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Hospital & Health Sciences System
Changing medicines. For good.

Opportunities for Pharmacy to Impact Inpatient Quality Measures

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Illinois Council of Health-System Pharmacists 2013 Annual Meeting

Disclosures

- Consulting
 - Cassidy Schade LLP
 - Edwards Wildman LLP
- Speaker
 - Paradigm Medical Communications

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Learning Objectives

<p>Pharmacists</p> <ul style="list-style-type: none"> • Explain the current environment regarding quality measures & their impact on medication therapy management throughout the continuum of care • List key strategies to implement quality measures that impact patient outcomes in the inpatient setting • Review current incentives for pharmacists to assure quality measures are achieved in the inpatient setting 	<p>Technicians</p> <ul style="list-style-type: none"> • Explain the current environment regarding quality measures & their impact on medication therapy management throughout the continuum of care • List key strategies to implement quality measures that impact patient outcomes in the inpatient setting • Describe ways for pharmacy technicians to assist in quality measure initiatives
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CURRENT STATE OF INPATIENT QUALITY MEASURES

A Historical Perspective

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Quality: What is it?

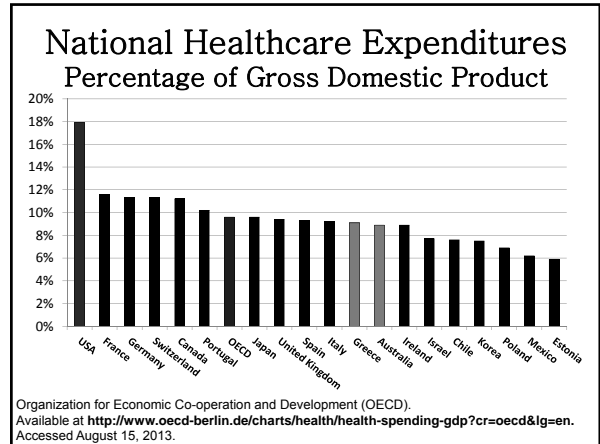
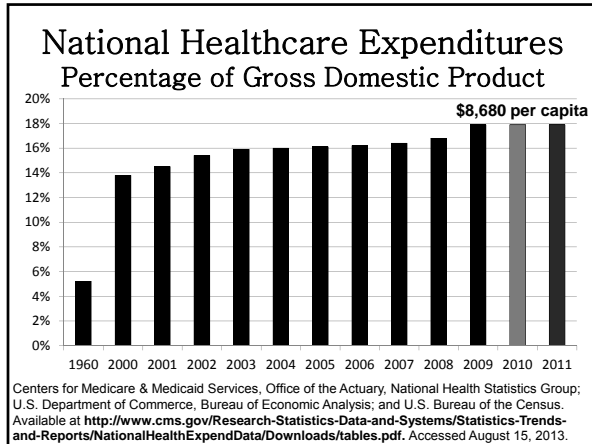
- Quality
 - New World Dictionary
 - Degree of excellence which a thing possesses
 - Excellence; superiority
- Quality of Medical Care
 - Institute of Medicine
 - Degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge

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Why the Focus on Quality?

- Committee on the Quality of Healthcare in America (1998)
 - Observations
 - **Care delivered ≠ Care that should be received**
 - ↑↑↑ in research, research spending, & technological advances
 - > 70 publications demonstrating “serious quality shortcomings” (1990s)
 - Inconsistent, fragmented care, over/under use
 - Lack of access/insurance: 16.7% of population (2010)
 - **Escalating healthcare costs**

Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington: National Academy Press, 2001. www.nap.edu.



Aims for Improving Healthcare Quality

Committee on the Quality of Healthcare in America

Healthcare should be:

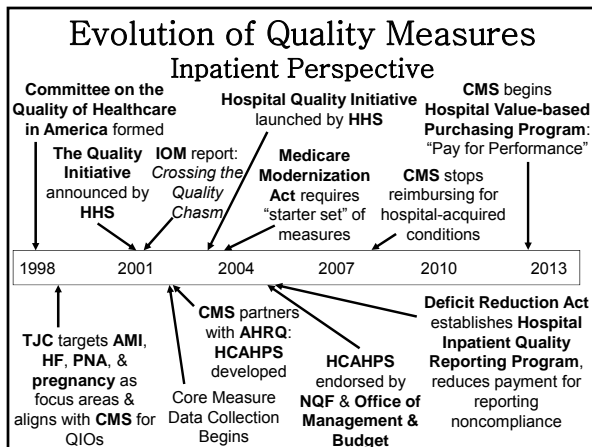
1. Safe
2. Effective
3. Patient-centered
4. Timely
5. Efficient
6. Equitable

Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington: National Academy Press, 2001. www.nap.edu.

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Quality Stakeholders

- **PATIENTS**
- Providers
- Regulatory agencies
 - *The Joint Commission (TJC)*, Dept. of Public Health
- Third party payers
 - *Centers for Medicare & Medicaid Services (CMS)*, Dept. of Public Aid, private insurers
- Healthcare organizations
 - *Agency for Healthcare Research & Quality (AHRQ)*, Institute of Medicine (IOM), American Hospital Association (AHA), National Quality Forum (NQF), Federation of American Hospitals (FAH), Hospital Quality Alliance (HQA)
- Medical/Specialty organizations
 - American College of Cardiology Foundation (ACCF), American Heart Association (AHA), American Medical Association (AMA), American Association of Medical Colleges (AAMC), *American College of Clinical Pharmacy (ACCP)*, *American Society of Health-System Pharmacists (ASHP)*



Quality Measures Defined

- **Performance measures**
 - A quantitative tool that provides an indication of an organization's performance in relation to a specified process or outcome.
- **Process measures**
 - A measure used to assess a goal directed, interrelated series of actions, events, mechanisms, or steps, such as measure of performance that describes what is done to, for, or by patients, as in performance of a procedure.
- **Outcome measures**
 - A measure that indicates the result of performance (or non-performance) of a function(s) or process(es).

