Memorial Hospital of South Bend

SVS PSO CASE STUDIES

A Physician-led Approach to Improving Quality Data: Improving Statin/Antiplatelet Therapy at Discharge

SOCIETY FOR VASCULAR SURGERY SVS PSO PATIENT SAFETY ORGANIZATION

Organization and Team Members

Memorial Hospital of South Bend (MHSB) is a 606-bed short-term acute care hospital and a designated Level II Trauma Center. MHSB is part of the Beacon Health System, which also includes Elkhart General Hospital (402 beds) and Epworth (psychiatric) Hospital (131 beds).

The Team

Gerard Duprat, MD, FRCP
Catherine Bringedahl, MS, RCIS
Cheryl Stopper, Quality Management

Problem Statement and Hypothesis

Background

Q1 2014 VQI data demonstrated that only 65.9% of MHSB's PVI patients were discharged on antiplatelet and statin drugs. Although cardiology supported prescribing antiplatelet and statins for cardiovascular patients, IR/surgeons did not want to manage patients long term.

A 2015 VQI study found that for every 25 patients treated, discharge on an antiplatelet agent and statin medication is associated with 3.5 additional patients alive at 5 years; a 14% absolute survival benefit and 40% adjusted improved survival. (Source: DeMartino RR *et al*; Vascular Quality Initiative. J Vasc Surg. 2015 Jan 15)

Hypothesis

A new statin protocol and changes in staffing/workflow management will improve the percentage of peripheral vascular cases that have a statin and appropriate antiplatelet therapy documented on discharge.

Potential Solutions

- Develop and implement a new statin protocol to improve the percentage of peripheral vascular cases that, on discharge, have documented statin and appropriate antiplatelet therapy or documented contraindications.
- Embed guidelines into EMR post-order sets.
- Utilize Nurse Navigators as key to real-time success management.

Goals & Key Metrics

Goals

Implement a Work Plan for developing and communicating a new statin protocol that:

- Defines the problem or opportunity
- Determines the metric , how it will be measured, and who will measure it
- Describes the clinical impact
- Identifies stakeholders
- Determines the financial impact of the measure

Key Metrics

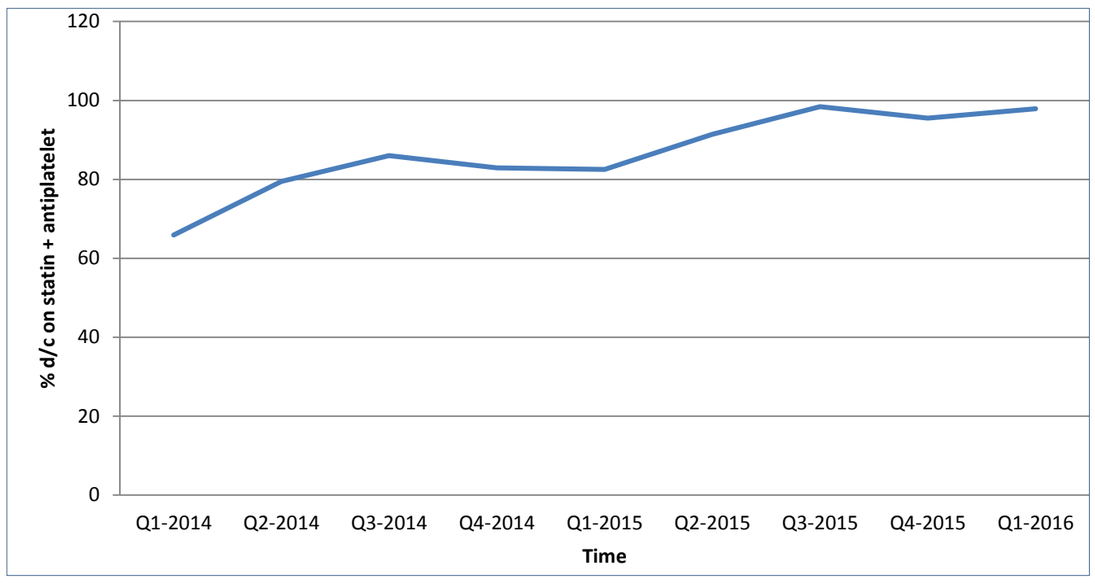
- Metric description
  - 90% of peripheral vascular cases that have documented Statin plus ASA or Coumadin or Plavix (or other appropriate antiplatelet therapy) on discharge or documented contraindication
- Metric definition
  - Numerator: Number of peripheral vascular cases with statin plus ASA, Coumadin, Plavix or documented contraindication
  - Denominator: Number of peripheral vascular cases
- Measurement process and tool description
  - Data source: VQI
  - Frequency of collection and report out: Monthly and quarterly
  - Metric "owner": Cheryl Stopper, Quality Management
  - Verification: Quality Management
- Value creation
  - Clinical quality: Impact on clinical quality using evidence-based guidelines
  - Stakeholder satisfaction: Positive impact on patient and family satisfaction with the right treatment being provided and potential for improved patient survival
  - Financial impact: Positive impact on the cost with a reduction in avoidable complications and restenosis rates.

Improvement Strategies

- Develop and implement *Change Management* Strategies that:
  - Standardize protocol via an *Ad Hoc* committee (cardiology, IR, surgery, internist & PCP)
  - Utilize Nurse Navigators as key to real-time success management; reallocated staff – no additional FTEs
  - Promote continuing education
  - Embed guidelines into EMR post-order sets
- Develop Statin protocol for cardiovascular patients to implement first 6 months, then monitor Statins plus ASA or Coumadin or Plavix (or other appropriate antiplatelet therapy) on discharge for PV Intervention the second 6 months.
- Communication plan for protocol developed and executed with multiple methods of communication (meetings, email, etc.)
- Target physician and staff groups (cardiology, vascular surgery and physician offices) to effect improvement
- To ensure patient safety, monitor stats for increased bleeding disorders.

Results

Although this initiative took time to develop and show improvement, the percentage of peripheral vascular cases that, on discharge, had documented statin and appropriate antiplatelet therapy or documented contraindications improved dramatically over a two year period.



Patients with Documented Statin and Antiplatelet Therapy at Discharge
2014: 65.9%
1st quarter 2016: 97.9%

Challenges & Lessons Learned

Challenges

Once guidelines were developed, cardiologists and interventional radiologists quickly added them to their post order sets for procedures. However, surgeons—initially more reluctant than cardiologists to manage patients long-term —needed additional time, information and encouragement.

Lessons Learned

Engage Physician's Assistants and Nurse Practitioners sooner

Additional Benefits & Other Implementations

Benefits

- The statin and antiplatelet implementation process carried over to all cardiovascular and stroke patients.

Other Implementations

- Continue to use this protocol as a pay for performance measure for 2016
- Added metrics to monitor statins at discharge for CEA and Fem-Pop bypass patients
- Customized antiplatelet therapy via VerifyNow and Thromboelastography (TEG)

Success Factors

- MHSB has built a trusting collaborative endeavor by investing in leadership coaching for the physicians and other key staff. The leadership development goal is creating a high-performing team through:
  - Focusing on results
  - Holding each other accountable
  - Committing to decisions and plans-of-action
  - Engaging in unfiltered conflict around ideas
  - Trusting one another
- Continuing peer review of cases inform efforts to constantly improve outcomes and be accountable for quality, efficiency and cost.