

ASHP 2015 Initiative - The Good, The Bad, and The Ugly in Illinois

Medication Reconciliation

Helga Brake, PharmD, CPHQ
Patient Safety Leader
Northwestern Memorial Hospital

Speaker has no conflicts of interest to disclose

Medication Reconciliation Is...

A formal process of identifying
the most complete and accurate list of medications
a patient is taking and using that list
to provide correct medications for the patient
anywhere within the health care system

Goal: Reduce medication errors & associated patient harm

Sounds easy, doesn't it?

A Goal *and* An Initiative

 The Joint Commission National Patient Safety Goals

#8: Accurately and completely reconcile medications
across the continuum of care. www.jointcommission.org

2015

ASHP Health-System Pharmacy Initiative

#1.6: In 90% of hospitals, pharmacists will ensure that
effective medication reconciliation occurs during
transitions across the continuum of care. www.ashp.org

The Right Thing To Do



transfer patient received a **duplicate dose of insulin** because the receiving nurse didn't know the medication had been given before transfer



patient became **lightheaded and fell in the bathroom** after a physician prescribed metoprolol extended-release at a **dose larger than she took at home**



physician prescribed Flolan™ at the correct flow rate, but did not specify the concentration. **Hospital used the 0.5 mg/100 mL concentration; patient had been using the 0.3 mg/100 mL concentration at home**

Cases submitted to the Institute for Safe Medication Practices Medication Errors Reporting Program, ISMP. Building a case for medication reconciliation. Available at: <http://www.ismp.org/Newsletters/acute/acute/articles/20050421.asp>. Accessed August 7, 2009.

Today's Discussion

Given the challenges of conducting med rec, what can pharmacists do to ensure it effectively occurs during transitions across the continuum of care?



09-046 – Helga Brake

Post-test question:

Can pharmacists ensure effective medication reconciliation occurs during transitions across the continuum of care?

Yes or No



BMV Go-Live...

Now, the Fun Begins

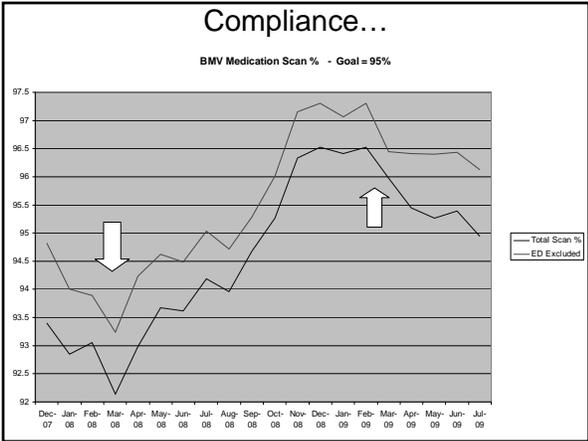
E. Thomas Carey, Pharm D
SwedishAmerican Hospital
Rockford, IL

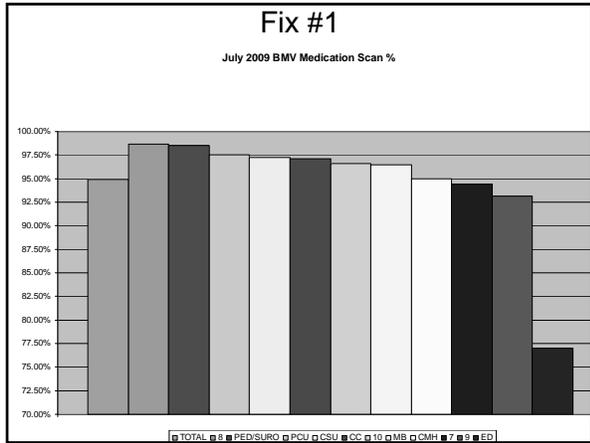
The speaker has no conflict to disclose.

