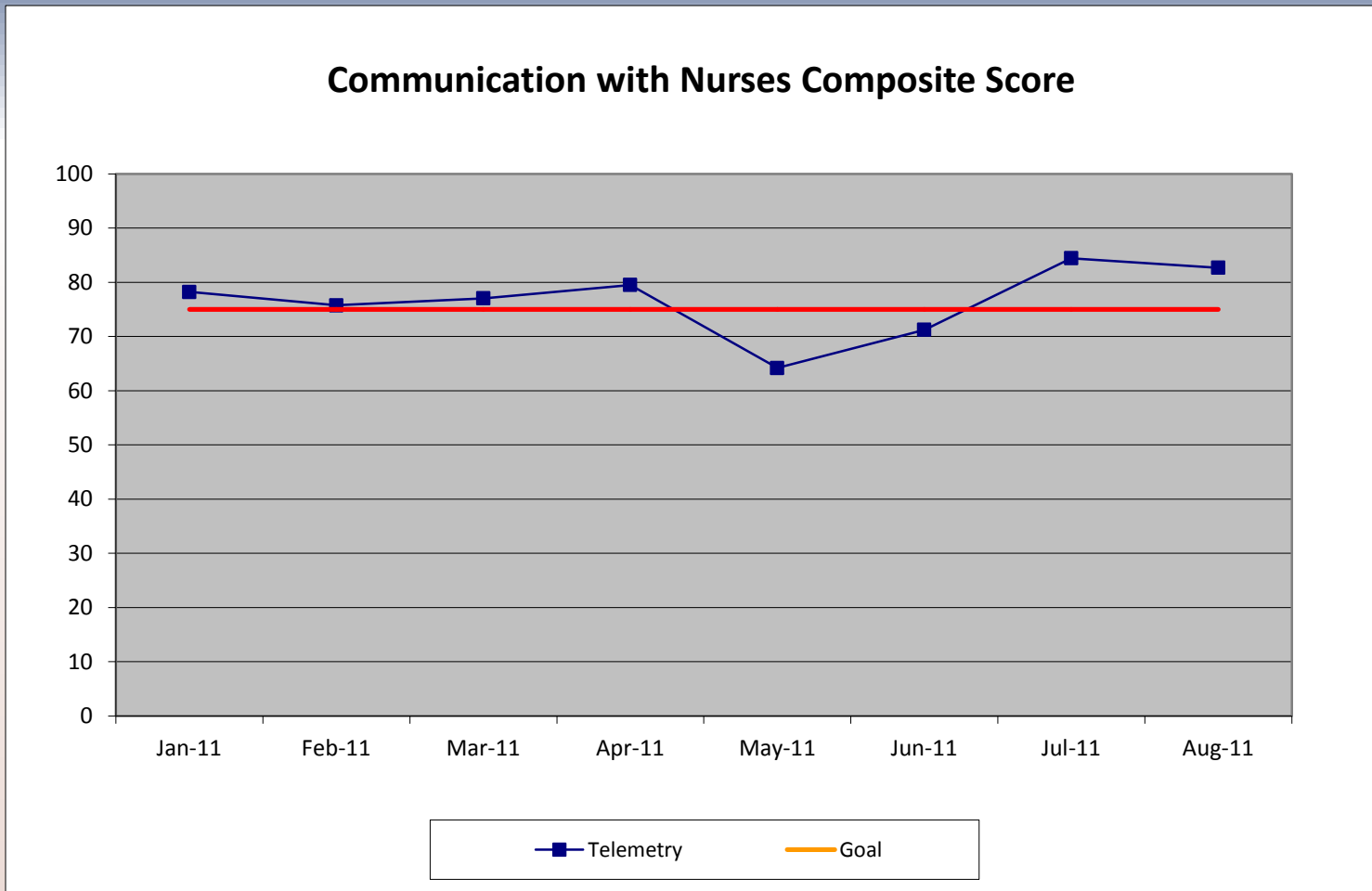
Patient Outcomes

Patient Satisfaction (HCAHPS) achieved 75th percentile

- Communication with Nurses
- Discharge Information
- Overall Hospital Rating

