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# Systematic Use of SOPS Results to Drive Patient Safety Rounds

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April 2010

**Track:** SOPS Patient Safety Improvement Initiatives  
**Session:** Patient Safety Mentors, Rounds, and Innovations  
**Date & Time:** April 20, 2010, 2:15 pm  
**Track Number:** SOPS T2 – S3



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# Hospitals and Health Centers Annual Activity

- **Total licensed beds:** 930 (865 acute care licenses and 65 psych licenses)
- **Total available/staffed beds:** 866 (including 99 adult ICU beds, 40 neonatal ICU beds, 31 pediatric ICU beds, 40 maternity beds and 36 psych beds)
- **Admissions** (excl. newborns): 43,558
- **Inpatient Discharges** (excl. newborns): 43,186
- **Observation Cases:** 5,476
- **Clinic Visits** (all sites excluding ER): 1,615,774
- **Emergency Services/Urgent Care Visits:** 80,510
- **Patient Days:** 266,574
- **Total Surgical Cases:** 44,683 (17,074 inpatient; 27,609 outpatient)
- **Deliveries:** 3,628
- **Operating Expenses:** \$1.8 billion

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# UMHHC Mission



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# The UMHHC Hospital Board's Role in Ensuring Safety

Corporate boards, once largely seen as passive, avuncular bodies at most involved in corporate direction-setting are now expected to assume collective and, for individual board members, personal responsibility for the corporation's legal, ethical and social obligations. Mostly due to corporate accounting scandals in recent years, board responsibility for corporate financial propriety is unquestioned. The Regents, acting through this Board, are ultimately responsible for the quality of patient care and safety according to our bylaws and Michigan law. UMHS is a prominent figure on the national patient safety stage and this Board must be literate in patient safety challenges and our efforts to address them.

HHCEB should make quality a primary focus, placing patient safety & quality issues on board meeting agendas. The establishment of a series of concise presentations, designed to provide HHCEB with a graduated overview of national safety benchmarks and UMHS's efforts to address them, is proposed. To accomplish this, every agenda will include a 10-15 minute item during which selected speakers will inform the board of the measures and institutional efforts to meet them. A selection of national quality and safety measurement efforts include:

- National Quality Forum (NQF) endorsed national voluntary consensus standards
- JCAHO National Patient Safety Goals and Core Measures
- Leapfrog Group
- National Surgical Quality Improvement Program
- AHRQ SOPS Data (UMHHC vs. like institutions)
- Institute for Healthcare Improvement (IHI) - patient care improvement campaigns

Specific cases will be presented which highlight safety and quality performance levels which differ significantly from national benchmarks with a focus on the organization's plan for improvement.

Board members will participate in Patient Safety Rounds

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# UMHHC History of Safety Culture Survey Measurement

- The University of Michigan Hospitals and Health Centers (UMHHC) have used SOPS to measure staff perceptions of patient safety culture since 2005.
- Repeated measurement has been taken in 2003, 2004, 2005, 2006, 2007, 2009

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# UMHHC 2009 Database: Characteristics of All Respondents

**Of the 3009/7175 (42%) respondents, the staff positions these respondents held in the hospital were:**

<b>Registered Nurses</b>	<b>N=1269</b>	<b>42%</b>	<b>47%</b>
<b>Nurse Practitioners</b>	<b>N=74</b>	<b>2%</b>	
<b>LVN/LPN/MA</b>	<b>N=42</b>	<b>1%</b>	
<b>CRNA</b>	<b>N=35</b>	<b>1%</b>	
<b>Clinical Nurse Specialists</b>	<b>N=35</b>	<b>1%</b>	
<b>Attending Physicians</b>	<b>N=454</b>	<b>15%</b>	<b>24%</b>
<b>House Officers</b>	<b>N=266</b>	<b>9%</b>	
<b>Physician Assistants</b>	<b>N=93</b>	<b>3%</b>	
<b>Pharmacy Staff</b>	<b>N=205</b>	<b>7%</b>	
<b>Administration/Management</b>	<b>N=146</b>	<b>7%</b>	
<b>Physical, Speech &amp; Occupational Therapy</b>	<b>N=121</b>	<b>4%</b>	
<b>Respiratory Therapy</b>	<b>N=98</b>	<b>3%</b>	
<b>Dietician/Other FANS Staff</b>	<b>N=45</b>	<b>1%</b>	
<b>Technicians (Lab, Radiology)</b>	<b>N=19</b>	<b>1%</b>	