TJC/CMS Core Measures (2013)				
Year	Core Measures	Process	Outcome	Total
2002	Acute MI (AMI), Heart Failure (HF), Pneumonia (PNA), Pregnancy & related conditions (PRC)	18	6	24
2004	+ Surgical Infection Prevention (SIP) Changed to Surgical Care Improvement Project (SCIP) in 2006 & measures added	10	0	10
2007	+ Children's Asthma Care (CAC) (+ mortality & readmission for AMI & HF)	3	0	3
2008	+ Hospital-based Inpatient Psychiatric Services (HBIPS) + Healthcare-associated conditions (HAC) (+ mortality & readmission for PNA)	7	23	30
2009	+ Venous thromboembolism (VTE) + Stroke (STK)	13	1	14
2010	Perinatal Care replaced PRC	4	1	5
2011	+ Healthcare-associated Infection (HAI)	0	6	6
2012	+ Substance abuse (SUB) + Tobacco treatment (TOB) + Immunization (IMM)	14	2	16
TOTAL:		69	49	118
2013	+ TAH/TKA readmission & complications	0	10	10

TJC/CMS Core Measures (2013) (Potential) Pharmacy-Related Measures		
Drug (36)	Education (13)	Outcome (25)
- AMI (7)	o AMI (1)	- AMI (2)
- HF (1)	o HF (1)	- HF (2)
- PNA (3)	o CAC (1)	- PNA (2)
- SCIP (7)	o HBIPS (2)	- VTE (1)
- CAC (2)	o VTE (1)	- HAC (9)
- HBIPS (2)	o STK (1)	- HAI (4)
- VTE (4)	o TOB (3)	- TOB (1)
- STK (6)	o SUB (3)	- SUB (1)
- PC (1)		- THA/TKA (3)
- IMM (4)		
- TOB (2)		

Pharmacy has the potential to impact ~60% of existing quality measures & ~1/2 of outcome measures

Quality Measures, Medication Therapy Management, & Continuity of Care Pharmacy Opportunities

<p>Admission</p> <ul style="list-style-type: none"> Use of evidence-based therapies upon admission <ul style="list-style-type: none"> Aspirin in acute MI Fibrinolytics in MI/stroke <ul style="list-style-type: none"> Timeliness Appropriate antibiotic selection VTE prophylaxis Screening (Med History) <ul style="list-style-type: none"> Substance use/abuse Immunization history Contraindications to evidence-based therapies 	<p>Discharge</p> <ul style="list-style-type: none"> Use of evidence-based therapies at discharge <ul style="list-style-type: none"> Documentation of contraindications, if present Immunizations Patient education
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HEALTHCARE QUALITY MEASURES & INPATIENT PHARMACY PRACTICE

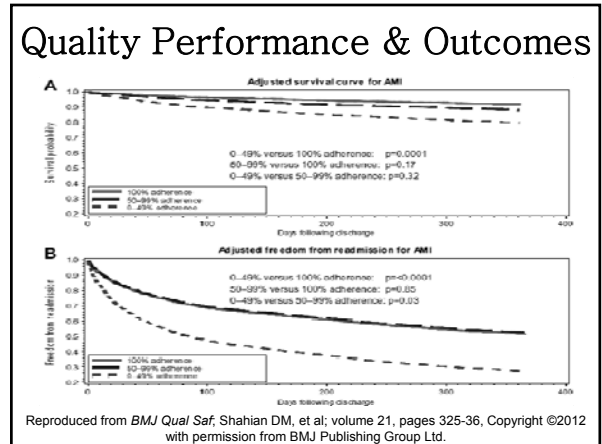
Current Incentives to Get Involved

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Inpatient Pharmacist & Technician Incentives to Participate in Quality Initiatives

- Good patient care

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Quality Performance & Outcomes

Disease/Measure	Mortality/90 days Adj. HR (95% CI)	Readmit/90 days Adj. HR (95% CI)
ACUTE MI		
PCI within 90 minutes	n/a	2.36 (1.14 – 4.85)
Smoking cessation	2.51 (0.71 – 8.93)	2.02 (1.13 – 3.62)
Failure of any measure	2.67 (1.51 – 4.73)	1.47 (1.12 – 1.93)
HEART FAILURE		
ACE/ARB for LVSD	1.98 (1.10 – 3.55)	1.53 (1.09 – 2.16)
Discharge instructions	1.22 (0.84 – 1.78)	1.20 (1.006 – 1.42)
PNEUMONIA		
Blood culture timing	1.86 (1.07 – 3.21)	1.00 (0.73 – 1.37)
Smoking cessation	1.19 (0.53 – 2.68)	1.59 (1.08 – 2.34)

Shahian DM, et al. *BMJ Qual Saf* 2012;21:325-36.

Quality Performance & Outcomes

Superior adherence to Quality Measures vs not	Inpatient mortality Adj. OR (95% CI)
Overall inpatient mortality	
Both	0.79 (0.63 – 0.99)
Acute MI only	0.96 (0.77 – 1.20)
Heart failure only	0.86 (0.68 – 1.08)
Acute MI inpatient mortality	
Both	0.78 (0.60 – 1.00)
Acute MI only	0.83 (0.64 – 1.06)
Heart failure only	0.92 (0.71 – 1.20)
Heart failure inpatient mortality	
Both	0.88 (0.71 – 1.09)
Acute MI only	1.08 (0.91 – 1.29)
Heart failure only	0.99 (0.79 – 1.25)

Wang TY, et al. *J Am Coll Cardiol* 2011;58:637-44.