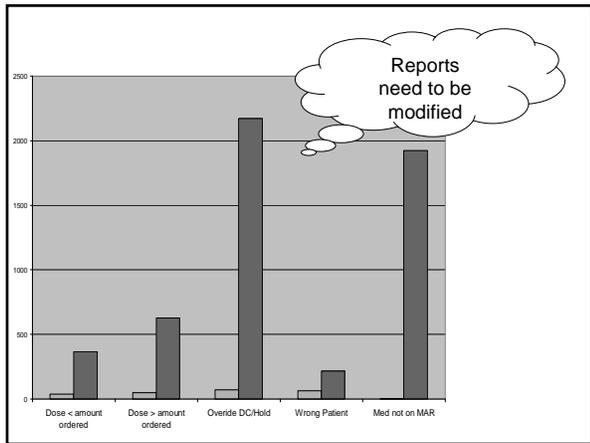


SwedishAmerican Hospital

- 347-bed community teaching hospital
- Milestones:
 - 2004: EHR and CPOE in outpatient clinics
 - 2006: eMAR and CPOE in ED
 - 2007: BMV
 - 2009: eMAR, EHR, Admin Billing







Financial Impact

Drug	Bags Dispensed	Bags Charges
Amiodarone	17	14
Argatroban	15	13
Bumetanide	19	17
Dexmedetomidine	28	24
Diltiazem	91	75
Dobutamine	3	2
Dopamine	48	34
Fentanyl	25	16
Furosemide	17	13
Heparin	22	17
Insulin	47	42
Midazolam	18	10
Nitroprusside	14	13
Nitroglycerin	1	0
Norepinephrine	88	63
Phenylephrine	16	14
Potassium	59	46
Propofol	241	177
Sodium Bicarbonate	35	30
Vasopressin	16	10
Total amounts	820	630

\$35,413

Take Home Pearls

- Identify areas of vulnerability
 - First: Clinical
 - Second: Financial
- Modify reporting process
- Provide continual, specific follow up

Thomas Carey
09-046

1. Very little follow up is required after implementation of bed-side scanning?

- _____ True
- _____ False

2. Continual and frequent status updates will help assure a successful implementation?

- _____ True
- _____ False



Surgical Care Improvement Project

The pharmacist's role in improving compliance with SCIP-Infection Core Measures

Sonali Muzumdar, Pharm.D.
Charlene Hope, Pharm.D., BCPS

The speakers have no conflict of interest to disclose.



What is SCIP?

- Stands for Surgical Care Improvement Project or SIP (Surgical Infection Prevention)
- Partnership of organizations interested in improving surgical care by significantly reducing surgical complications
- The Joint Commission worked with the Centers for Medicare & Medicaid Services (CMS) to develop core measures sets common to both organizations.
- SCIP is used to grade a hospital's surgical performance & it is publicly reported.
- In the near future, SCIP compliance will affect the hospital's reimbursement.



Mercy Hospital & Medical Center

- 479 licensed bed community teaching hospital in Chicago, IL
- Implemented several electronic healthcare information solutions in September 2008 including EMAR, CPOE, and bedside scanning
- Implemented electronic anesthesia documentation system in April 2009.

SIP Core Measures

There are three main measures; each have sub-sections.

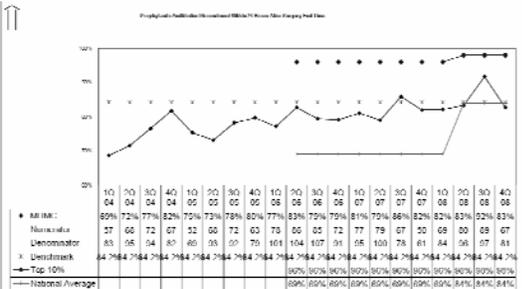
- SIP – INF (infection)
- SIP – Card (cardiology)
- SIP – VTE (venous thrombolism)

• www.qualitynet.org

SCIP-Inf- 3

- Focused on this goal for improvement because order sets were consistently utilized
- Prophylactic antibiotics are discontinued within 24 hours after surgery end time (48hrs for cardiac).
- Note: The 24 hour time period ends exactly 24 hours after documented surgery end time.

