Pharmacy Involvement in Quality Metrics

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Objectives

- Define quality improvement
- Discuss quality measures that apply to pharmacy practice
  - Transitions of care/30-day readmissions
  - Adverse drug events
  - Antimicrobial stewardship programs
- Discuss pharmacy involvement in local, state and national initiatives

Quality Improvement

“The combined and unceasing efforts of everyone – healthcare professionals, patients and their families, researchers, payers, planners and educators – to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development.”

-Drs. Batalden and Davidoff

Centers for Medicare & Medicaid Services (CMS) “Triple Aim”

Better Health for the Population

Better Health Care for Individuals

Lower Costs through Improvement

Breakthrough Series Model for Improvement (IHI)

Donald M. Berwick, MD, MPP
Breakthrough Series Model for Improvement

Three Questions:
1. **Aim?** Determine which specific outcomes to change/improve
2. **Measures?** Identify appropriate measures to track success
3. **Changes?** Identify key changes to actually test

Plan-Do-Study-Act (PDSA) Cycle

- What changes need to be made?
- What’s next? (Decide next cycle)
- Analyze data
- Summarize what was learned
- Plan details of the redesign (who, what, where, when)
- Set goals
- Plan for data collection
- Carry out the plan
- Record data
- Document observations

Institute of Medicine’s Six Aims for Improvement

1. **Safe:** Avoiding injuries to patients from the care that is intended to help them
2. **Effective:** Providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit
3. **Patient-centered:** Providing care that is respectful of and responsive to individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions

Care Transitions

The actions of health care providers designed to ensure the coordination and continuity of health care during a patient’s movement between health care practitioners and settings as their condition and care needs change during the course of a chronic or acute illness.
Background

- In 2009, more than 7 million Medicare beneficiaries experienced more than 12.4 million inpatient hospitalizations.
- Medicare spent an estimated $26 billion in 2009 on hospital readmissions.
- Up to 76 percent of readmissions may be preventable.¹

¹. MedPAC: June 2007

Results of Improved Care Transitions

- Improved health care and patient outcomes.
- Reduced health care costs for the patient, family, health care system, and public and private payers.
- Reduced chaos and stress for the patient and family.
- Improved patient safety.
- Fewer errors or harm associated with health care.

Medicare Readmission Data

Results of Improved Care Transitions

- Within 30 days of discharge, 19.6 percent of Medicare beneficiaries are re-hospitalized.¹
- Patients who understand discharge instructions are 30 percent less likely to be readmitted within 30 days.²


National Readmissions per 1,000 Medicare Beneficiaries
Patient Protection and Affordable Care Act

- Hospital readmissions reduction program
  - Subjects Inpatient Prospective Payment System (IPPS) hospitals with readmission rates over a certain threshold to Medicare reimbursement penalties
  - Currently applies to readmissions related to heart failure, heart attack and pneumonia
    - CMS may expand the list of conditions to include chronic obstructive pulmonary disease (COPD), additional cardiac procedures, vascular conditions, etc., during subsequent years of the program
  - Began October 2012

  [http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientPPS/Readmissions-Reduction-Program.html](http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/InpatientPPS/Readmissions-Reduction-Program.html)

- Publicly reported (starting July 2013)

Hospital-wide All-cause Unplanned Readmission (HWR) Measure

- Estimates a risk-standardized readmission rate (RSRR) based on unplanned readmissions to any acute care hospital for any cause within 30 days of discharge
- Similar to the readmission measures for acute myocardial infarction, heart failure and pneumonia
- Calculated for all non-federal short-stay acute care hospitals and critical access hospitals
- Publicly reported (starting July 2013)

[http://www.qualitynet.org](http://www.qualitynet.org)
Partnership for Patients

• Improve Care Transitions:
  By the end of 2013, preventable complications during a transition from one care setting to another would be decreased so that all hospital readmissions would be reduced by 20 percent, compared with 2010.Achieving this goal would mean more than 1.6 million patients will recover from illness without suffering a preventable complication requiring re-hospitalization within 30 days of discharge.

http://partnershipforpatients.cms.gov/

Medicare 10th Scope of Work (SOW)

• 10th SOW: Integrate care for populations and communities
  • Improve the quality of care for Medicare beneficiaries who transition among care settings through a comprehensive community effort
  • Reduce statewide 30-day readmission rates by 2 percent over three years
  • Reduce recruited community 30-day readmission rates by 7 percent over three years

http://qio.afmc.org/HealthCareProfessionals/CareTransitions.aspx

Medicare 10th SOW
Integrating Care for Populations and Communities

Coalition Definition

A temporary alliance of distinct parties, persons or states for joint action

Coalition Formation

▪ Utilize existing relationships
▪ Build new relationships
▪ Educate community providers

Coalition Benefits

▪ Networking, relationship building
▪ Additional information/resources
▪ Sharing of best practices and barriers
▪ Different vantage points
▪ Widespread change
Root Cause Analysis (RCA)

RCA Definition

A process for identifying the basic or causal factors that underlie variations in outcomes.