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## RN vs. Faculty vs. HO

Number of Respondents			
	2005	2007	2009
RN	930	1283	1523
Faculty	509	620	454
HO	378	296	266

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# AHRQ 2009 Comparative Database: Characteristics of Respondents

- 196,546 hospital staff respondents from 623 hospitals
  - 94,772 respondents from 190 Teaching Hospitals
  - 53,249 respondents from 49 Hospitals with 500+ beds
- Downloadable copy of the 2009 report is available on the AHRQ Web site at <http://www.ahrq.gov/qual/hospsurvey09/>.

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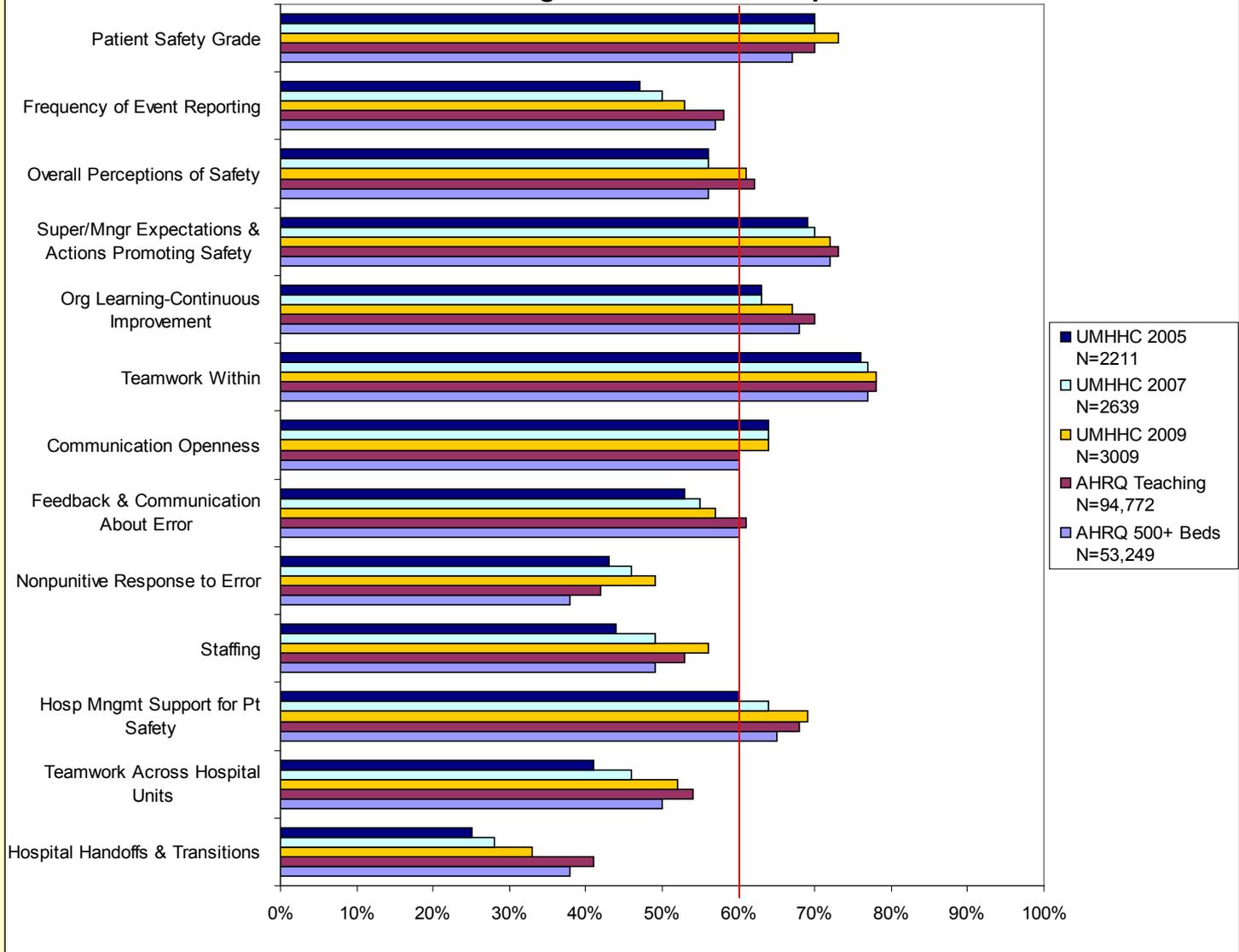
# AHRQ and UMHHC 2009 Survey Process and Response Rates