Mercy's SCIP-INF3 Compliance



Process Improvement Plan

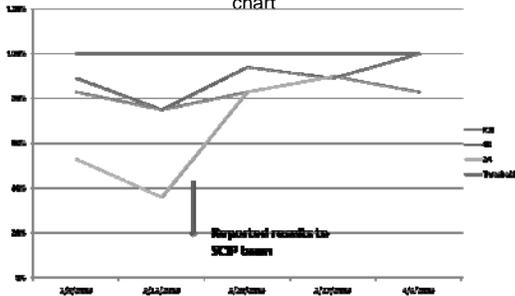
- Implementation of electronic anesthesia documentation system
- Evaluated computerized post-op order set
 - Change frequency from standard administration time to interval time
 - Allows pharmacist to indicate start time of 1st post-op antibiotic
- Educated pharmacists on SCIP and order verification process
- Provide continuous feedback to pharmacists

Process Measures

- Type of quality of care measure that can be used as an healthcare improvement strategy.
- They are direct measures of the quality of health care.
- Not to be confused with outcome measures.
- Process measures are actionable.
- They reflect the care that clinicians are delivering and feel accountable for them.
- Data collection is a part of routine care.

VTE Prophylaxis Order Form

% compliance of completed order form on the medical chart



Conclusion

- Process measures should be relevant, practical, and easy to interpret.
- Back to Mercy Hospital SCIP initiative...
 1. Establish a threshold value – 100% of orders discontinued within 24 hours after surgery time.
 2. Establish a time frame for data collection (daily, weekly).
 3. Provide continuous feedback to pharmacists in a timely manner (weekly, biweekly).
 4. Consider additional source of data by utilizing clinical intervention data.

ASHP 2015 – Roundtable Questions

121-000-09-046-L04-P

Charlene Hope / Sonali Mazumdar

1. What opportunities exist for patient and family involvement to assist with SCIP Core Measure Set?
2. What types of outcomes measures can we track for the SCIP Core Measure Set?
3. How are pharmacy departments educating and involving their pharmacy staff about the SCIP Core Measure Set?

ASHP 2015

SCIP/Core Measures Round Table

Hope / Mazumdar

Post-test Questions

1. Which of the following can be used to assist pharmacists in appropriately timing antibiotics after surgery?
 - a. Pharmacist availability to access and view anesthesia real-time documentation.
 - b. Create a “canned” frequency specifically for post-op antibiotics.
 - c. Create a nursing workgroup to establish start and stop times.
 - d. Educate pharmacists on the appropriate start and stop times per SCIP guidelines.

2. Which of the following measures are considered process measures?
 - a. Percent reduction in Surgical Site Infections
 - b. Number of patient with completed VTE prophylaxis order forms on the chart.
 - c. Surgery patients who received appropriate VTE Prophylaxis within 24 hours prior to surgery to 24 hours after surgery-end time.
 - d. Surgery patients with recommended VTE Prophylaxis ordered.



ASHP 2015 Initiative – The Good, The Bad, and The Ugly in Illinois

Todd Karpinski, PharmD, MS
Director of Pharmacy
Froedtert Hospital



Disclosures

- The speaker has no conflict of interest to disclose.



Refresher – What is the ASHP 2015 Initiative?

- Initiative to significantly improve the practice of pharmacy across health systems
 - “Call to action” for the ASHP Vision for Pharmacy Practice
- Developed in 2002, launched in 2003
- Six initial goals with 31 objectives
 - Changes in 2008 – revised 5, deleted 5 and added 5 new objectives



ASHP 2015 Initiative Goals

- Goal 1: Increase the extent to which pharmacists help individual hospital inpatients achieve the best use of medications.
- Goal 2: Increase the extent to which h/s pharmacists help individual non-hospitalized patients achieve the best use of medications.
- Goal 3: Increase the extent to which h/s pharmacists actively apply evidence-based methods to the improvement of medication therapy.



ASHP 2015 Initiative Goals

- Goal 4: Increase the extent to which pharmacy departments in h/s have a significant role in improving the safety of medication use.
- Goal 5: Increase the extent to which h/s apply technology effectively to improve the safety of medication use.
- Goal 6: Increase the extent to which pharmacy departments in h/s engage in public health initiatives on behalf of their communities.



How are we doing *nationally*?

- Significant improvement on:
 - Objectives involving implementation of technology
 - Objectives overlapping with Joint Commission Standards
- Modest improvement on:
 - Objectives focusing on evidence based medication use
 - Objectives related to disease specific quality indicators
 - Objectives focused on public health



How are we doing in Illinois?

- Initial survey conducted in 2005 to gather baseline compliance rates
 - 133 survey respondents
- Successful implementation of initiatives ranged from:
 - 4.8% (recall speaking with a pharmacist) to
 - 94.4% (h/s has a program with pharmacy involvement to improve the safety of med use)



How are we doing in Illinois?