Process Measures & Outcomes Case for Pharmacy Involvement?

Review of 12 papers evaluating adherence with heart failure quality measures & outcomes

- ACE/ARB for LV dysfunction**
 - 5 papers
 - Mortality and/or readmission lower in 4
- Beta-blocker at discharge**
 - 1 paper
 - Mortality & readmission lower
- Anticoagulation in patients with AFib/Flutter**
 - 2 papers
 - Mortality & readmission lower in 1
- Assessment of LV function**
 - 2 papers
 - No difference
- Discharge Instructions**
 - 5 papers
 - Readmission (+ mortality) lower in 2
- Smoking cessation**
 - 2 papers
 - No difference
- Composite score**
 - 3 papers
 - Mortality ± readmission lower in 2

Maeda JL. *J Cardiac Fail* 2010;16:411-8.

Excelling on Process Measures Has Small Effect on Outcome Measures

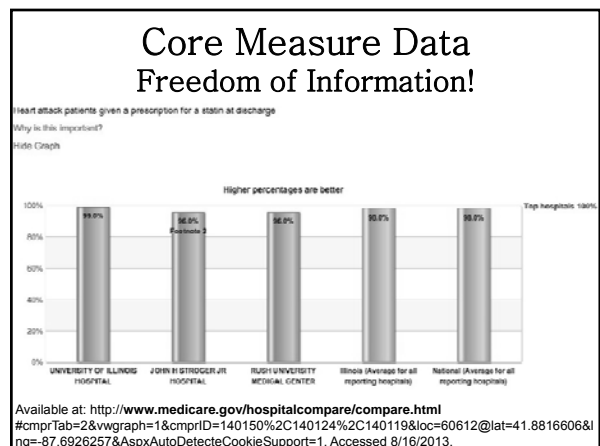
Acute Myocardial Infarction Process Measure	% Variance in 30-day Risk-Adjusted Mortality Explained by Each Measure
Beta-blocker on admission	0.1
Beta-blocker at discharge	2.6
Aspirin on admission	0.3
Aspirin at discharge	3.3
ACE/ARB for LV dysfunction	0.9
Smoking Cessation	0.1
Timely reperfusion therapy	3.3
Composite Score	6.0

Bradley EH, et al. *JAMA* 2006;296:72-8.

Inpatient Pharmacist & Technician Incentives to Participate in Quality Initiatives

- Good patient care
- Good public relations

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Performance Used to Generate Business

- Distinguish from competing institutions
 - Commercial advertising
- Attract new patients
- Generate new contracts
 - Provider groups
 - Third party payers
 - Referrals from other institutions

Inpatient Pharmacist & Technician Incentives to Participate in Quality Initiatives

- Good patient care
- Good public relations
- Tied to reimbursement

Financial Incentives for Quality Money Talks!

- Non-payment for non-performance
 - Deficit Reduction Act (2005)
 - New requirements for Hospital Inpatient Quality Reporting Program (formerly Reporting Hospital Quality Data Annual Payment Update or RHQDAPU)
 - Inpatient Prospective Payment System (IPPS) hospitals expected to submit additional quality measures in FY 2007 & subsequent years
 - » Medicare Annual Payment Update subject to 2% reduction if failure to report
 - 2008: Hospital-acquired conditions no longer reimbursed

Financial Incentives for Quality Value-Based Purchasing (VBP) Program

- Affordable Care Act (2010)
 - Rewards hospitals with incentive payments for high quality care
 - All participating hospitals will have base DRG payments reduced each year
 - FY2013: 1%, FY2014: 1.25%, FY2015 1.5%, FY 2016: 1.75%, FY2017 & beyond: 2%
 - This money funds incentive payments to hospitals performing highly on Clinical Care Process Measures & Patient Experience of Care (HCAHPS)
 - **Effective 10/1/2012**

Does VBP Work? Premier Hospital Quality Incentive Demonstration

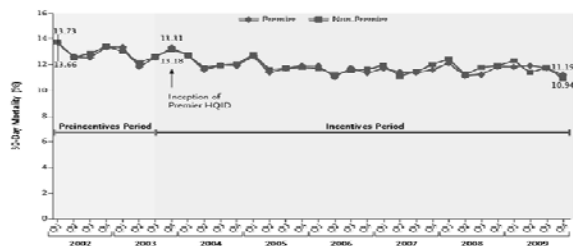


Figure 1. Mortality at 90 Days among All Hospitals, According to Pay-for-Performance Status, 2002–2009. The rates have been adjusted for patient and hospital characteristics and include all study conditions. HQID denotes Hospital Quality Incentives Demonstration.

From *N Engl J Med*. Jha AK, et al. "The long-term effect of Premier pay for performance on patient outcomes." Volume 366, pages 1606-15. Copyright © 2012 Massachusetts Medical Society. Reprinted with permission from Massachusetts Medical Society.

Inpatient Pharmacist & Technician Incentives to Participate in Quality Initiatives

- Good patient care
- Good public relations
- Tied to reimbursement
- Job security!

STRATEGIES TO IMPLEMENT INPATIENT QUALITY MEASURES & IMPACT PATIENT OUTCOMES

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Implementation of Quality Performance Initiatives

Strategies for Pharmacists & Technicians

- Know your institutional plan
 - Who are the champions for quality and pay-for-performance?
 - What are the priority areas?
 - What are the key elements of the institutions plan for quality initiatives?
 - Is pharmacy involved in these discussions?

