"Medication Reconciliation: A Team Approach" Conference Summary

March 6, 2009 Chicago, IL

Society of Hospital Medicine 1500 Spring Garden Suite 501 Philadelphia, PA 19130 www.hospitalmedicine.org

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About the Society of Hospital Medicine

SHM is the premier medical society representing hospitalists. Over the past decade, studies have shown that hospitalists decrease patient lengths of stay, reduce hospital costs and readmission rates, all while increasing patient satisfaction. Hospital medicine is the fastest-growing specialty in modern healthcare, with more than 28,000 practicing hospitalists currently practicing in hospitals around the world.

For more information about SHM, visit www.hospitalmedicine.org.

Acknowledgement of Agency Support

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Meeting Summary

Overview

On March 6, 2009, the Society of Hospital Medicine (SHM) convened a one-day conference at Northwestern University in Chicago, Illinois, to address medication reconciliation as a critical factor in patient safety in the hospital and at the time of discharge.

Attendance to the conference was by and invitation only included 36 stakeholders representing 17 different professional, quality, consumer, and regulatory organizations. The conference agenda began with a plenary session overview of medication reconciliation, followed by case studies highlighting medication reconciliation processes in various types of medical settings. Attendees then iteratively participated in four breakout sessions that focused on domains within medication critical reconciliation. After each attendee had rotated through each session, the conference continued with reports from the breakout session leaders and a facilitated discussion about their findings ensued.

The conference closed by receiving written commitments from attendees for further steps their organizations would endeavor to pursue.

In April and May, 2009, attendees participated in conference calls to follow-up on their organizational commitments. By request of the participants, an executive level slide set summarizing key points was created and was disseminated to all participating organizations in December, 2009, along with a copy of these proceedings.

This document describes the administrative details and key findings of the conference. For additional details on the conference content, refer to the "Medication Reconciliation: A Team Approach" final report, available from the Society of Hospital Medicine.

Background

Medication Reconciliation and Patient Safety

The everyday use of medications – both prescription and over the counter – has become commonplace in America. Indeed, the average number of ambulatory prescriptions per capita rose to 12.6 in 2007. [http://www.kff.org/rxdrugs/upload/3057 _07.pdf Kaiser Family Foundation].

Errors in healthcare settings in general, and medication related errors in specific, are more likely to occur when patients have a transition in care settings. These errors may be associated with serious and potentially life threatening events. Preventing medication errors resulting from transitions in care requires a collaborative effort from a multidisciplinary group of clinical practitioners, hospital systems, and patients/caregivers. The individuals and systems involved must support the patient throughout the transitional period (e.g. between services in a hospital when a transfer occurs, or between the inpatient and outpatient settings during admission to or discharge from the hospital).

The combination of these phenomena has greatly increased the risk of drug interactions or omissions, or dosage errors - all of which may endanger the safety of the patient.

Several national regulatory and quality agencies, including the Institute for Healthcare Improvement (IHI), the Joint Commission (TJC), and the National Quality Forum (NQF), have recognized the importance of systematic processes which attempt to prevent medication errors for patients during hospitalization and during the transition into and out of the hospital.

The Joint Commission and NPSG 8

While The Joint Commission (TJC) required the implementation of the medication reconciliation process for accreditation (NPSG 8), they recognized the difficulty that many hospitals had implementing the process systematically. They announced effective January 1, 2009, that medication reconciliation evaluations during site visits would continue to be conducted; however, survey findings would not be factored into the organization's accreditation decision. In addition, survey findings on NPSG 8 would not generate Requirements for Improvement (RFI) and would not appear on the accreditation report. In 2009-10 TJC will evaluate and further refine NPSG 8, resulting in an improved NPSG 8 that both supports quality and safety of care and can be more readily implemented by the field in 2010.

The Need for a Conference

Despite the challenges in implementing medication reconciliation, it remained clear that medication reconciliation was a worthwhile effort for patient safety. Therefore, in 2008 SHM proposed to convene a meeting of the key stakeholders at the professional, quality, consumer and regulatory levels to discuss medication reconciliation and begin to make recommendations to address several issues confronting practitioners as well as professional organizations.

Conference Development

AHRQ Small Conference Grant

The "Medication Reconciliation: A Team Approach" conference was made possible, in part, by a conference grant from the Agency for Healthcare Research and Quality (AHRQ), a federal agency within the U.S. Department of Health and Human Services

- Principal Investigator: Jeffrey Greenwald, M.D., Co- PI Lakshmi Halasyamani, MD, FHM
- Organization: Society of Hospital Medicine
- Project period: May 1, 2008 to April 30, 2009
- Federal Project Officer: James Battles, Ph.D.
- Grant Number: 1R13HS017520-01

Conference Task Force

SHM and the principal investigator created a task force to guide the development of the conference and to ensure that the final agenda and outcomes reflected the needs and interests of member organizations.

The task force included:

• Principal Investigator and Chair: Jeffrey L Greenwald, MD, FHM

- Co- Principal investigator: Lakshmi Halasyamani, MD, FHM (SHM)
- Committee members: Mark Williams, MD, FHM (SHM); Cynthia LaCivita, PharmD (ASHP Foundation); Carolyn Brennan (SHM Advisor); Linda Boclair(SHM Staff); and Lauren Valentino (SHM Staff).