- Follow-up survey conducted in May 2008
 - 91 respondents (6.4%)
- Results compared to 2005 survey data and data from a recent ASHP survey
- Demographics changed
 - 2005 – smaller, rural, non-teaching facilities
 - 2008 – 300+ bed, urban, teaching facilities



The Very Good

- Pharmacists involved in evidenced based therapeutic protocols (91%)
- Pharmacy has integrated emergency preparedness program (89%)
- Pharmacists involved in ensuring patient receive evidence based medication therapy (82%)



The Good

- Objectives with >10% increase in compliance:
 - >20% increase in goals regarding use of ACE-I, ARB's, b-blockers, aspirin and lipid lowering therapies*
 - 19% increase in compliance with influenza and pneumococcal vaccination rates
 - Use of machine readable barcodes on dispensing (15%), administration (23%)
 - Pharmacist reviewing medication relevant portions of record to manage medication therapy (10%)**

*individual objectives eliminated – replaced by overarching objective for core measures

**objective modified – manage complex / high risk medications



The Bad

- 15% decrease in requiring PTCB certification
- 10% decrease in having a pharmacist involved in documenting safety efforts
- 3% decrease in pharmacist reviewing 90% of routine medications



The Ugly

- Objectives with continued poor compliance (2008):
 - Medication histories (18%)
 - Discharge counseling (26%)
 - Patients recall speaking with a pharmacist (11.5%)
 - Utilizing barcodes for dispensing (20%)
 - Utilizing barcodes on administration (30%)
 - Initiatives that target public health (25%)



What is ICHIP doing to help these efforts?

- Educational sessions
- ASHP 2015 champion
- Articles in KeePosted
- Future efforts



Presenters today

- Sandy Salverson and Karin Terry: Medication Safety
- Lori Wilken: Smoking Cessation
- Helga Brake: Medication Reconciliation
- Tom Carey: Barcoding
- Charlene Hope and Sonali Muzumdar: Core Measures

Demonstrate Improvement through an Organizational Medication Safety Program

ASHP 2015 Initiative – The Good, The Bad, and the Ugly in Illinois

Sandra Salverson, PharmD, BCPS
Karin Terry, PharmD
OSF Saint Francis Medical Center Peoria, IL

We declare no conflict or potential conflict of interest in relation to this presentation

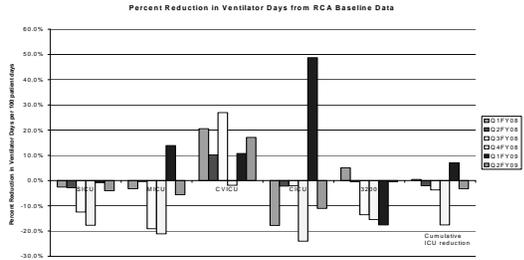
Objective

- List three ways pharmacy can participate in and measure improvement of an organizational medication safety program.

SFMC Medication Safety Program Goals

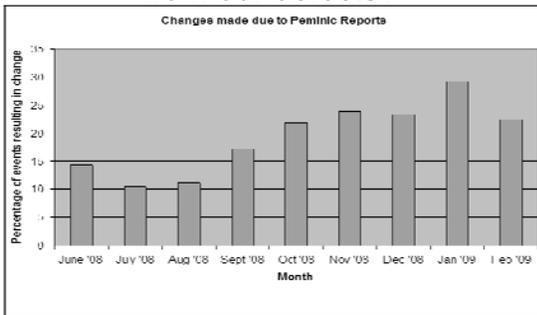
- Identification and collaborative implementation of medication safety best practices, both within the pharmacy and throughout the organization
- Respond to internal medication error reports and adverse drug events in a timely manner and identify potential system-based improvements.
- Communicate identified opportunities for improvement to key stakeholders within the organization.
- Promote and build a “Just Culture

Improving Sedation with Mechanical Ventilation



- **Outcomes:**
 - How do we know we learned from our defects?
 - 4/5 ICU units achieved greater than 98% accountability of controlled substance infusions.
 - Have we reduced the risk of harm?
 - At least a 15% reduction in quarterly ventilator days in 4/5 ICU units.

How do we know we have learned from our defects?



How well have we created a culture of safety?