The AHSP Discussion Guide on The Pharmacist's Role in Quality Improvement. ASHP. Available at: <http://www.ashp.org/DocLibrary/Policy/QII/Discussion-Guide.aspx>
 Pay-For-Performance (P4P): Evaluating Current and Future Implications: Issues for Pharmacy. ASHP. Available at: <http://www.ashp.org/DocLibrary/Policy/QII/Pay-For-Performance.aspx>
 Vermeulen LC, et al. Am J Health-Syst Pharm 2007;64:1699-710. ASHP. Am J Health-Syst Pharm 2010;67:578-9.
 Brennan C, et al. Am J Health-Syst Pharm 2011;68:e50-60. Shane R. Am J Health-Syst Pharm 2011;68:e65-75.

Implementation of Quality Performance Initiatives

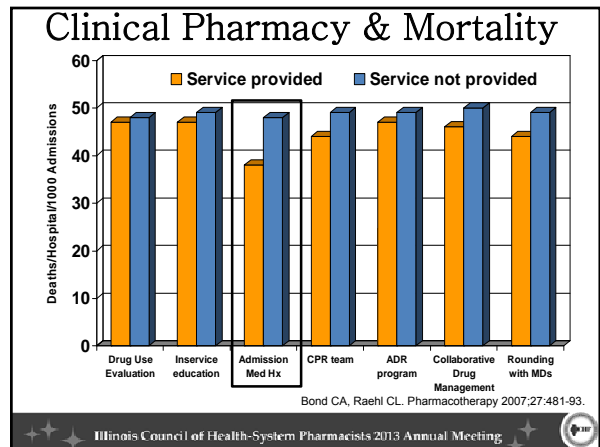
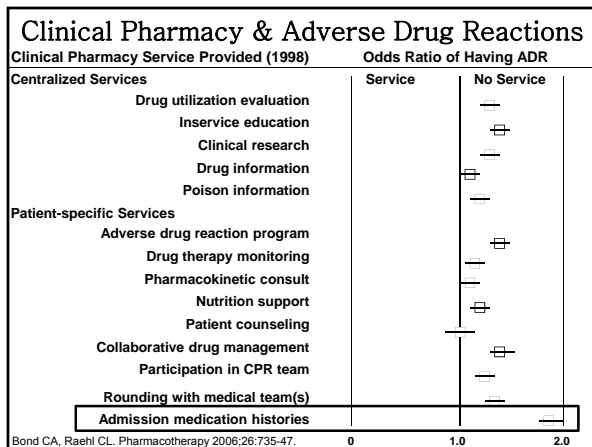
Strategies for Pharmacists & Technicians

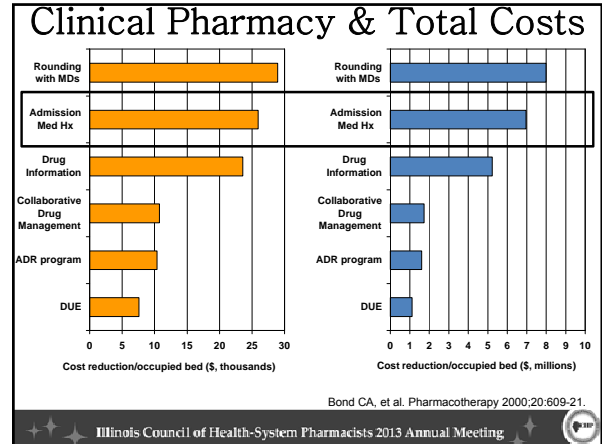
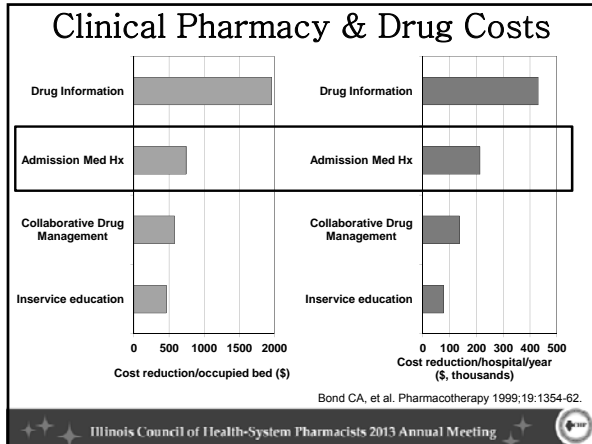
- Know your institutional plan
- Develop a pharmacy strategic plan that delivers value

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Pharmacy Strategic Plan for Quality Initiatives

- Should align with institutional plan
- Select appropriate initiatives & measures
 - *Services pharmacists & technicians perform well*
 - *Services that (may) affect outcomes, not just processes*
 - *Focus on care transitions?*
 - Admission
 - Discharge
- Reassess pharmacy model
 - Patient-centered
 - Outcome-based
 - Efficient
- Accountability





Core Clinical Pharmacy Services The Most Value (“Bang”) for Your Buck!

- Services with at least 2 favorable associations health or economic outcomes
 - Drug information
 - **Admission medication histories**
 - ADR program/management
 - Collaborative drug management
 - Participation on medical rounds

Bond CA, et al. Pharmacotherapy 2004;24:427-40.

Hospital Strategies Associated with HF Readmissions

PHARMACY CALL TO ACTION!

Lower Readmissions	Higher Readmissions
<ul style="list-style-type: none"> • Med rec by RNs • Partnership with MD groups • Partnership with other hospitals • Follow-up appt at discharge • Discharge summary sent to PCP • Hospital staff assigned to follow-up on test results available after discharge • Pacific region of US • 200 – 399 hospital beds 	<ul style="list-style-type: none"> • Electronic linking of outpatient & inpatient Rx records • Written emergency plan on discharge • Alerting of PCP within 48 hours of discharge • Post-discharge phone call • Teaching hospital

Bradley EH, et al. Circ Cardiovasc Qual Outcomes 2013;06:444-50.

