

- 診療録管理部門の体制整備、情報の活用には診療情報管理士の配置の有無が関連していたが、診療録の適切な管理においては明確な関連はみられなかった。
- 医療安全担当者（リスクマネージャー）に関しては、人員配置を厚くすることが院内報告件数の増加に寄与しているものの、原因分析や対策実行など他の側面にはあまり影響していないことがうかがわれた。改善策立案を充実させるためには焦点を絞った教育研修が有効である可能性が示唆された。

【審査基準への示唆】

- 麻酔医の配置に関して、受審病院では手術における全麻件数が年間 150 件を超えると常勤麻酔医を 1 名配置していた。手術麻酔部門の医師の配置基準は、①常勤換算医師数は 4 名より多く、全身麻酔件数 3,000 件までは“常勤換算医師数 $=0.0028 \times$ 全身麻酔件数 $+0.7759$ ”、②常勤専任医師数は 3 名以上で、全身麻酔件数 3,000 件までは“常勤専任医師数 $=0.0025 \times$ 全身麻酔件数 $+0.6276$ ”が目安となった。
- 病理医の配置に関して、当該部門の評価が高い病院での病理医数の配置は、がん手術が 400 件までは、100 件/人程度という大まかな傾向が見られた。病理部門の医師の配置基準として、常勤換算医師数が 0.3 名より多く、がん手術件数 400 件までは“常勤換算医師数 $=0.0044 \times$ がん手術件数 $+0.7279$ ”が目安となった。
- 年間紹介患者数について、調査項目の補足説明や項目の細分化などにより、より詳細なデータを把握することの必要性が示唆された。
- 高さ調節・傾斜調節ベッドの整備状況については、事前の安全対策と関連付けた評価が行われていないことがうかがわれ、安全の観点から「転落防止」対策を評価するための項目設定の必要性が示唆された。

一方で今年度の分析を通じて以下のような課題も明らかになった。

- 施設基本票等からはアウトカムに関する情報が十分得られず、アウトカムに寄与する審査項目を検討することが困難であることが分かった。個別のテーマごとにアウトカムの代替となる項目や、プロセス指標のみを用いた分析の方法論について検討する必要がある。
- 今年度の分析は主に 2 変数間の関係を検証するにとどまっている。引き続き多面的な視点から今年度得られた結果の検討を行う必要がある。
- 特に、今回取り扱ったデータは項目数が非常に多く、項目間相互の関連も強いことが考えられるため、今後多変量解析を用いた分析を行うことが必要である。
- また、変数、サンプル数とも大量であるため、データマイニング的な手法を用いことも有効である。
- 今年度の分析の班では結果の妥当性に関する検討は十分行われなかった。サーベイヤーを対象としたインタビュー調査などを通じて、審査現場の実感との整合を検証すること

ども必要となろう。

○今後は上記のような分析・検討を進め、病院における医療機能モデル（客観的データに裏づけられた構造・プロセス・アウトカムの構造に関するモデル）の構築を進めることが求められる。

今年度の分析は試行的なものとして位置づけられ、データの全体像を概観することに注力した。今年度の成果を踏まえることで、今後の分析において、よりテーマを絞り込んだ精緻な分析に移行していくことが可能となったものと考えられる。

2004
HOSPITAL EXECUTIVE BRIEFINGS

JCAHO
National Patient Safety
Goals

Joseph L. Cappiello
Darlene A. Christiansen



SESSION OBJECTIVES

- Review of 2004 trends
- Describe 2005 goals and requirements
- Provide insight on how organizations can meet new goals and requirements



The Joint Commission's
Sentinel Event Policy

- Established in January 1996 with the following goals:
 - To have a positive impact in improving care
 - To focus attention on underlying causes and risk reduction
 - To increase the general knowledge about sentinel events, their causes and prevention
 - To maintain public confidence in the accreditation process



Experience to Date

Of 2552 sentinel events reviewed by the Accreditation Committee, January 1995 through June 2004:

- 382 inpatient suicides
- 308 operative/post op complications
- 310 events of surgery at the wrong site
- 291 events relating to medication errors
- 172 deaths related to delay in treatment
- 113 deaths of patients in restraints
- 114 patient falls
- 89 assault/rape/homicide
- 73 transfusion-related events
- 71 perinatal death/injury
- 49 deaths following elopement
- 45 fires
- 38 infection-related events
- 497 "other"