- AHRQ: 623 U.S. hospitals, 196,546 respondents
  - AHRQ avg # respondents per hospital = 315 (52%)
  - UMHHC = 3009 respondents (42%) via web
- AHRQ Survey administration
  - Paper 44%
  - Web 33%
  - Both 23%
- AHRQ Average hospital response rate = 52%
  - Paper 58%
  - Web 45%
  - Both 52%

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### AHRQ UMHHC 2005, 2007 and 2009 results compared to AHRQ Teaching and 500+ Beds Hospitals



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# Traditional Communication Plan

- Distribution of these results to various stakeholders
  - Patient Safety Committee
  - CQIP Lead Team
  - ECCA (Physician Data)
  - Pharmacy Data to Director of Pharmacy
  - Nursing Data to Chief of Nursing
  - Physician Data to Service Chiefs and Chairs
  - Pediatric Executive Committee
  - Hospital Executive Board
- The Patient Safety Committee utilizes SOPS data deficits to identify priority focus areas for improvement within the annual Patient Safety Plan.

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## Local Data Distribution and Follow Up

- Review local data and ask staff to discuss one construct which can be improved upon:  
“What does this statement mean to you?”
- Ask staff:  
“How accurately does the unit score reflect your experience on this unit? Share examples”
- Ask staff:  
“How would it look on this unit if 100% of staff strongly agreed with this item?”
- Ask staff to identify one actionable idea to improve unit results in this area

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# Deficits in Traditional Safety Culture Data Distribution

- These data were gathered, analyzed and distributed cyclically in the Fall but there was a leadership perception that these data were not considered useful past the initial data distribution.
- Leadership wanted a method by which local data could be periodically reviewed within an existing forum throughout the year.
- UMHHC began to use SOPS data to structure Patient Safety Rounds (PSRs) as an effective intervention and tool for improving scores.



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# Culture Measurement, Feedback, and Intervention

1. Leaders should assess the organization's safety and quality culture using a survey tool that is selected with consideration of validity, consistency, and reliability. The survey should be one that has been conceptualized around domains such as teamwork, leadership, communication, and openness to reporting.
  - Conduct the survey on a sample of units or service areas that in aggregate deliver care to more than 50 percent of the patients who are receiving care.
  - Measure service lines or units in which there is a high patient safety risk.
  - Identify and prioritize culture performance improvement targets; provide adequate resources to address performance gaps over a specified period.
  - Survey a valid sample to allow unit-level analysis and facilitate improvement.
2. Critical care areas and services and high-volume and high-risk areas should be surveyed (e.g., emergency departments, outpatient surgical services, diagnostic centers) and should include, in the aggregate, ambulatory totals to determine which of these areas should be targeted initially.
3. The results of the culture survey process should be documented and disseminated widely across the organization systematically and frequently. The interventions component of this practice element will be satisfied if the survey findings are documented and have been used to monitor and guide performance improvement interventions.

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# Survey Fatigue can make the message hard to hear...