Pharmacist & Technician Opportunities for Improving Quality Care Transitions & Medication Reconciliation

Rationale

- Inaccurate medication histories/reconciliation account for many adverse drug events & suboptimal care
- It is one of the most basic pharmacy tasks
- **WE EXCEL AT THIS!**
- **IT IMPROVES OUTCOMES!!**

Potential Strategies

- Reconsider pharmacy models
 - Mobilize “staff” pharmacists to the bedside
 - Utilize technicians
 - ↑ responsibilities within pharmacy to free up RPh
 - Incorporate into medication history taking?
 - Utilize pharmacy students
 - APPE, IPPE

Rx CARES Category	Associated Clinical Goals
Reconciliation	• Inadvertent discontinuation/continuation, duplications of medications/therapeutic class, incorrect drug/regimen
X-drug drug interactions	• Interactions between new meds and old meds; also between old medications
Coordination and communication of care	• Transmit updated medication list and recommendations to next provider, follow-up appt reminders, deactivation of discontinued medications
Access and adherence	• Obtain their medications? Compliance? Medication discrepancies; medication regimen review, ADRs; medication questions and counseling
Risk reduction	• Vaccinations; fall risk medications; anticoagulants; insulin therapy (review regimen, side effects, monitoring); smoking cessation; allergy update
Evidence based review/elimination of medications	• Are all medications indicated? Titrated appropriately? Medications that may further reduce mortality/hospitalization?
Savings	• Brand/generic; cost-saving alternative; preferred formulary medications

Bursua A, et al. Unpublished data.

Multidisciplinary Approach to ADHF Treatment: Role for Pharmacy

Chronic Heart Failure Medications on Discharge	Pre (n=357) %	Post (n=326) %	P value
Diuretic	82.5	84.0	0.09
ACE inhibitor or ARB	77.6	78.8	0.47
Beta blocker	54.9	75.2	<0.001
Digoxin	40.6	39.3	0.81
Aldosterone antagonist	8.1	13.5	0.15

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DiDomenico RJ, et al. Ann Pharmacother 2008;42:327-33. Epub 2008 Feb. 26.

Implementation of Quality Performance Initiatives

Strategies for Pharmacists & Technicians

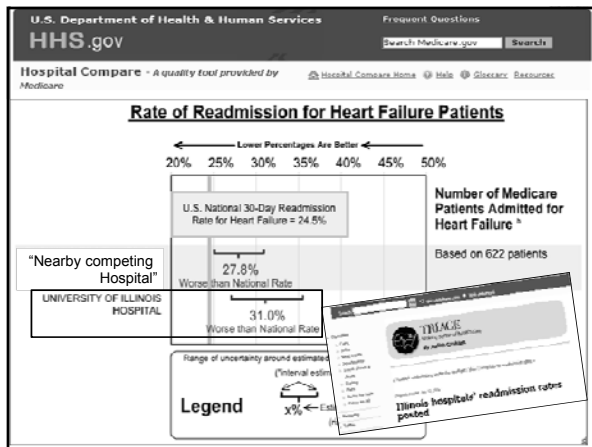
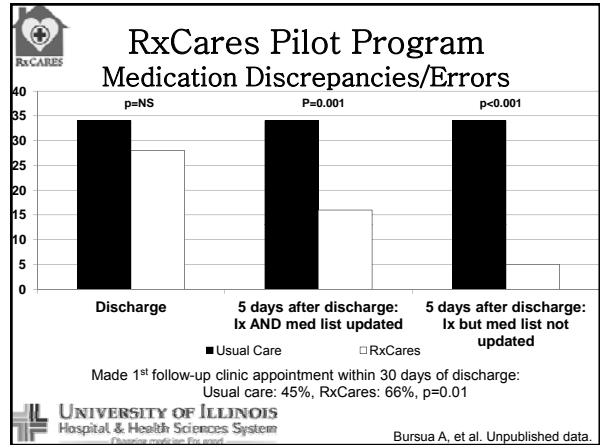
- Know your institutional plan
- Develop a pharmacy strategic plan that delivers value
- Utilize data to drive performance & value

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Vermeulen LC, et al. Am J Health-Syst Pharm 2007;64:1699-710. ASHP. Am J Health-Syst Pharm 2010;67:578-9. Brennan C, et al. Am J Health-Syst Pharm 2011;68:e50-60. Shane R. Am J Health-Syst Pharm 2011;68:e65-75.

Utilize Data to Drive Performance & Value

- Determine the various data sources for quality performance & get access
- Utilize pharmacy databases
- Utilize technology
 - Electronic databases, “real-time” data, decision support
- Identify benchmarks
- Establish “dashboards”
- “Drill down” to patient-level data to investigate factors influencing performance
 - Plan, Do, Study, Act...repeat...