Sentinel Event Alert

- | | |
|-------------------------------|-----------------------------------|
| 1. Potassium chloride | 16. Proactive risk reduction |
| 2. Policy issues | 17. Home fires (O2 therapy) |
| 3. Policy issues | 18. Kernicterus |
| 4. Policy issues | 19. Look-alike, sound-alike drugs |
| 5. Policy issues | 20. Kreuzfeldt-Jakob disease |
| 6. Wrong site surgery | 21. Medical gas mix-ups |
| 7. Suicide | 22. Needles & sharps injuries |
| 8. Restraint deaths | 23. Dangerous abbreviations |
| 9. Infant abductions | 24. Wrong-site surgery #2 |
| 10. Transfusion errors | 25. Ventilator-related events |
| 11. High Alert Medications | 26. Delays in treatment |
| 12. Op/post-op complications | 27. Bed rail deaths & injuries |
| 13. Impact of <i>SE Alert</i> | 28. Nosocomial infections |
| 14. Fatal falls | 29. Surgical fires |
| 15. Infusion pumps | 30. Perinatal deaths |




Expected Response to Recommendations
in *Sentinel Event Alert*

- All accredited health care organizations are expected to review each issue of *Sentinel Event Alert*
 - As relevant to their services, these organizations should implement the recommendations in *SE Alert*
- OR**
- Implement a reasonable alternative (at least as good)
- OR**
- Provide a reasonable explanation for doing neither



National Patient Safety Goals


- Each year a set of goals will be identified from review of.
 - Sentinel events and associated root cause analysis information in the Joint Commission's Sentinel Event Database.
 - Compliance data respecting existing Requirements among surveyed organizations.
 - The foci of Sentinel Events Alerts published to date.
 - Other sources of information about adverse events.
- The Goals and their requirements will be published by mid-year.
- Selection of the Goals and requirements will be guided by a panel of experts: the *Sentinel Event Alert* Advisory Group.
 - Considers the data and information compiled in the review process.
 - Identifies candidate new Goals and associated Requirements
 - Recommends proposed new Goals and/or Requirements and deletion of existing Goals and/or Requirements.



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The *Sentinel Event Alert* Advisory Group


- Nationally recognized experts in patient safety
- Systems engineers with practical knowledge of root cause analysis, failure mode & effects analysis, human factors engineering, etc.
- Individuals with hands-on experience in health care organizations, representative of the types & sizes of organizations and the various patient populations
- Experts in related fields such as pharmaceuticals, information technology, medical equipment, etc.



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The JCAHO 2004 National Patient Safety Goals

- Patient identification
- Communication among caregivers
- High-alert medications
- Wrong-site surgery
- Infusion pumps
- Clinical alarm systems
- Health care-associated infections



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The JCAHO 2004 National Patient Safety Goals

Goal #1: Improve the accuracy of patient identification.

Requirement #1.a.
Use at least 2 patient identifiers (not the patient's room number) whenever taking blood samples or administering medications or blood products.

Requirement #1.b.
Prior to the start of any surgical or invasive procedure, conduct a verification "time out" to confirm the correct patient, procedure, and site.

Effective July, 2004, embedded in accreditation participation requirement 23 addressing universal protocol




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Root Causes of Sentinel Events

(All categories; 1995-2002)


Category	Percentage of Events
Communication	65%
Medication errors	55%
Patient assessment	45%
Availability of staff	35%
Staffing levels	30%
Physical environment	25%
Continuum of care	20%
Competence, credentials	15%
Procedural compliance	10%
Alarm systems	5%
Organizational culture	5%



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Communication as a Root Cause

- Mode of communication
 - Oral (55%)
 - Written (35%)
 - Electronic (10%)
- Participants
 - Among staff (60%)
 - With or among physicians (25%)
 - With patient or family (15%)
- Other communication issues
 - Transcription
 - Change-of-shift report
 - Paging systems



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The JCAHO 2004 National Patient Safety Goals

Goal #2: Improve the effectiveness of communication among caregivers.

Requirement #2.a.

Implement a "read-back" process for taking verbal or telephone orders, or reports of critical test results.

Requirement #2.b.

Standardize abbreviations, acronyms, and symbols used throughout the organization, including a list of those not to be used.



