2) Improving Healthcare Value at Baystate Medical Center through Bundled Payments – FINALIST

Baystate Medical Center

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PROJECT DESCRIPTION

The health system's vision in 2014 was "To transform the delivery and financing of health care to provide a high quality, affordable, integrated and patient-centered system of care that will serve as a model for the nation". A plan was made to expand the number of bundled payment arrangements and improve cost per case for up to three bundles. This strategy was in direct support of achieving the Triple Aim and Medicare's Accountable Care Organization (ACO) program.

In 2010, a pilot was performed with a private orthopedics group for total hip replacement. That successful pilot provided early experience in aligning care across the continuum, setting up gainsharing arrangements, and care model redesign.

In 2013, hospital leadership decided to apply for participation in the CMMI Bundled Payments for Care Improvement (BPCI) demonstration project and was selected to enter that program for Joint Replacement (TJR) and Coronary Artery Bypass Graft (CABG) in 2014. In preparation, the eight step process developed during the original pilot was followed:

1. Convene the right team
2. Define the episode
3. Develop measures (quality & financial)
4. Develop model of care
5. Price the bundle
6. Develop cost reduction opportunities
7. Plan the gain-sharing
8. Develop a continuous process improvement plan

The 'right team' for TJR included hospital operations, nursing, finance, and quality improvement specialists as well as Visiting Nurse Association, Case Management, private practice physicians and administrative leaders, health plan and post-acute care liaisons. The local best practice clinical guideline or 'Model of Care' included pre-operative steps, perioperative steps, and post-acute management plans including a patient pathway for patients requiring skilled nursing facility care which defined expected length of stay and rehabilitation milestones. Physician participation in its creation was essential to the subsequent practice change. Initial changes included:

- Reduction of blood transfusions
- Enhanced care coordination including ongoing education for SNF providers
- Patient engagement
- Standardized post-op nausea and pain protocols
- Early notification and clinical review of every hospital readmission

A dashboard was fed back to the team monthly including physician-specific processes and outcomes. Data analysis of Medicare Claims data was provided by a third party through participation in a national bundled payment collaborative. The Medical Center has been a leader in that collaborative, fielding phone calls and hosting a national meeting to share learnings. Additionally, national presentations have been made by invitation from Premier, the American Hospital Association, and the Institute for Healthcare Improvement over the past 3 years. The pilot experience was recently published in a peer reviewed journal.

Participation in the BPCI demonstration has been a huge success for the Medical Center. There were significant reductions in 90-day costs for both TJR and CABG. Additionally, there were significant decreases in hospital expenditures, increasing the operating margin associated with performing CABG procedures. More importantly, indices of quality and patient safety were maintained or improved while increasing engagement with patients and their families. Partnerships with post-acute providers have been strengthened with data sharing, regular educational offerings, and improved coordination of care for patients.

Currently, the medical center has added one additional CMMI bundle, applied for the CMMI Oncology Bundle, and is working on three bundles with a private insurer. The strategy is to grow the portfolio of bundled payment arrangements in order to improve value.

OUTCOMES ACHIEVED

2010 Pilot Total Hip Bundle Pilot (N=45 patients)

- $30,000 saving (average $666 per patient)
- 17% increase in patients discharged to home versus to a post-acute care facility
- Decreased readmissions, improved process measures of quality

2014 CMMI TJR (N=510 patients)

- $1,383,000 in savings; 9% cost reduction
- 10% reduction in discharges to skilled nursing facilities (SNF)
- Reduction in SNF length of stay (14.5 versus 8.5 days)
- Development of a preferred provider network
- 77% of patients discharged to a preferred provider skilled facility
- Cost reductions in blood products of $101.00 per case and diagnostics $77.00

2014 CMMI CABG (N=137 patients)

- Total Savings $389,000; 4.8% cost reduction
- Lower length of stay in SNF
- Less intense us of VNA services
- Inpatient cost decreased 7.1% - 1.9 day lower length of stay

LESSONS LEARNED

Success is dependent on:

1. Post-Acute partnership collaboration
2. Tightly aligned physician partnerships
3. Care model redesign which drives improvements in quality and secondarily in cost