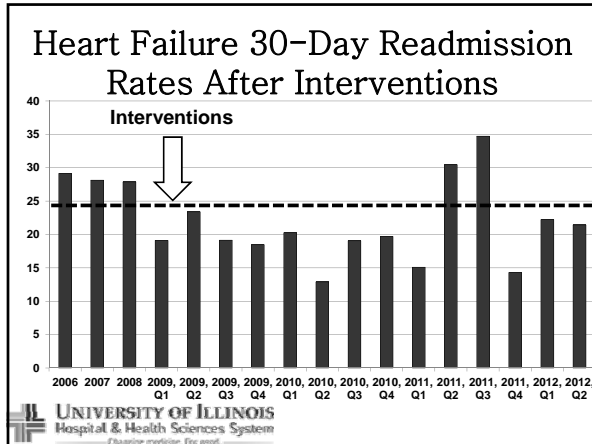
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Heart Failure Readmissions Summary from Chart Review (HF admits 4/08 – 3/09)

- Initial findings (n=68)
 - General
 - Many admissions not for HF
 - ~10% of index admissions
 - ~40% of readmissions
 - Dietary & medication nonadherence a factor in 20 – 30% of cases
 - Discharge
 - Good use of mortality meds
 - Few treated with “goal doses”
 - ~50% chronic Rx unchanged
 - <40% received med list
 - Outpatient follow-up poor
 - Only 11% seen within 10 days
 - 1/3 admitted before clinic visit
 - Mean time to readmit: 14.3 days
- Comparison with HF patients not readmitted
 - N=102
 - 51 readmitted
 - 51 not readmitted
 - Baseline clinical characteristics
 - Readmitted patients sicker
 - More LV dysfunction
 - Higher BNP
 - No difference in adherence!!!
 - Inpatient treatment & discharge
 - No differences

Groo VL, et al. Pharmacotherapy 2010;30:431e [abstract 234].
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Quality, Pharmacy, & Technology

DVT Risk Assessment & Prophylaxis

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DVT Risk Assessment & Prophylaxis Quality, Pharmacy, & Technology

Variable	Control Group (n=18,317)	Intervention Group (n=20,330)	P value
VTE prophylaxis	4,736 (25.9%)	7,479 (36.8%)	<0.0001
Total VTE	94 (0.51%)	87 (0.43%)	0.22
Medicine Pts	47 / 8,515 (0.55%)	33 / 9,981 (0.33%)	0.02
Major bleeding	232 (1.27%)	266 (1.31%)	0.72
Minor bleeding	320 (1.75%)	326 (1.60%)	0.27

UNIVERSITY OF ILLINOIS Hospital & Health Sciences System Galanter WL, et al. Am J Health-Syst Pharm 2010;67:1265-73.

- ### Implementation of Quality Performance Initiatives Strategies for Pharmacists & Technicians
- Know your institutional plan
 - Develop a pharmacy strategic plan that delivers value
 - Utilize data to drive performance & value
 - Collaborate & communicate
- The AHSP Discussion Guide on The Pharmacist's Role in Quality Improvement. ASHP. Available at: <http://www.ashp.org/DocLibrary/Policy/QI/IDiscussion-Guide.aspx>
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- ### Communicate & Collaborate
- Multidisciplinary interventions are essential
 - Take advantage of each discipline's unique skills
 - Make quality an agenda item at departmental meetings
 - Publicize performance
 - Good & bad
 - Reward success
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- ### Implementation of Quality Performance Initiatives Strategies for Pharmacists & Technicians
- Know your institutional plan
 - Develop a pharmacy strategic plan that delivers value
 - Utilize data to drive performance & value
 - Communicate & collaborate
 - Increase awareness of quality initiatives, current performance, & opportunities
- The AHSP Discussion Guide on The Pharmacist's Role in Quality Improvement. ASHP. Available at: <http://www.ashp.org/DocLibrary/Policy/QI/IDiscussion-Guide.aspx>
 Pay-For-Performance (P4P): Evaluating Current and Future Implications: Issues for Pharmacy. ASHP. Available at: <http://www.ashp.org/DocLibrary/Policy/QI/Pay-For-Performance.aspx>
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Conclusions

- Focus on quality of care has escalated in the last decade
 - Early emphasis on process measures
 - Outcome measures a focus recently
- Pharmacy can play a key role in > 50% of existing quality measures
- Incentives for pharmacists to participate in quality measures include:
 - Optimization of care, public relations, FINANCIAL, job security
- Several strategies are necessary to successfully implement quality measures across the continuum of care
 - Performance on process measures may not translate to improvements in outcome measures
 - Target services tailored to pharmacist & technician skill set & outcomes
 - Multidisciplinary approach

http://www.jointcommission.org/specifications_manual_for_national_hospital_inpatient_quality_measures.aspx
http://www.jointcommission.org/core_measure_sets.aspx
http://www.ahrq.gov/professionals/clinicians-providers/resources/nursing/resources/nurseashbk/FarquharM_IS.pdf

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References That May Help

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 - <http://www.ashp.org/menu/PracticePolicy/ResourceCenters/QII/Leam-About-QI.aspx>
 - *The ASHP Discussion Guide on The Pharmacist's Role in Quality Improvement.*
 - <http://www.ashp.org/DocLibrary/Policy/QII/RoleinQI.aspx>
- *Hospital Quality Improvement: Strategies and Lessons from U.S. Hospitals.* The Commonwealth Fund. Publication no. 1009. April, 2007.
 - http://www.commonwealthfund.org/~media/Files/Publications/Fund%20Report/2007/Apr/Hospital%20Quality%20Improvement%20%20Strategies%20and%20Lessons%20From%20U%20S%20%20Hospitals/Silow%20Carroll_hosp_quality_improve_strategies_lessons_1009%20pdf.pdf
- Pharmacy Practice Model Initiative (PPMI) Summit.
 - <http://www.ashpmedia.org/ppmi/ppmi-summit.html>
 - <http://www.ajhp.org/content/68/12.toc>

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APPENDIX

TJC/CMS/AHRQ INPATIENT QUALITY MEASURES

Drug-related and pharmacy opportunities highlighted in Bold/Red

http://www.jointcommission.org/specifications_manual_for_national_hospital_inpatient_quality_measures.aspx
http://www.jointcommission.org/core_measure_sets.aspx
http://www.ahrq.gov/professionals/clinicians-providers/resources/nursing/resources/nurseashbk/FarquharM_IS.pdf