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Minimum "Do Not Use" list for 2004:

- u
- IU
- qd
- qod
- Leading decimal point (always use a Leading zero)
 - Trailing zero
 - MS
 - MSO₄
 - MgSO₄

Plus, by April 1, 2004, an additional 3 items of your choice



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The JCAHO 2004 National Patient Safety Goals

Goal #3: Improve the safety of using high-alert medications.

Requirement #3.a.

Remove concentrated electrolytes from patient care units (including KCl, K₂PO₄, NaCl > 0.9%)

Requirement #3.b.

Standardize and limit the number of drug concentrations available in the organization.



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The JCAHO 2004 National Patient Safety Goals

Goal #4: Eliminate wrong-site, wrong-patient, wrong-procedure surgery.

Requirement #4.a.

Use a pre-op verification process, such as a checklist, to confirm appropriate documents are available.

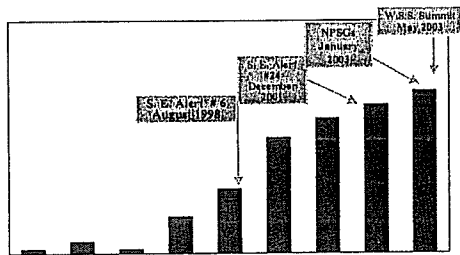
Requirement #4.b.

Implement a process to mark the surgical site and involve the patient in the process.



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Sentinel Event Trends: Reported Cases of Wrong-site Surgery



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Wrong-Site Surgery Summit

- When? May 9, 2003
- Why? To reach consensus on a universal protocol for eliminating wrong-site surgery
- Who? Leaders of all major professional associations that relate to the surgical process
- Results: Consensus on the following
 - Wrong site, wrong patient, wrong procedure surgery is a significant, continuing problem
 - A "universal protocol" is appropriate
 - Teamwork is critical
 - A multi-factorial approach is needed



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Development, Approval, and Endorsement of the Protocol

- Draft consensus statement (Universal Protocol) developed and circulated among participants at the Summit
- Universal Protocol revised based on participant feedback
- Posted on JCAHO web site for comment
 - Over 3000 responses received; further revisions made
- Approved by the Board of Commissioners (July 2003)
- Seeking endorsements of the Universal Protocol
- JCR Wrong Site Surgery seminar (December 2, 2003)
- Implementation of the Universal Protocol as a requirement for accreditation (July 1, 2004)



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Endorsements as of 1/1/04:

- | | |
|--------------------------------------------|---------------------------------------------|
| ➤ Accred Council for Grad Med Education | ➤ American Medical Association |
| ➤ Agency for HC Research & Quality | ➤ American Medical Group Association |
| ➤ Amer Academy of Amb Care Nursing | ➤ American Nurses Association |
| ➤ Amer Academy of Cosmetic Surgeons | ➤ Amer Organization of Nurse Executives |
| ➤ Amer Acad of Facial Plastic & Recon Surg | ➤ Amer Pediatric Surgical Association |
| ➤ Amer Academy of Family Physicians | ➤ Amer Society for Surgery of the Hand |
| ➤ Amer Academy of Ophthalmology | ➤ Amer Society of Anesthesiologists |
| ➤ Amer Academy of Othopedic Surgeons | ➤ Amer Society of General Surgeons |
| ➤ Amer Acad of Otolaryn—Head & Neck Surg | ➤ Amer Society of Ophthalmic RNs |
| ➤ Amer Academy of Podiatry | ➤ Amer Society of Perianesthesia Nurses |
| ➤ Amer Assoc of Amb Surgery Centers | ➤ Amer Society of Plastic Surgeons |
| ➤ Amer Assoc of Eye & Ear Hospitals | ➤ Amer Society of Plastic Surg Nurses |
| ➤ Amer Assoc of Nurse Anesthetists | ➤ American Urological Association |
| ➤ Amer Assoc of Oral & Maxillofacial Surg | ➤ Assoc of American Medical Colleges |
| ➤ Amer College of Cardiology | ➤ Assoc of Perioperative Reg Nurses |
| ➤ Amer College of Chest Physicians | ➤ Assoc of Surgical Technologists |
| ➤ Amer College of Emergency Physicians | ➤ Federated Ambulatory Surgery Assoc. |
| ➤ Amer College of Foot & Ankle Surgeons | ➤ Federation of American Hospitals |
| ➤ Amer College of Obstetrics & Gynecology | ➤ Medical Group Management Assoc |
| ➤ American College of Physicians | ➤ National Assoc. of Medical Staff Services |
| ➤ American College of Surgeons | ➤ North American Spine Society |
| ➤ American Dental Association | ➤ Radiological Society of North America |
| ➤ American Hospital Association | ➤ Society of Thoracic Surgeons |