- 6-3-09: UMHS-SON Clinical Collaborative Project survey, sent to all UMHS nurses
- 7-16-09: Close of the Practice Environment Scale of the Nursing Work Index (PES) survey. This deadline was extended from an earlier deadline.
- 7-09: UMHS Patient Education Survey, sent to all nurses, others (MD survey was held until after Patient Safety Culture survey was completed) (survey closed on 8-15-09)
- 8-3-09: Modern Healthcare's Best Places to Work survey
- 8-3-09: Clinical Nurse Specialist Survey for Inpatient Nurses Only
- 8-11-09: Nursing survey for feedback on the 2009 Nursing Blitz
- 8-17-09: UMHS Patient Education Survey to all MDs

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# Patient Safety Rounds

- UMHHC PSRs are led by the Chief of Staff with participation of the CEO, Chief of Nursing, the Patient Safety Manager, pharmacy, Materiel Services and Facilities Directors, a patient representative, and other administrative leaders.
- This core group rotates through all clinical areas, joining local staff on a biweekly basis.

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# Patient Safety Rounds Demographic Data

- PSR at UMHHC
  - Initiated in 2001
  - Approximately 2 per month
  - 1 hr in duration
  - Conducted by the Chief of Staff
- Over 160 PSR completed to date
- Over 1800 UMHHC staff have participated
- Standing PSR membership includes Chief of Staff, Nursing Administration, RM, Pharmacy, MSC, Facilities, Patient Representative
- Guests from the School of Information, School of Medicine, School of Pharmacy, Planning and Marketing, EVPMA, CEO, COO, VA safety intern

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# Use of SOPS Data for Review within Patient Safety Rounds

- Prior to conducting PSRs, the Chief of Staff and the Patient Safety Manager review the last three SOPS results for the unit or area.
- Error reports for the last quarter are also reviewed
- These results are used to facilitate the PSRs discussion. This review of the local SOPS scores is done in a manner that engages the staff who are assessed.

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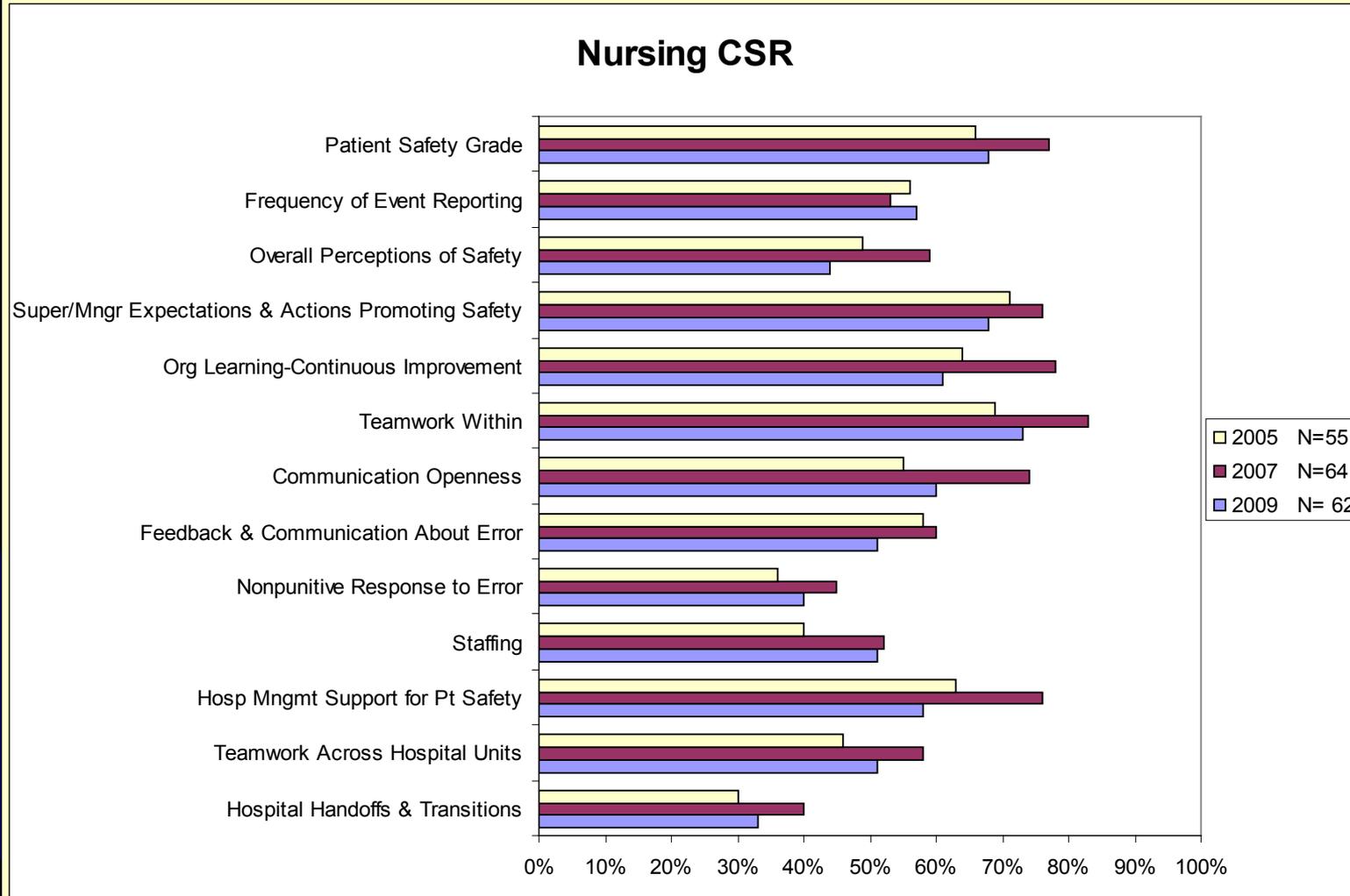
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# Example of SOPS Data for Review within Patient Safety Rounds