RCA

- Analysis should focus on a process that has potential for redesign to reduce risk
- Should be comprehensive, community-based and include other providers
- Results of the RCA should drive the selection of the population of focus and the proposed interventions

RCA Process

- Identify the root cause of readmissions at your home health agency
- Identify patterns of readmissions specific to your community and its providers
- Use RCA results to guide targeting criteria and intervention selection

RCA Methods

- Patient/family interviews
- Care coordinator interviews
- Medical chart reviews
- Process mapping
- Cause-and-effect diagrams
- “5 Whys”

Patient/Family Interviews

- Semi-structured telephone or face-to-face interviews with patients who were readmitted
- Helps to identify opportunities for improvement from the patient’s perspective
**Patient/Family Interviews**

- **Readmission Diagnostic Tool**
  - Patient/Family Interview Worksheet

1. STAAR Initiative; Institute for Healthcare Improvement; 2009

**Medical Chart Reviews**

- **Readmission Diagnostic Tool**
  - Chart Review Worksheet

1. STAAR Initiative; Institute for Healthcare Improvement; 2009

**Selection of Intervention**

- **Using RCA to Drive Intervention Selection**
  - Select evidence-based interventions
    - Results from the community-specific RCA
    - Existing local programs and resources
    - Funding resources
    - Sustainability
    - Community preferences
Intervention Examples

Project RED:
A Re-Engineered Discharge Process
Brian Jack, MD
www.bu.edu/fammed/projectred/

Intervention Examples

Project RED

“The Hospital Discharge: A Review of a High Risk Care Transition with Highlights of a Re-Engineered Discharge Process”

- New patient discharge process
- Educate the patient
- Improve continuity of patient information
- Goals:
  - Reduce post-discharge adverse events
  - Decrease hospital readmissions
  - Lower overall health care costs

Project RED

1. Educate the patient about their diagnoses throughout their hospital stay
2. Make appointments for clinician follow-up and post-discharge testing
3. Discuss with the patient any tests or studies that have been completed
4. Organize post-discharge services

Project RED

5. Confirm the medication plan
6. Reconcile the discharge plan with national guidelines and critical pathways
7. Review the appropriate steps on what to do if a problem arises
8. Expedited transmission of the discharge summary to the physicians accepting responsibility for the patients care after discharge

Project RED

9. Assess the degree of understanding by asking them to explain in their own words the details of the plan
10. Develop/give the patient a written discharge plan
11. Telephone reinforcement of the discharge plan
Care Transitions Intervention
Eric A. Coleman, MD, MPH, AGSF, FACP
Director, Care Transitions Program
www.caretransitions.org

Intervention Examples

- A patient self-activation and management session with a transitions coach, designed to help patients and their family caregivers build skills, confidence and use tools to assert their role in managing transitions
- Transitions coach (caseload 24-28) visits patients in the home and via phone calls designed to reinforce and sustain behavioral change as well as provide continuity across the transition

CTI

- Four pillars: Key areas to support self-care
  - Medication self-management
  - Follow-up with PCP/specialist
  - Knowledge of “red flags” or warning signs/symptoms and how to respond
  - Patient-centered record

CTI

- Hospital visit
- Personal health record
- Home visit after discharge
- Three follow-up phone calls

AR Hospitals Involved

AR Hospitals Involved

Adverse Drug Events
What is an Adverse Drug Event (ADE)?

“Harm or injury caused to the patient resulting from medical intervention related to a drug”¹

What’s the Big Deal?

- More than 133 million Americans live with chronic illnesses⁴
- 91 percent of all prescriptions filled for a chronic condition²
- 1.5 million people are injured each year as a result of medication³

What’s the Big Deal?

- Office of the Chief Pharmacist’s 2011 Report to the U.S. Surgeon General
- “Pharmacy practice models can rapidly relieve some of the projected burden of access to quality care, reduce health disparities, and improve overall health care delivery.”¹

What’s the Big Deal?

- Uncoordinated care costs an estimated $240 billion/year.¹
- Medication errors cost the health care system more than $887 million annually in the Medicare population alone²

What’s the Big Deal?

- Former U.S. Surgeon General Regina Benjamin, MD, MBA, responded on December 14, 2011
- “[The report] provides the evidence health leaders and policy makers need to support evidence-based models of cost effective patient care that utilized the expertise and contributions of our nation’s pharmacists as an essential part of the health care team”
Patient Safety and Clinical Pharmacy Services Collaborative (PSPC)

HRSA PSPC

- Quality improvement initiative with the goal of improving health outcomes and patient safety for high-risk patients
- Improve the delivery system where there are gaps:
  - Enhance care coordination among the providers and partners involved
  - Fosters multidisciplinary, team-based care approach
  - Strengthens patient-centered medical home
  - Integrate medication management and other services to minimize harm related to adverse drug events and maximize optimal health outcomes

HRSA PSPC

- Produce breakthroughs in the following three areas:
  1. Improved patient health outcomes
  2. Improved patient safety
  3. Increase cost-effective clinical pharmacy services

