EFFECT OF A QUALITY IMPROVEMENT INITIATIVE ON ANTIPLATELET MEDICATION ADHERENCE AND HOSPITAL READMISSION RATES IN PATIENTS WITH ACUTE CORONARY SYNDROME

Amy Larkin, PharmD, Medscape Education, New York, NY; Michael LaCouture, MD, Medscape Education, New York, NY; Frank R. Ernst, PharmD, Indegene, Kennesaw, GA; Eric R. Bates, MD, University of Michigan, Ann Arbor, Michigan; Christopher P. Cannon, MD, Harvard Medical School, Boston, Massachusetts; Dwayaw L. Bledt, MD, MPH, Harvard Medical School, Brigham and Women’s Hospital Heart and Vascular Center, Boston, Massachusetts.

INTRODUCTION

Some hospital readmissions after an acute coronary syndrome (ACS) are preventable, yet 48% of Americans surviving a new coronary event will suffer from a serious event and 15% will have a major cardiac readmission within 1 year. This high frequency of hospital readmissions is a significant problem, and one that has been targeted by quality improvement initiatives in hospitals. In this study, we evaluate the impact of a quality improvement (QI) initiative aimed at improving adherence to oral antiplatelet therapy among patients discharged after an ACS event.

METHODS

Patient Medication Counseling at Hospital Discharge

A sample of patient charts was selected at random from among the population of patients who had a recent ACS event. The following quality measures and practice guidelines are used to assess patient adherence to oral antiplatelet therapy:

- Antiplatelet medication counseling at hospital discharge, 30 days, and 60 days post-discharge.
- Adherence to newer (brand) P2Y12 receptor inhibitors.
- Dual antiplatelet therapy (DAPT) adherence.
- Hospital readmission rates.

This quality improvement initiative focused on utilizing continuing medical education (CME) to educate cardiologists and provide them with the necessary tools to counsel patients more effectively on the importance of continuing their medications after an ACS event. The goal of this initiative was to decrease hospital readmission rates.

RESULTS

Patient demographics were similar between the baseline and follow-up cohorts (Table 1). Notable performance and patient-level changes observed in the INTERVENTION (QI) period include:

- Improved adherence to newer P2Y12 receptor inhibitors.
- Increased dual antiplatelet therapy (DAPT) adherence.
- Decreased hospital readmission rates.

CONCLUSION

This study demonstrates the success of a dual intervention (CME activities and individualized clinician coaching) in improving physician performance and, potentially, patient outcomes related to quality- and guideline-based ACS management. The effectiveness of the health system–funded intervention has implications for the quality of care provided across the United States.

The partnership demonstrates a valuable and scalable innovation in elevating clinical performance, thus improving health outcomes among individuals with ACS.

REFERENCES


NOTES

■ This study demonstrates the success of a dual intervention (CME activities and individualized clinician coaching) in improving physician performance and, potentially, patient outcomes related to quality- and guideline-based ACS management.

■ The effectiveness of the health system–funded intervention has implications for the quality of care provided across the United States.

■ This partnership demonstrates a valuable and scalable innovation in elevating clinical performance, thus improving health outcomes among individuals with ACS.

STUDY DESIGN

RECRUITMENT

A total of 300 patients were enrolled in the study.

BASELINE CHARACTERISTICS

The following demographics and risk factors were collected at baseline:

- Age
- Gender
- Race
- Diabetes
- Hypertension
- Hyperlipidemia
- Obstructive sleep apnea
- Smoking history
- Family history
- Prior ACS

INTERVENTION

The study used a 3-month intervention period.

POST-INTERVENTION

The following data were collected at 30 days and 60 days post-discharge:

- Adherence to newer (brand) P2Y12 receptor inhibitors
- Dual antiplatelet therapy (DAPT) adherence
- Hospital readmission rates

Post-cardiac events, hospitalizations, and patient outcomes related to quality- and guideline-based ACS management were evaluated.

DISCLOSURES

Larkin, nothing to disclose.

FIGURE 1. Patient Counseling at Discharge

FIGURE 2. Dual Antiplatelet Therapy Prescribed at Discharge: 30 days, and 60 days

FIGURE 3. Patient Filling of Antiplatelet Prescriptions at Discharge (Pharmacy Fill Rate)

FIGURE 4. Patient Adherence to Any P2Y12 Inhibitor at Discharge (Pharmacy Fill Rate)

FIGURE 5. Posthospitalization Rates at 30 and 60 Days Post-Discharge

TABLE 1. Patient Demographics

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<th>Baseline Characteristics</th>
<th>Interim Follow-up</th>
<th>Post-Interim Follow-up</th>
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<td>Smoking history</td>
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<td>Family history</td>
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<td>Prior ACS</td>
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TABLE 2. Risk Factors

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<td>Uncontrolled family history</td>
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FIGURE 6. Adherence to newer P2Y12 receptor inhibitors and dual antiplatelet therapy (DAPT) adherence.