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Inpatient Quality Measures Acute Myocardial Infarction (AMI)

- Clinical Care
 - Arrival
 - Aspirin at arrival
 - Median time to fibrinolysis
 - Door-to-needle time (fibrinolysis) ≤ 30 minutes
 - Median time to PCI
 - Door-to-balloon time (PCI) ≤ 90 minutes
 - Discharge
 - Aspirin at discharge
 - ACE/ARB for LVSD
 - Beta-blocker at discharge
 - Statin at discharge
- Education-related
 - Smoking cessation counseling
- Outcomes
 - Separate measures
 - 30-day mortality
 - 30-day readmission

<http://www.jointcommission.org/assets/1/16/Acute%20Myocardial%20Infarction.pdf>

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Inpatient Quality Measures Heart Failure (HF)

- Clinical Care
 - Arrival
 - n/a
 - During hospitalization
 - Assessment of LV function during hospitalization
 - Discharge
 - ACE/ARB for LVSD
- Education-related
 - Discharge instructions
- Outcomes
 - Separate measures
 - 30-day mortality
 - 30-day readmission

<http://www.jointcommission.org/assets/1/16/Heart%20Failure.pdf>

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Inpatient Quality Measures Pneumonia (PNA)

- Clinical Care
 - Arrival
 - Blood Cx in ED before initial antibiotic
 - Blood Cx 24 hours pre/post arrival for ICU patients
 - Initial antibiotic selection
 - ICU
 - Non-ICU
 - Discharge
 - n/a
- Education-related
 - n/a
- Outcomes
 - Separate measures
 - 30-day mortality
 - 30-day readmission

<http://www.jointcommission.org/assets/1/16/Pneumonia.pdf>

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Inpatient Quality Measures Perinatal Care (PC)

- Clinical Care
 - Arrival
 - Elective delivery
 - Cesarean delivery
 - Antenatal steroids
 - During hospitalization
 - Exclusive breast-feeding
- Education-related
 - n/a
- Outcomes
 - Healthcare-associated bloodstream infection in newborn

http://www.jointcommission.org/assets/1/6/Perinatal%20Care.pdf

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Inpatient Quality Measures Surgical Care Improvement Project (SCIP)

- Clinical Care
 - Perioperative drug-related
 - Prophylactic antibiotic use: overall & for select procedures
 - Given within 1 hour of surgery
 - Appropriate drug selection
 - d/c'd within 24 hours of surgery
 - 6AM glycemic control in cardiac surgery patients
 - Continuation of beta-blocker perioperatively
 - Appropriate VTE prophylaxis
 - Appropriate VTE prophylaxis 24 hours pre/post-surgery
 - Non-drug-related
 - Surgery site hair removal
 - d/c of urinary catheter POD 1 or 2
 - Perioperative temperature monitoring
- Education-related
 - n/a
- Outcomes
 - n/a

http://www.jointcommission.org/assets/1/6/Surgical%20Care%20Improvement%20Project.pdf

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Inpatient Quality Measures Children's Asthma Care (CAC)

- Clinical Care
 - During hospitalization
 - Relievers used (e.g., beta-agonists)
 - Corticosteroid use
 - Discharge
 - n/a
- Education-related
 - Home management plan of care (HMPC) given to patient or caregiver
- Outcomes
 - n/a

http://www.jointcommission.org/assets/1/6/Childrens%20Asthma%20Care.pdf

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Inpatient Quality Measures Mortality & Readmission

<p>Mortality</p> <ul style="list-style-type: none"> • Disease states of interest <ul style="list-style-type: none"> – AMI – HF – PNA 	<p>30-day Readmission</p> <ul style="list-style-type: none"> • Hospital-wide all-cause unplanned • Disease states of interest <ul style="list-style-type: none"> – AMI – HF – PNA – THA/TKA
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http://www.jointcommission.org/specifications_manual_for_national_hospital_inpatient_quality_measures.aspx

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Inpatient Quality Measures Hospital-Based Inpatient Psychiatric Services (HBIPS)

- Clinical Care
 - Arrival
 - Screening for violence risk, substance abuse, psychiatric trauma Hx, & patient strengths
 - During hospitalization
 - Hours of physical restraint
 - Hours of seclusion
 - Discharge
 - d/c on multiple psych meds
 - d/c on multiple psych meds-justified
- Education-related
 - Post-discharge continuing care plan developed
 - Post-discharge care plan transmitted to next level of care
- Outcomes
 - n/a

http://www.jointcommission.org/assets/1/6/HBIPS.pdf

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Inpatient Quality Measures Venous Thromboembolism (VTE)

- Clinical Care
 - During hospitalization
 - VTE prophylaxis
 - VTE prophylaxis in ICU patients
 - VTE patients with anticoagulant overlap
 - VTE patients on heparin per protocol
- Education-related
 - VTE warfarin therapy discharge instructions
- Outcomes
 - Hospital-acquired potentially preventable VTE

http://www.jointcommission.org/assets/1/6/VTE_List.pdf

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Inpatient Quality Measures Stroke(STK)

- Clinical Care
 - Arrival
 - Fibrinolysis
 - Anticoagulant therapy by Day 2
 - Discharge
 - VTE prophylaxis received
 - Antithrombotic therapy at discharge
 - Anticoagulation for atrial fibrillation/flutter
 - Statin at discharge
 - Assessed for rehab
- Education-related
 - Stroke education
- Outcomes
 - n/a

<http://www.jointcommission.org/assets/1/6/Stroke.pdf>

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Inpatient Quality Measures Substance Use (SUB)