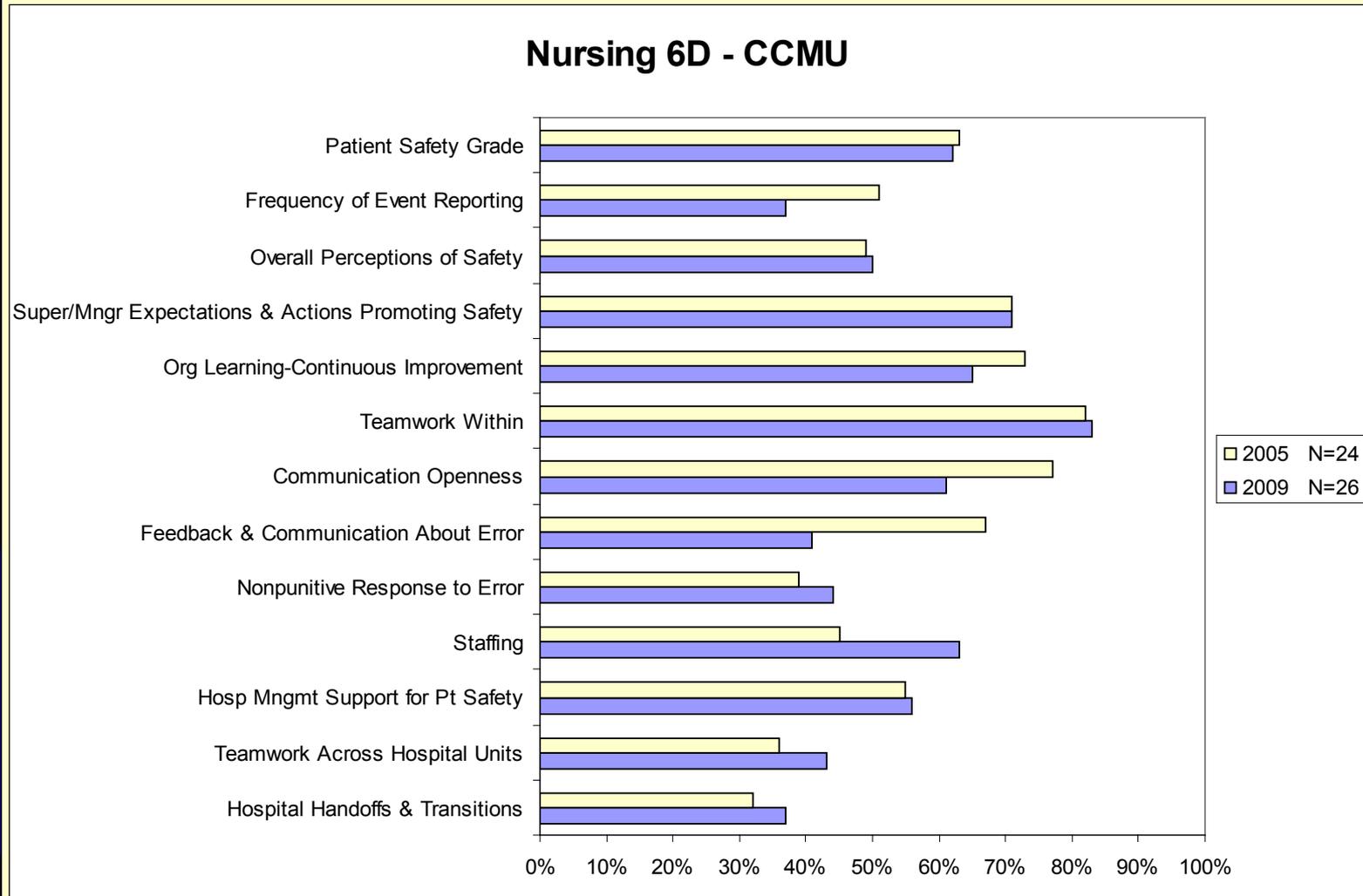


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# Example of SOPS Data for Review within Patient Safety Rounds

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# SOPS Differentiation of PSR Participants vs. Nonparticipants

- UMHHC added a question to the SOPS survey, asking if respondents had participated in PSRs in the past.
- This allows an analysis of PSRs participants versus nonparticipants.

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# SOPS Differentiation of PSR Participants vs. Nonparticipants

- UMHHC SOPS respondents who have participated in PSRs are more positive in their responses along all SOPS constructs as compared to their colleagues who have never participated in PSRs.
- Staff has used the SOPS comment section to request that PSRs occur in their area.