The task force conducted monthly conference calls in advance of the March conference to develop the agenda, recruit stakeholders. review medication reconciliation literature. ensure а sustained effort after the conference, and identify and analyze the experiences of a cohort of hospitals' medication reconciliation programs.

Conference Location and Agenda

The conference was held at Prentice Women's Hospital at Northwestern University in Chicago.

"Medication Reconciliation: A Team Approach" Conference Agenda				
March 6, 2009				
8:00-8:30AM	Welcome and Overview of Medication			
	Reconciliation: Past, Present and Future			
8:30-8:45AM	Overview of the meeting outcomes			
8:45-9:30AM	Case study presentation and discussion			
9:30–9:45AM	Work group assignments			
9:45-10:00AM	BREAK			
10:00AM-	Breakout sessions 1-4 (45 min. each) and			
2:50PM	working lunch			
3:00-3:45PM	Work group reports and facilitated discussion			
3:45-4:00PM	Conference evaluations, commitments and			
	closing comments			

The conference agenda was designed by the task force to give participants sufficient background on medication reconciliation and enough time to begin to explore the complex issues within the topics.

Key Stakeholders

Engaging key leaders from a variety of organizations was critical to the success of the conference and its ability to further the dialogue about medication reconciliation.

Participation of the attendees was by invitation only and all invitees attended explicitly as representatives of their organization.

A broad based attendance was achieved through targeted outreach via professional organizations, with representation from the professional, and quality, consumer, regulatory Contacts were made at the arenas. highest levels of the organizations to encourage the adoption needed for postconference dissemination of proceedings implementation and of recommendations.

Literature Review

Prior to the conference, the task force worked with attendees and the Delaware Academy of Medicine to compile a file of previous and ongoing medication reconciliation research projects. In addition to the research compiled by the Delaware Academy of Medicine, 14 organizations submitted research papers.

Prior to the conference, the task force distributed the collected works to attendees and encouraged them to review them before the conference.

Break-Out Session Topics and Outcomes

All attendees were divided into one of four small groups, selected by conference organizers to ensure reasonable representative balance. The small group then rotated together through the four break-out sessions (see below), each of which built iteratively on the prior group's input.

The four break-out session topics were:

- Community resources and partnerships to support and augment the clinically based medication reconciliation process.
- Patient education, literacy and empowerment and its impact on medication reconciliation.
- Implementation strategies that improve the operationalization and effectiveness of medication reconciliation.
- Measuring the effectiveness and impact of medication reconciliation.

Principal Findings

The principal findings below are a result of the conference. They can also be found in the final report.

1) Consensus among key stakeholders is an essential element in elucidating and addressing the opportunities and challenges in medication reconciliation.

2) A standardized definition of a "medication" is a crucial first step. Thereafter, a clarification of the guiding

principles and clearly defined objective of "reconciliation," will, accordingly, permit process definition.

Themes that emerged surrounding these definitions included:

a. Patient-centeredness as a key concept in defining a medication reconciliation process.

b. The definition must view medication reconciliation beyond the regulatory context. Reframe medication reconciliation within the context of the entire patient care continuum.

3) Electronic health records (personal and provider based) must be implemented standardized and to medication transfer information effectively and efficiently across transitions of care. This requires true integration of electronic data.

4) The development of a public health agenda around medication *safety* as the community-based parallel of medication reconciliation would support the medication reconciliation process occurring in clinical settings. To achieve this agenda, social marketing, health promotion, community mobilization and similar techniques may prove useful.

5) Leveraging existing community-based initiatives and infrastructures which exist in many national organizations fosters collaboration and recognizes the importance of patient and community engagement as a national priority for quality and safety.

6) Interorganizational partnerships are critical to the implementation of the

recommendations offered by the stakeholders. By designating a central coordinating body or coalition, the organizations can partner while sharing a common vision and contributing expertise to addressing the myriad issues in medication reconciliation:

- Health systems must partner with community and ambulatory care based pharmacy providers as well as ambulatory medical providers to ensure uninterrupted communication between the inpatient and outpatient settings.
- Quality organizations must establish unambiguous and unified medication reconciliation standards across the care continuum through longitudinal discussions with stakeholders.
- Research and quality improvement communities must develop and test interventions and disseminate results.
- Professional societies must collaboratively agree to a standard, patient-centered method to promote and maintain a universal medication reconciliation process.
- Public health systems must partner with community based organizations to encourage and promote the established standards for medication reconciliation, which include issues of patient literacy.

Summary of Action Items

1) Developing key principles and definitions:

a. Development of a clear definition of "medication" and "medication reconciliation" from which a process and appropriate metrics may be derived.

b. Focus medication reconciliation as a patient centered, patient safety initiative.

c. Determination of local systems present and systems needing development to implement and measure medication reconciliation.

d. Establishment of clearly defined roles, responsibilities and expectations of each participant in medication reconciliation process.