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Provisions of the Universal Protocol

- Preoperative verification process
 - Relevant pre-op tasks completed and information is available and correct
- Surgical site marking
 - Unambiguous mark, visible after prep & drape
 - Right/left, multiple structures or levels
- "Time out" immediately before starting
 - Involves entire team; active communication
 - Fail-safe model: "No go" unless all agree
- Applicable to invasive procedures in all settings



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Preoperative Verification Process

- Checklist recommended, not required
- Follows patient throughout pre-op activities
- Relevant information available and correct
- Begins with scheduling of surgery/procedure
- Continues until start of procedure
- Consider including site marking and "time out"



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Marking the Operative Site

- Mark prior to moving patient to operative area
- Mark directly on skin; visible after prep & drape
- Unambiguous mark; not otherwise specified
- Do not mark any non-operative sites
- Involve patient in the process
- *Should* be done by person doing procedure
- At least right/left; fingers/toes; spinal level



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Marking the Operative Site (Special considerations)

- Spinal surgery:
 - Mark general level prior to surgery (C/T/L)
 - Mark precise level intraop using radiographic tech.
- Teeth need not be marked directly
 - The dental radiograph or diagram must be marked and available at the time of the procedure
- Other exemptions:
 - Site not predetermined
 - Continuous attendance
 - Premature infants
- Procedure for patient refusal of site marking



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"Time out" Immediately Before Starting the Procedure

- In the location where the procedure will be done
- Involve entire team using active communication
- Must be documented
- Must include, at a minimum:
 - Correct patient
 - Correct procedure
 - Correct site
 - Correct positioning
 - Correct implant(s) and special equipment
- Process for reconciling differences



Differences Between the Universal Protocol and the NPSGs

- Non-operative sites must not be marked
- The site *should* be marked by the person who will do the procedure
- Adhesive markers ("stickies") should not be used as the sole means of marking the surgical site
- In addition to patient, procedure, and site, the "time out" must include verification of correct patient position and availability of correct implants and any necessary special equipment
- The "time out" must be documented



The JCAHO 2004 National Patient Safety Goals

Goal #7: Reduce the risk of health care-acquired infections.

Requirement #7.a.

Comply with current CDC hand hygiene guidelines.

Requirement #7.b.

Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a health care-acquired infection.



CDC Hand Hygiene Guidelines

- Full report available at
- Specific recommendations:
 1. Indications for hand washing and hand antisepsis
 - Visibly soiled—use soap and water
 - Not visibly soiled—may use alcohol-based hand rub
 - List of specific clinical circumstances
 - Towelettes are not a substitute
 - Non-alcohol-based hand rubs not recommended



CDC Hand Hygiene Guidelines

- Specific recommendations (cont'd.):
 2. Hand hygiene technique
 - Alcohol-based hand rub—until dry
 - Soap & water—at least 15 seconds
 3. Surgical hand antisepsis
 4. Selection of hand hygiene agents
 5. Skin care
 6. Other aspects of hand hygiene



CDC Hand Hygiene Guidelines

- Each CDC hand hygiene recommendation cites the strength of evidence supporting the recommendation:
 - Category I (IA, IB, or IC)
 - Category II
- Under Goal 7a, implementation of all CDC hand hygiene recommendations supported by Category I evidence will be required.
- Organizations will be asked to consider implementing all CDC hand hygiene recommendations supported by Category II evidence.



The JCAHO 2004 National Patient Safety Goals

Goal #7: Reduce the risk of health care-acquired infections.

Requirement #7.a.

Comply with current CDC hand hygiene guidelines.

Requirement #7.b.

Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a health care-acquired infection



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Healthcare-Associated Infection and Sentinel Events

- This is not a new requirement
- Any unanticipated death or major injury is a sentinel event *whether there is an infection or not*
- No change in surveillance methods is required
- This does not replace traditional rate-based analysis of health care-acquired infections
- RCA is not required for all health care-acquired infections; only those that result in death or major injury
- The RCA looks comprehensively at the care of the patient, not just the infection



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NPSG Compliance Data for 2003

(5157 Full Surveys Conducted 1/1/03 through 12/31/03)

Percent Non-compliance

NPSG requirement	All Programs	General Hospitals
1a: Two identifiers	4.5%	3.1%
1b: Time out before surgery	2.8%	6.6%
2a: Read-back verbal orders	5.0%	7.4%
2b: Standardize abbreviations	15.4%	23.5%
3a: Concentrated electrolytes	1.0%	3.0%
3b: Limit concentrations	0.3%	0.6%
4a: Preoperative verification	0.5%	1.5%
4b: Surgical site marking	1.0%	6.2%
5a: Free-flow protection	0.8%	0.3%
6a: Alarm maintenance & testing	1.2%	1.4%
6b: Alarm settings & audibility	1.9%	0.1%



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NPSG Compliance Data for 2003

(172 Random Unannounced Surveys Conducted 1/1/03 through 12/31/03)

Percent Non-compliance

NPSG requirement	All Programs	General Hospitals
1a: Two identifiers	12.8%	14.6%
1b: Time out before surgery	7.0%	22.9%
2a: Read-back verbal orders	9.9%	10.4%
2b: Standardize abbreviations	26.2%	35.4%
3a: Concentrated electrolytes	2.3%	4.3%
3b: Limit concentrations	0.6%	0.0%
4a: Preoperative verification	2.3%	6.3%
4b: Surgical site marking	9.3%	31.3%
5a: Free-flow protection	3.5%	0.0%
6a: Alarm maintenance & testing	1.2%	0.0%
6b: Alarm settings & audibility	5.2%	2.1%



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Requesting Review of an Alternative Approach

- Requests for review of an alternative to one of the NPSG requirements must be submitted at least 60 days prior to scheduled survey
- Request form and procedure available on [www.jcaho.org](#)
- Review by *Sentinel Event Alert* Advisory Group
- Decision on acceptability by the JCAHO
- Evaluation of implementation by surveyor



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Lessons Learned from 2003

- We know what to do (to improve safety), but we're still not doing it.
- Established behaviors are hard to change, even when there is good reason to change.
- Many organizations implemented the NPSGs in anticipation of a survey, not when the Goals were introduced.
- Some of the Goals challenge the relationship between the organization's leaders and its medical staff.
- If it's not important to the leaders, it's not important.



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Public Disclosure of Compliance with the National Patient Safety Goals

- **Aggregate data**
 - Data from 2003 surveys on web site now
- **Individual health care organizations:**
 - Compliance with specific requirements (whether scored in the standards or NPSGs)
 - Revised "Quality Reports" — 2004
 - On web site beginning mid-year 2004

2004 HOSPITAL QUALITY REPORT

JCAHO 2004 National Patient Safety Goals

Goal #	Organization	Score
Goal #1	A Sample Hospital	100%
Goal #2	A Sample Hospital	100%
Goal #3	A Sample Hospital	100%
Goal #4	A Sample Hospital	100%
Goal #5	A Sample Hospital	100%

Legend:
 100% = Fully Compliant
 75% = Substantially Compliant
 50% = Partially Compliant
 25% = Non-Compliant
 0% = Not Applicable

For More Information on the NPSGs

Joint Commission
An Accreditor of Health Care Organizations

Headline news

- Quality Check:** New survey tool for patient safety
- Survey News:** Latest survey results and updates
- Standards Updates:** Changes to accreditation standards
- Joint Commission News:** Updates on organizational news
- Public Policy:** Advocacy and regulatory updates

JCAHO National Conference on Quality and Safety
 Shared Values: How Pathways Video: Goals Survey Progress
 JCAHO In-House Writing Site Surgery Conference

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For More Information on the NPSGs

Joint Commission
An Accreditor of Health Care Organizations

National Patient Safety Goals

On July 18, the Joint Commission's Board of Commissioners approved the 2004 National Patient Safety Goals (NPSGs). These goals include the six 2003 goals and their accompanying requirements, and add one new goal with two requirements that focus on reducing the risk of health care acquired infections.