- Clinical Care
 - During hospitalization
 - Alcohol use screening
 - Alcohol use brief intervention offered
 - Alcohol use brief intervention
 - Discharge
 - Alcohol or other substance abuse treatment offered at d/c
 - Alcohol or other substance abuse treatment at d/c
- Education-related
 - n/a
- Outcomes
 - Assessing substance use within 30 days

http://www.jointcommission.org/assets/1/6/Substance_Use_Measures_List.doc.pdf

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Inpatient Quality Measures Tobacco Treatment (TOB)

- Clinical Care
 - During hospitalization
 - Tobacco use screening
 - Tobacco use treatment offered
 - Tobacco use treatment
 - Discharge
 - Tobacco use treatment offered at d/c
 - Tobacco use treatment at d/c
- Education-related
 - n/a
- Outcomes
 - Assessing tobacco use within 30 days

http://www.jointcommission.org/assets/1/6/Tobacco_Treatment_Measures_List.doc.pdf

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Inpatient Quality Measures Immunization (IMM)

- Clinical Care
 - Admission
 - n/a
 - Discharge
 - Pneumococcal immunization
 - Overall & select populations
 - Influenza immunization

http://www.jointcommission.org/core_measure_sets.aspx

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Inpatient Quality Measures Hospital-Acquired Conditions (HAC)

<p>TJC/CMS HACs</p> <ul style="list-style-type: none"> • Foreign body retained after surgery • Air embolism • Blood incompatibility • Stage III or IV pressure ulcer • Falls & trauma • Vascular catheter-associated infection • Catheter-associated UTI • Manifestations of poor glycemic control • Surgical site infections for specific procedures • VTE following THA/TKA • Iatrogenic pneumothorax after venous catheter insertion <p>http://www.cms.gov/Medicare/Fee-for-Service-Payment/HospitalAcqCond/Downloads/FY_2013_Final_HACsCodeList.pdf</p>	<p>AHRQ Quality Indicators</p> <ul style="list-style-type: none"> • Post-op <ul style="list-style-type: none"> – Respiratory failure – VTE – Wound dehiscence – Sepsis – Hip fracture <ul style="list-style-type: none"> – Hemorrhage/hematoma – Physiologic/metabolic derangements – Death (serious, treatable complications) • Decubitus ulcer • Selected infections from med care • Iatrogenic pneumothorax (adult) • Foreign body left in during procedure • Accidental puncture or laceration • Birth/obstetric trauma • Anesthesia complications • Death in low-mortality DRGs • Transfusion reaction <p>http://www.ahrq.gov/professionals/clinicians-providers/resources/nursing/resources/nursesdbk/Parq_uharM_IS.pdf</p>
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Inpatient Quality Measures Hospital-Associated Infection (HAI)

- Central-line-associated bloodstream infection
- Catheter-associated UTI
- Surgical site infection (SSI)
- Methicillin-resistant Staph aureus (MRSA)
- Clostridium difficile (CDiff)
- Healthcare personnel influenza vaccination

http://www.jointcommission.org/specifications_manual_for_national_hospital_inpatient_quality_measures.aspx
<http://www.qualitymet.org/dcs/ContentServer?pagename=QnetPublic%2FPage%2FQnetTier2&cid=122876048702>

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Inpatient Quality Measures
Complication Rate for Elective Total Hip/Knee
Arthroplasty (COMP-THA/TKA)

- During hospitalization or within 7 days
 - AMI, PNA, sepsis/septicemia/shock
- During hospitalization or within 30 days
 - *Surgical site bleeding, PE, death*
- During hospitalization or within 90 days
 - Mechanical complications, *periprosthetic joint/wound infection*

http://www.jointcommission.org/specifications_manual_for_national_hospital_inpatient_quality_measures.aspx

Opportunities for Pharmacy to Impact Inpatient Quality Measures
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Post Test Questions:

1. The Medicare Value-Based Purchasing Program, which provides incentive payments to hospitals meeting or exceeding quality benchmarks, is funded through which of the following mechanisms?
 - a. 2% reduction in the Medicare Annual Payment Update for hospitals failing to report quality measures
 - b. Reduced base DRG payments for all participating hospitals
 - c. Savings realized by not reimbursing for conditions acquired during the index hospitalization
 - d. Savings realized from lower readmission rates
2. What type of quality measures make up the majority of hospital quality measures mandated by the Centers for Medicare and Medicaid Services (CMS) for hospitals?
 - a. Composite of outcomes and financial measures.
 - b. Financial measures
 - c. Outcome measures
 - d. Process measures
3. Which of the following best describes why pharmacists can play a major role in improving performance with hospital quality measures?
 - a. Clinical pharmacists working on multidisciplinary medical teams improve quality by lowering adverse drug reactions.
 - b. Clinical pharmacy services are known to improve the outcome measures mandated by CMS (e.g., 30-day mortality and readmission).
 - c. More than 50% of existing measures focus on specific drugs or patient education that can be performed by pharmacists.
 - d. Pharmacists effectively maintain hospital formularies, resulting in both improved quality and lower drug costs.
4. When determining the pharmacy strategic plan for quality improvement, which of the following outcomes would be a preferred target for the initiatives selected?
 - a. Drug costs
 - b. Drug interactions
 - c. Medication errors
 - d. Readmission
5. Which of the following strategies may allow for pharmacy to take a more active role in care transitions and medication reconciliation?
 - a. Centralize pharmacy operations
 - b. Delegate some of the medication history taking responsibilities to pharmacy technicians and student pharmacists
 - c. Develop collaborative practice agreements with the medical staff that allow credentialed pharmacists to place orders.
 - d. Require clinical pharmacists to perform this task on all hospitalized patients