2) Mobilizing Community Resources and Partnerships

a. Identify community resources and execute partnerships with health organizations that will best maximize the promotion of understanding medication safety in the community.

b. Use public health methodologies develop tools to engage community-healthcare partnerships.

c. Develop evaluation criteria for effectiveness of these partnerships and their efforts at the community level. 3) Patient Centeredness and Literacy Mindedness

> a. Determine key patient education, literacy, and empowerment fundamentals required for safe medication reconciliation including efforts to make healthcare providers and practitioners more aware of and adept at handling these issues.

b. Develop tools/guideline plans for patient education, literacy assessment and patient empowerment.

c. Develop evaluation criteria to insure processes are patient-centered.

4) Implementing and Measuring to Ensure Meaningful Success

a. Determine practical best practice medication reconciliation strategies that translate to multiple care settings.

b. Develop tools/guideline plans for implementation of medication reconciliation throughout the continuum of care.

c. Develop evaluation criteria, which emphasize both process and outcomes measures.

Appendix A: Participants, Titles and Organizations

Participant	Title	Organization
Dave Hanson, RN, CNS, MSN, CCRN	AACN Past-President	American Association of Critical-Care Nurses (AACN)
Bruce Bagley, MD	Medical Director for Quality Improvement	American Academy of Family Physicians (AAFP)
Erin Stucky, MD	Children's Specialists of San Diego Pediatric Hospitalist and Director of Pediatric Hospitalist Fellowship	American Academy of Pediatrics (AAP)
Frederick C. Blum, MD, FACEP	ACEP Past-President	American College of Emergency Physicians (ACEP)
Prentiss Taylor Jr., MD, FACP	Regional Center Medical Director, Advocate Health Centers/Advocate Medical Group	American College of Physicians (ACP)
Patricia E. Sokol, RN, JD	Senior Policy Analyst, Clinical Quality Improvement and Patient Safety	American Medical Association (AMA)
Kerri Fei, MSN, RN	Policy Analyst, Clinical Performance Evaluation	American Medical Association (AMA)
Cora J. Palmer, BSN, RN-C	Chicago Chapter	Academy of Medical- Surgical Nurses (AMSN)
Cynthia LaCivita, PharmD	Director of Education & Special Programs	American Society of Health-System Pharmacists Research and Education Foundation (ASHP Foundation)
Karl F. Gumpper, RPh, BCNSP, BCPS, FASHP	Director, Section of Pharmacy Informatics & Technology	American Society of Health-System Pharmacists (ASHP)
Kathryn Leonhardt, MD, MPH	Patient Safety Officer and Medical Director, Care Management, Aurora Health Care	Consumers Advancing Patient Safety CAPS

Todd Stankewicz, RPh, MPH, MBA	Pharmacy Officer-CMS Region V	Centers for Medicare and Medicaid Services (CMS)
Sherry Aliotta, RN-BC, BSN, CM	President/CEO, S.A. Squared Associates, Inc.	Case Management Society of America (CMSA)
Beth McCarty	PharmD candidate University of Michigan	Case Management Society of America (CMSA)
Robert Harrington Jr., MD	Vice President of Medical Affairs	InCompass Health
Fran Griffin, RRT, MPA	Director	Institute for Healthcare Improvement (IHI)
Allen J.Vaida, PharmD, FASHP	Executive Vice President Institute for Safe Medication Practices	Institute for Safe Medication Practices (ISMP)
Nanne M. Finis, RN, MS	Executive Director, Solutions Services	Joint Commission Resources (JCR)
Jeannell M. Mansur, RPh, PharmD,	FASHP Practice Leader, Medication Safety	Joint Commission Resources (JCR)
Ken Epstein, MD, MBA, FACP, FHM	President	KRE Consulting
Paula Griswold, MS	Executive Director	Massachusetts Coalition for Prevention of Medical Errors
Bill Reid, FACHE	Director	Microsoft Corporation, HealthVault Platform Strategy Health Solutions Group
John Henson	Product Manager	Microsoft Corporation, HealthVault Platform Strategy Health Solutions Group
Jane Kelly-Cummings, RN, CPHQ	Senior Director, Quality Initiatives, Society of Hospital Medicine	National Coordinating Council for Medication Error Reporting and Prevention (NCC-MERP)
Wendy Vernon	Senior Director of the National Priorities Partnership	National Quality Forum (NQF)
Kristine Gleason, RPh	Clinical Quality Leader	Northwestern Memorial Hospital MATCH Program

Helga Brake, PharmD, CPHQ	Quality Leader, Patient Safety	Northwestern Memorial Hospital MATCH Program
Archie Willard	Patient Advocate	
Tom Staiger, MD	Interim Medical Director, University of Washington Medical Center	Society of General Internal Medicine (SGIM)
Carol J. Gilhooley	Director, The Division of Standards and Survey Methods	The Joint Commission (TJC)
Pat Adamski, RN, MS, MBA	Director, Standards Interpretation Group	The Joint Commission (TJC)
Brian J. Clay, MD	Assistant Professor of Medicine, Division of Hospital Medicine	University of California, San Diego Medical Center (UCSDMC)
Michael Miller, RPh, DrPH	Associate Professor	University of Oklahoma College of Pharmacy

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