Improving LDL Screening Following an Acute Coronary Event
Project Team

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Lipid Testing after an Acute Coronary Event: The Importance

- Total cost of cardiovascular disease in US estimated to be $329.2 billion (American Heart Association, 2002)


- Scientific evidence supporting importance of routine lipid testing and active lipid control in prevention of subsequent coronary events (e.g., Cannon, et al. 2004, Nissen, et al., 2004)
Lipid Testing after an Acute Coronary Event: The History

• 2000 – HEDIS results in 25\textsuperscript{th} percentile

• 2001 -- Quality Improvement Medical Management Committee (QIMMC) identified as system-wide clinical opportunity for improvement

• 2002 – Member intervention implemented as part of IHC-ATP project (Dr. Mark Kaufman)
  – LDL screening reminder mailed to member
  – LDL educational brochure included
Why remind members at 270 days post-event?

LDL Testing 60-365 Days

Year

Percent Tested


LDL Testing 60-365 days post-event
LDL Testing 60-270 days post-event
Aim Statement

• In the next 12 months, we will improve the 60-300 day post-acute coronary event (i.e., AMI, PTCA, CABG) LDL screening rate by 10%.
Primary Customers

• Patients/Members
• Clinicians (PCPs and Cardiologists)
• Employers (Purchasers)
• NCQA
Project Process Flowchart

Identify population

Agree to clinical recommendation

Develop baseline (post-pilot intervention) measure and goal

Identify enhanced intervention

Retention

Prospective

- Use HEDIS criteria
- Identification at SMH by Cardiac Rehab. Staff
- Develop patient registry; 12/31/99 and forward
- Develop data collection tool
- Enter data into laptop
- LDL order prior to discharge

Prospective

- 1st year: LDL test between 60 and 365 days post event
- Subsequent years: annual LDL testing
- Implement pilot intervention

Prospective

- HEDIS 2004 data: LDL test 83.03% LDL control 69.97%
- Goals (by 2005) LDL test: 90% LDL < 100: 75%
- Discuss potential interventions and change ideas
- Select enhanced intervention
- Identify enhanced intervention population

Barriers analysis; Cause and Effect Diagram

- Use HEDIS criteria
- Identification at SMH by Cardiac Rehab. Staff
- Develop patient registry; 12/31/99 and forward
- Develop data collection tool
- Enter data into laptop
- LDL order prior to discharge

HEDIS 2004 data: LDL test 83.03% LDL control 69.97%
Lack of follow-up LDL after AMI, PTCA, or CABG

Follow-up LDL control not < 100

Who is in charge?

Multiple providers

Variable clinical follow-up

Financial

System QI structure

Lack of dedicated staff

Revenue codes

Doesn’t believe LDL needed

No clinical consensus

No performance data

No follow-up protocol

No master member index

No central database

HIPAA concerns

No patient registry

HEDIS LDL value is 130

Medication cost

Medication compliance

Unaware of need for LDL

Information systems

Data

Physician

Coordinator of care

System resources

Patient

Primary care

Cardiology

Cardiac surgery

Physician extender
Improvement Opportunity

• Actively engaging practitioner in improvement
  • Practitioner letter
  • Practitioner alert
  • Copy of member materials
  • Request assistance

• Why focus on practitioners?
  – 2002-2004 – addressed member, data, and information systems “causes”
    • Implemented member registry
    • Implemented member intervention
    • Resolved revenue code issues
Data Specifications

• Identify members with an acute coronary event
  – HEDIS Technical Specifications for Cholesterol Management after an Acute Coronary Event Measure
    • Administrative Medical Claims
      – Member Identification Number
      – Member Name
      – ICD-9 Code (410.x1, 36.01, 36.02, 36.09, 36.1, 36.2) or DRG Code (105, 107, 109, 112, 121, 122, 516)
      – Event date

• Determine if LDL Test received in 60-270 days following event date
  – HEDIS Technical Specifications for Cholesterol Management after an Acute Coronary Event Measure
    • Administrative Medical Claims
      – Member Identification Number
      – Member Name
      – CPT code (80061, 83715, 83716, 83721)
      – Date of Service

• Identify assigned primary care practitioner for members without an LDL screening
  – Imputation Algorithm
    • Quarterly Imputation File
      – Member identification Number
      – PCP Code
      – Primary Care Practitioner Name/Clinic Location
Data Sources

• Administrative Medical Claims
  – Member Number (11 digits)
  – Member Name (Last Name, First Name, Middle Initial)
  – ICD-9 code or 410.x1, 36.01, 36.02, 36.09, 36.1, 36.2)
  – DRG Code(105, 107, 109, 112, 121, 122, 516)
  – Date of Acute Coronary Event (mm/dd/yyyy)
  – CPT Code (80061, 83715, 83716, 83721)
  – Date of LDL Screening (mm/dd/yyyy)

• Quarterly Imputation File (internally generated SAS database)
  – PCP Code
  – Primary Practitioner Code (xxxxx)
  – Primary Care Site Code (xxx)
LDL Test Following an Acute Coronary Event (60-300 Days)

Percent of Members

Event Date

Member Letter

Clinician Letter
Next steps

• Evaluate effectiveness of practitioner intervention

• Collaborate with CPC task force to improve system-wide screening rates

• Implement automated reminders and lab orders through EMR

• Compare performance to local competitors using HEDIS 2005 data