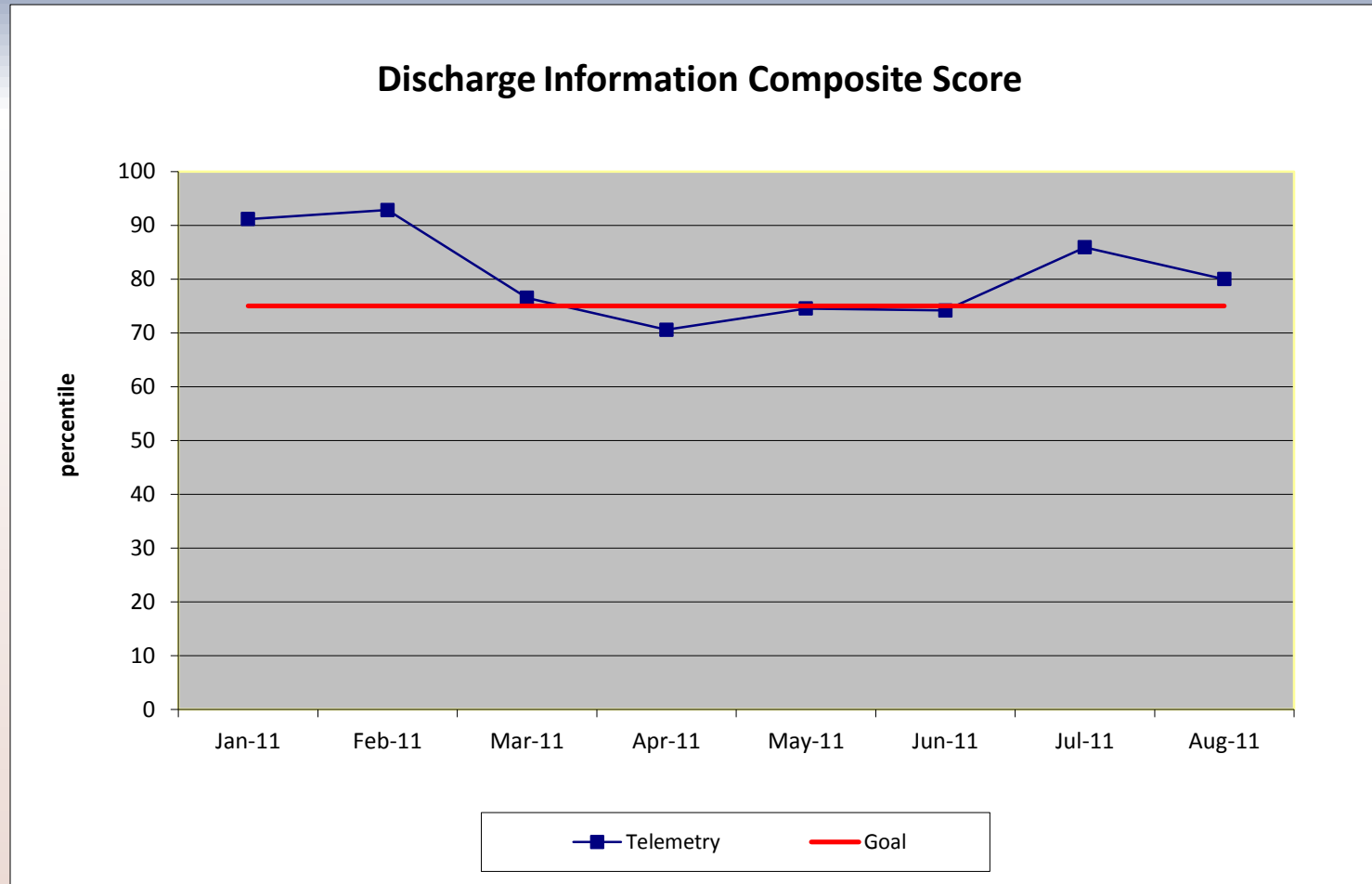


Results: Patient Satisfaction



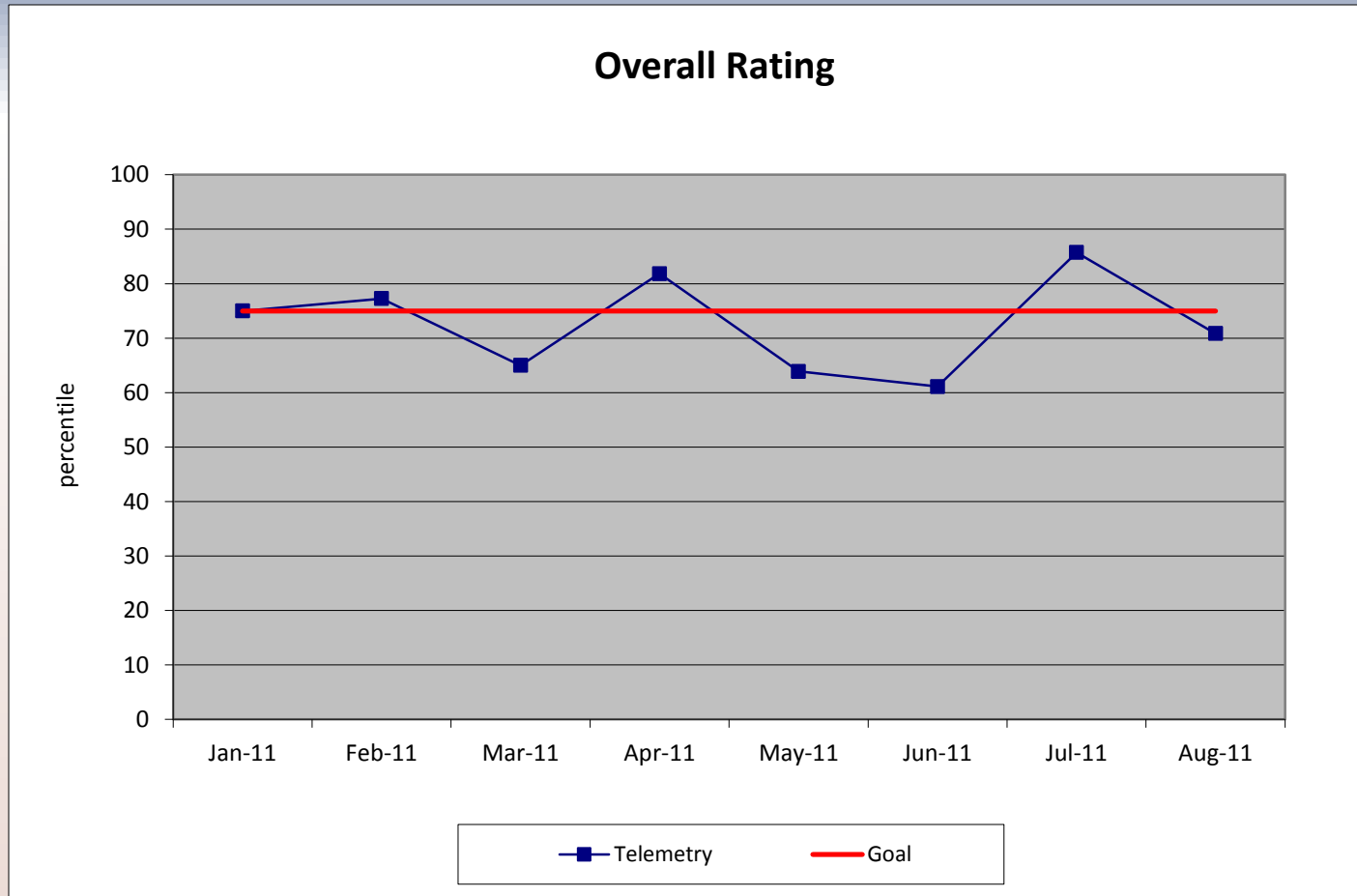
1. During this hospital stay, how often did nurses treat you with courtesy and respect?
2. During this hospital stay, how often did nurses listen to you?
3. During this hospital stay, how often did nurses explain things in a way you could understand?