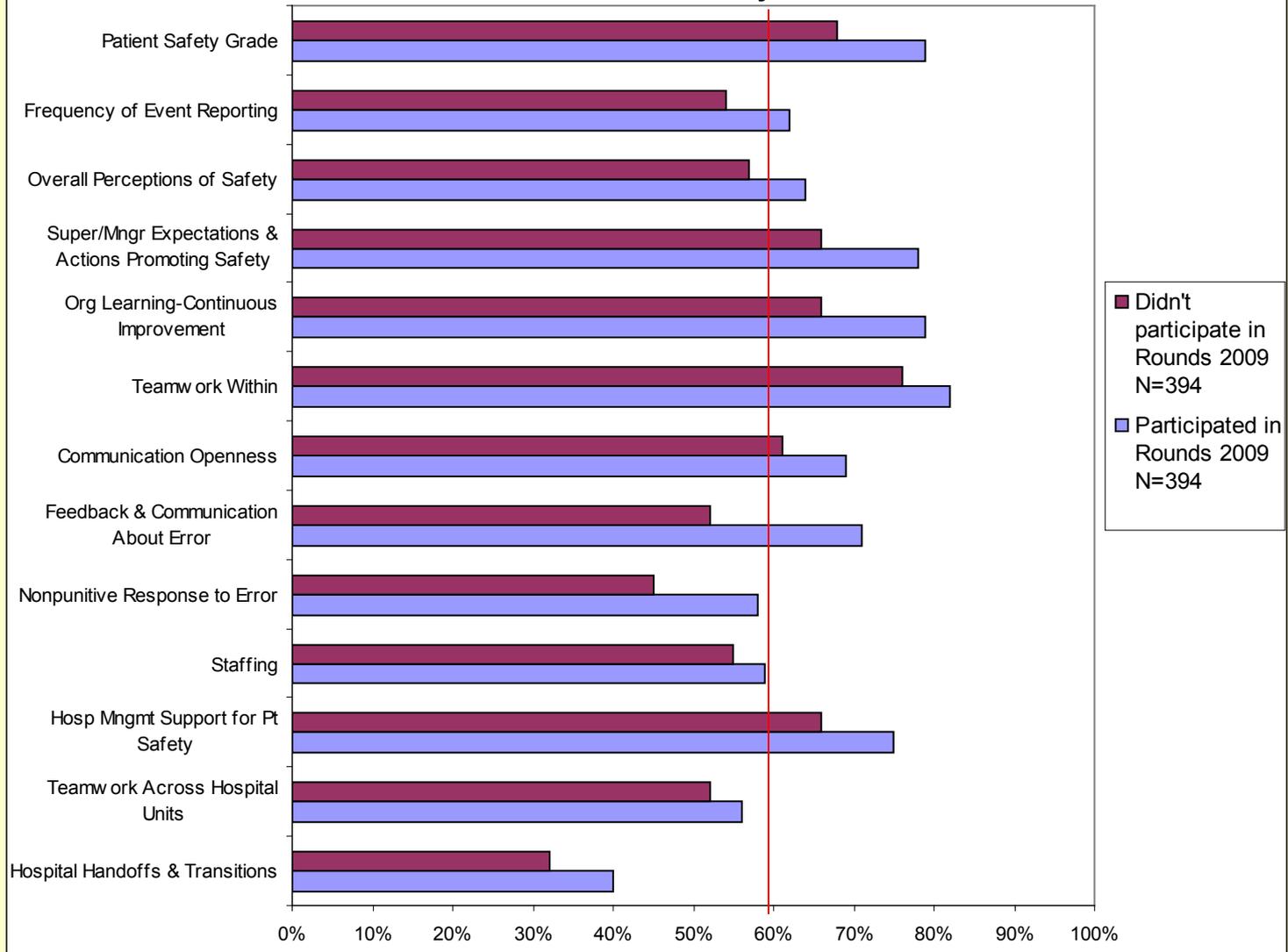
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### 2009 Participants vs. Non-Participants in Patient or Medication Safety Rounds



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# Medication Safety Rounds Goals

- Improve the culture of safety
- Provide a Gemba opportunity for key medication safety leaders and others
- Limit the scope of the observations to the type of issue most often identified within Patient Safety Rounds
  - medication dispensing
  - medication administration
  - (rarely) medication prescribing

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# Medication Safety Rounds

- Areas visited
  - UH 5B
  - UH Satellite Pharmacy
  - UH 4BC
  - UH 6D CCMU
  - MCHC PICU
  - MCHC PCTU
  - UH 8C
  - UH 5D SICU
  - ED
  - Peds Satellite Pharmacy
  - UH Trauma Burn
  - UH 7BC
  - CVC 4, 5 and Pharmacy
  - UH 5A, 6B, 7B
  - Anticoagulation discharge process
  - CPOE prescribing process
- Team Members
  - MD P & T Committee Chair
  - Nursing Administration
  - Patient Safety Manager
  - Pharmacy Associate Director
  - RPh Medication Safety Coordinator

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# Medication Safety Rounds Summary

- Medication Safety Rounds
  - Effectively provide a Gemba opportunity for key medication safety leaders and others
  - Differ from Patient Safety Rounds in that staff are observed in the process of doing their work
  - Staff feedback is received in isolation (difficult to identify special cause variation)

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# Conclusion

- PSRs are an effective forum within which to review local SOPS results with front line staff, with concurrent internal support from senior management.
- Use of the SOPS data, through PSRs is easily replicable by other survey users.

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Doug Strong, CEO  
U-M Hospitals and Health Centers



# The Faces of UMHHC Patient Safety Rounds



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