Hospital Survey on Patient Safety Culture	% positive Response	Benchmark: % positive response	Delta
We are actively doing things to improve patient safety.	100	87	13
Mistakes have led to positive changes here.	94	73	21
We are given feedback about changes put into place based on event reports.	76	53	23
In this unit, we discuss ways to prevent errors from happening again.	94	75	19
Staff feel like their mistakes are held against them.	76	63	13
When an event is reported, it feels like the person is being written up, not the problem.	76	57	19
The actions of hospital management show that patient safety is a top priority.	88	71	17

AHRQ Hospital Survey on Patient Safety Culture Pharmacist Results

Suggested References for Measuring Safety

- Pronovost PJ, Holzmueller CG, Needham DM, et al. How will we know patients are safer? An organization-wide approach to measuring and improving safety. *Crit Care med* 2006;34:1988-1995.
- Resar RK, Rozich JD, Classen DC. Methodology and rationale for the measurement of harm with trigger tools. *Qual Saf Health Care* 2003;12:39-45.
- Rozich JC, Haraden CR, Resar RK. Adverse drug event trigger tool: a practical methodology for measuring medication related harm. *Qual Saf Health Care* 2003;12:194-200
- Ohio Health. Reducing ADEs in your institution: strategies and practical tools for the real world. ASHP Best Practice Award Dec 2004.
- Hartis CE, Gum MO, Lederer JW. Use of specific indicators to detect warfarin-related adverse events. *AJHP* 2005;62:1683-8.
- Lederer J, Best D. Reduction in anticoagulation-related adverse drug events using a trigger-based methodology. *JC Qual Pat Safety* 2005;31(6):314-318.
- Nilsen EV, Fotis MA. Developing a model to determine the effects of adverse drug events in hospital inpatients. *AJHP* 2007;64:521-5.

ASHP 2015 - Medication Safety - Roundtable Discussion Questions
121-000-09-046-L04-P
Sandra Salverson / Karin Terry

1. How do you improve ADE identification and reporting?
2. How can pharmacy leaders promote a Just Culture?
3. What are different ways to promote transparency with medication errors?

Medication Safety

Post-test Question

Salverson / Terry

121-000-09-046-L04-P

Which of the following measurements is NOT an indicator of significant improvement of medication safety?

- a. decreased reporting of medication errors
- b. increase in the number of changes resulting from reported medication errors
- c. increase in the number of near misses reported in all aspects of the medication use process
- d. decreased cases of respiratory depression/naloxone use associated with patient controlled analgesia after implementation of a new protocol.



Smoking Cessation

ASHP 2015 Initiative- The Good, The Bad, and The Ugly in Illinois
Lori Wilken, PharmD, C-TTS

The speaker has no conflict to disclose.



Objective

- Discuss the implementation process of an inpatient smoking cessation consult service



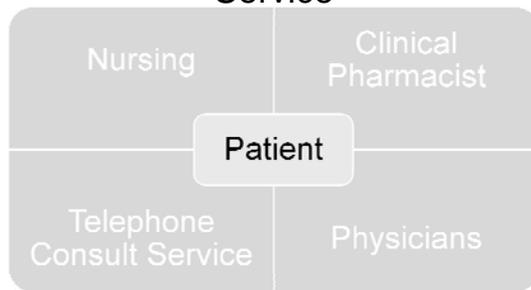
ASHP 2015

- **Increase the extent to which pharmacy departments in health systems engage in public health initiative**
 - 80% of hospital pharmacies will participate in ensuring that hospitalized patients who smoke receive smoking-cessation counseling.

5 A's

- Ask
- Advise
- Assess
- Assist
- Arrange follow-up

Smoking Cessation Consult Service



ASHP 2015 Smoking Cessation

Round table questions

1. What medications does your facility have on formulary to assist patients with stopping smoking?
2. What areas of patient care do your pharmacists currently work that is related to tobacco dependence (i.e. CCU, oncology, medicine (HTN, pneumonia, asthma, COPD, antithrombosis etc.)) or is preventative (Ob/gyne, psychiatry, pediatrics, surgery)?
3. What type of healthcare providers are currently providing tobacco dependence education and medication recommendations at your institution?

ASHP 2015 Smoking Cessation

Post- test question

True or False

The 5 As for helping a patient with tobacco dependence include Ask, Advise, Assess, Assist and Arrange follow-up.