Results: Patient Satisfaction



1. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
2. During your hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

Results: Patient Satisfaction



Using any number from 0 to 10 where 0 is the worst hospital possible, what number would you use to rate this hospital during your stay?

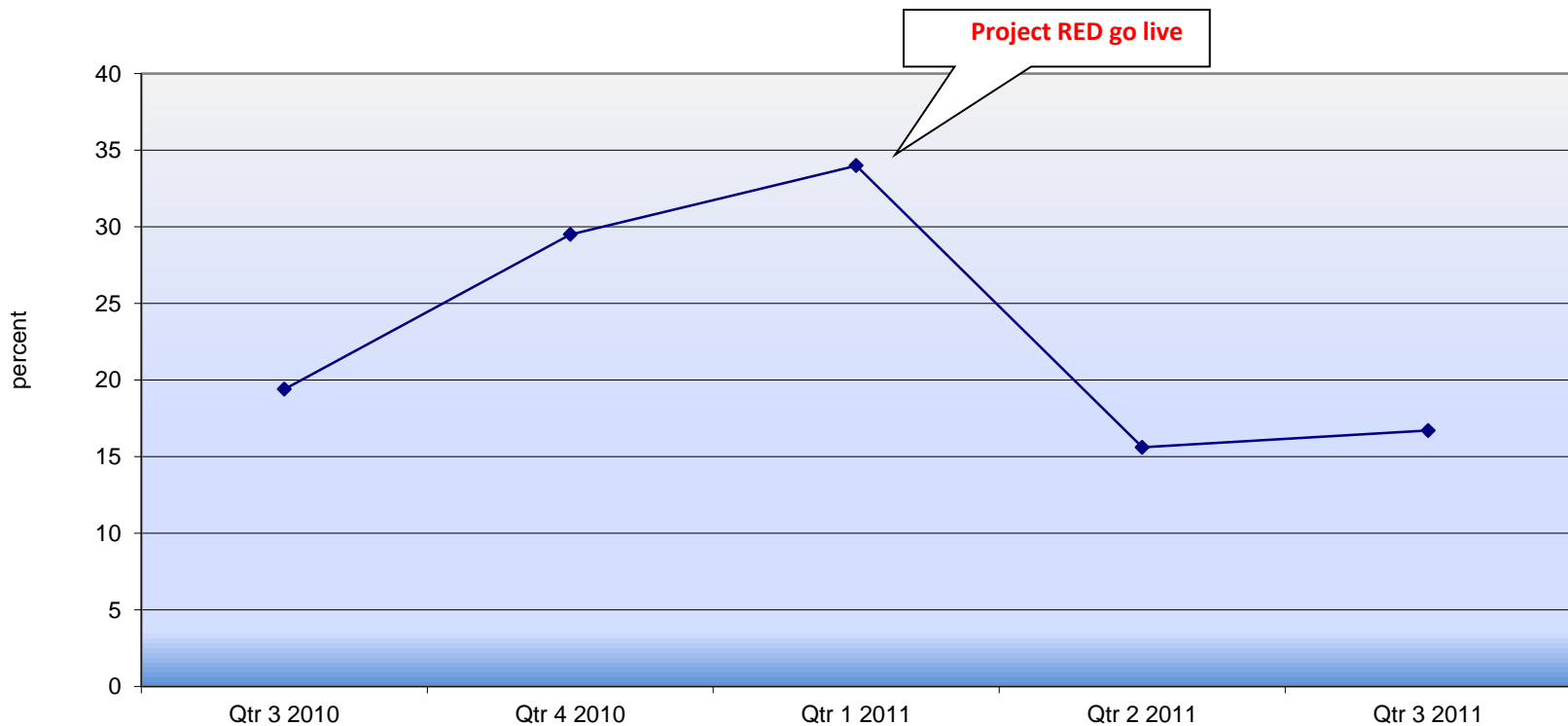
Results: Readmissions

- Readmission Rate for CHF Patients ≥ 64 years improved $\approx 12\%$ over baseline of 27% to 15%