HRSA PSPC

- Committed team
  - Expanded care team
  - Community partnerships
    - Schools of pharmacy
    - Hospitals
    - CMS Quality Improvement Organizations
  - Leadership commitment

HRSA PSPC

- Resource rich
  - Continuous peer-to-peer learning/sharing
  - Tools/resources
  - Powerful change package
- Faculty expertise and national support
  - Team development and support (regionally and nationally)

PSPC Model

Enroll Teams

Prework

PDSA: Plan, Do, Study, Act
LS: Learning Session
AP: Action Period

LS 1 → AP 1 → LS 2 → AP 2 → LS 3
PSPC Model

- Breakthrough model for improvement

PSPC Guide

- Provides teams and faculty information regarding various support services, such as faculty and QIOs, their roles and responsibilities including how to reach out to get assistance
- Provides teams and faculty with key expectations regarding participation in PSPC
- Introduces and provides links to tools and resources found within the PSPC supported web-based knowledge management system at www.healthcarecommunities.org

PSPC Key Points

- Patient-centered
- Interdisciplinary care team
- Cross-organizational with health homes at the center
- Systematically addresses medication management, safety and risk — huge issues for ambulatory care patients
- All teach, all learn

PSPC Teams in Arkansas

Antimicrobial Usage

- Antimicrobial usage, whether appropriately prescribed or not, has led to significant increases in morbidity and mortality in institutional health care settings due to hospital-acquired infections, such as those related to Clostridium difficile and multi-drug resistant pathogens

Antimicrobial Usage

• Current literature suggests that in hospitals, an estimated **50 percent of antibiotic orders are unnecessary** and potentially lead to the death of tens of thousands of Americans each year from infections caused by antibiotic-resistant pathogens2


Antimicrobial Usage

• The World Economic Forum recently cited antibiotic-resistant bacteria as the greatest threat to human health, stating “we live in a bacterial world where we will never be able to stay ahead of the mutation curve…our resilience [depends on] how far behind the curve we allow ourselves to fall.”


Antimicrobial Stewardship Program (ASP)

*The primary goal(s) of antimicrobial stewardship are to optimize clinical outcomes while minimizing unintended consequences of antimicrobial use, including toxicity, the selection of pathogenic organisms (such as Clostridium difficile), and the emergence of resistance, and to reduce health care costs without adversely impacting quality of care.*


ASPs

• **Collaboration** among clinical staff strengthens the ASP process
• ASP brings **organization and leverage**
• Each hospital needs to **prioritize** and negotiate the scope of its ASP
• Spread and sustainability require **organizational support**


ASP Teams

• **Formulary Committee**: Set policy on availability and restriction of antibiotics (Anti-infective subcommittee)
• **Physicians**: Role of the infectious disease (ID) consultant and of ID leadership
• **Pharmacists**: Review antibiotic use followed by selected interventions
• **Infection control practitioners**: Deal with the consequences of antibiotic use


Pharmacist Interventions

• Was the order approved by appropriate physician? If not, why?
• Antibiotic restriction and approval process
• Both physician and pharmacist input
• Can target “high-risk antibiotics” (e.g., fluoroquinolones or cephalosporins)
• Stop or modify existing antibiotic orders

Pharmacist Interventions

- Implement automatic stop orders
- De-escalate by switching to an IV or oral antibiotic with narrower spectrum
- Call the provider
- *Monitor, track and analyze data on antimicrobial usage!!!!!!*

ASP Toolkits for Getting Started

- Greater New York Hospital Association/United Hospital Fund antimicrobial stewardship toolkit
- Agency for Healthcare Research & Quality (AHRQ) toolkit for reduction of Clostridium difficile infections through antimicrobial stewardship

How Can Pharmacists Get Involved?

Next Steps

- Contact your facility’s *quality director* (or similar position) to see what quality improvement initiatives are occurring
- Contact AFMC to see if there is a quality improvement initiative in your area
- **Develop or participate** in an initiative near you

Next Steps

- Utilize evidence-based **interventions** aimed at improving population health, improving the quality of care and lowering health care costs
- Adopt an **all-teach, all-learn** philosophy
- Participate in AFMC’s *Learning and Action Network* sessions
- Participate in AFMC’s annual *Quality Conference*

AFMC’s Learning & Action Network (LAN) Sessions

- **What:**
  - Educational sessions discussing various health care quality improvement topics
  - Opportunities to share best practices, barriers and solutions, etc.
- **When/Where:**
  - Quarterly
    - One face-to-face session per year
    - Three remote sessions (i.e. webinar, teleconference) per year
Adverse Drug Events

Rethink Health: Achieving Better Health, Better Care & Lower Cost

- Tuesday, October 15th
- 11am-Noon
- Webinar
- Speaker:
  - Predrag Stojicic, MD, MPH – Research Associate, Harvard Kennedy School

Care Transitions

AFMC’s 21st Annual Quality Conference

- April 3-4, 2014
- Embassy Suites – Little Rock
- http://www.qualityconference.org/

For More Information

http://qio.afmc.org

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References

References

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