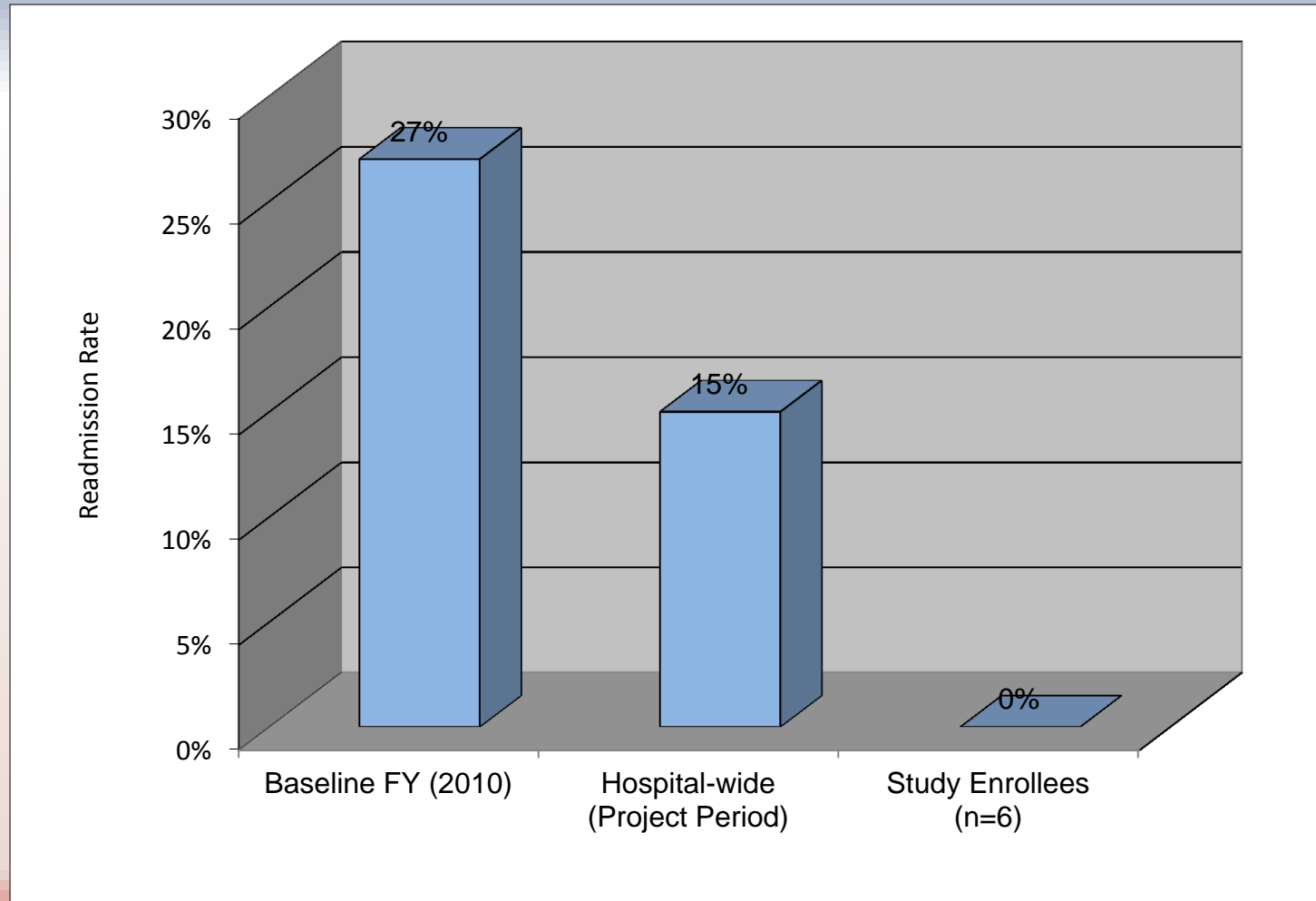


Patient Outcomes: CHF Readmission Rate

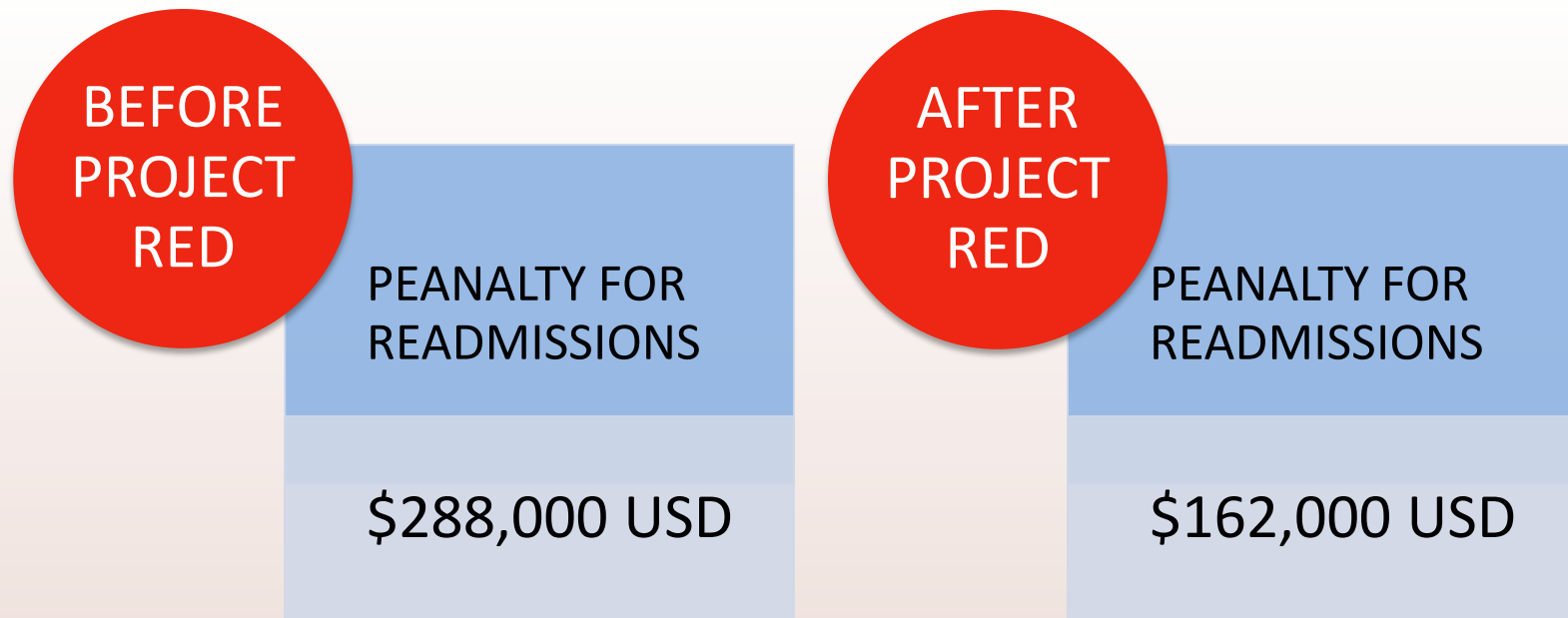
Hospital wide Readmission Rates (<30 days) for CHF Patients (Age > 64)



Patient Outcomes: Readmission Rates for CHF patients > 64 years



Hospital Outcomes: CMS Withholding



Foster and Harkness, 2010

Conclusions

1. Nursing Education in combination with Project RED resulted in the reduction of hospital readmissions of patients with CHF
2. Project RED is a cost effective plan that can minimize financial risk in a semi-rural community hospital.

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Questions?

Go
Bulldogs!