2004 National Patient Safety Goals (Effective January 1, 2004)

- Identify Patients Correctly
- Improve Communication Among Caregivers
- Use Safe Medication Practices
- Prevent Falls
- Prevent Hospital-Acquired Infections
- Prevent Patient Harm from Unsafe Surgery

2003 National Patient Safety Goals (Effective January 1, 2003)

- Identify Patients Correctly
- Improve Communication Among Caregivers
- Use Safe Medication Practices
- Prevent Falls
- Prevent Patient Harm from Unsafe Surgery

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The National Patient Safety Goals Comparison Chart

2004	2005
<p>Goal #1: Improve the accuracy of patient identification.</p> <p><u>Requirement #1.a.</u></p> <p>Use at least 2 patient identifiers (not the patient's room number) whenever taking blood samples or administering medications or blood products (scored at PC.5.10, EP 4)</p> <p><u>Requirement #1.b.</u></p> <p>Prior to the start of any surgical or invasive procedure, conduct a verification "time out" to confirm the correct patient, procedure, and site (scored at PC 13.20, EP 9)</p>	<p>Goal #1: Improve the accuracy of patient identification.</p> <p><u>Requirement #1.a.</u></p> <p>Use at least two patient identifiers (neither to be the patient's room number) whenever administering medications or blood products; <u>taking blood samples and other specimens for clinical testing or providing any other treatments or procedures.</u></p> <p><u>Requirement #1.b.</u></p> <p>[Now addressed under the Universal Protocol for Preventing Wrong Site, Wrong Person Surgery™] <u>Separate APR</u></p>

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The National Patient Safety Goals Comparison Chart Cont...

2004	2005
<p>Goal #2 Improve the effectiveness of communication among caregivers</p> <p><u>Requirement #2.a.</u></p> <p>Implement a "read back" process for taking verbal or telephone orders, or reports of critical test results. (Scored at IM.6.50, EP4)</p> <p><u>Requirement #2.b.</u></p> <p>Standardize abbreviations, acronyms, and symbols used throughout the organization, including a list of those not to be used. (Scored at IM.3.10, EP2)</p>	<p>Goal #2 Improve the effectiveness of communication among caregivers</p> <p><u>Requirement # 2a</u></p> <p>For verbal or telephone orders or for telephonic reporting of critical test results, verify the complete order or test result by having the person receiving the order or test result "read-back" the complete order or test result.</p> <p><u>Requirement #2b</u></p> <p>Standardize a list of abbreviations, acronyms and symbols that <u>are not to be used throughout the organization.</u></p>


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The National Patient Safety Goals Comparison Chart Cont...

2005 Goal #2: Improve the effectiveness of communication among caregivers

New Requirement #2c


Measure, assess, and if appropriate, take action to improve the timeliness of reporting, and the timeliness of receipt by the responsible licensed caregiver of critical test results and values.



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The National Patient Safety Goals Comparison Chart Cont...


<p style="text-align: center;">2004</p> <p>Goal #3: Improve the safety of using high-alert medications.</p> <p><u>Requirement #3.a</u></p> <p>Remove concentrated electrolytes from patient care units (including KCl, K₂PO₄, NaCl > 0.9%) (Scored at MM.2.20, EP 9)</p> <p><u>Requirement #3.b</u></p> <p>Standardize and limit the number of drug concentrations available in the organization (Scored at MM.2.20 EP8)</p>	<p style="text-align: center;">2005</p> <p>Goal #3: Improve the safety of using medications.</p> <p><u>Requirement #3.a</u></p> <p>Remove concentrated electrolytes (including, but not limited to, potassium chloride, potassium phosphate, sodium chloride > 0.9%) from patient care units.</p> <p><u>Requirement #3.b</u></p> <p>Standardize and limit the number of drug concentrations available in the organization</p>
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The National Patient Safety Goals Comparison Chart Cont...


<p style="text-align: center;">2004</p>	<p style="text-align: center;">2005</p> <p>Goal #3: Improve the safety of using medications cont...</p> <p><u>New Requirement #3.c</u></p> <p>Identify and, at a minimum, annually review a list of look-alike/sound-alike drugs used in the organization, and take action to prevent errors involving the interchange of these drugs.</p>
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The National Patient Safety Goals Comparison Chart Cont...


<p style="text-align: center;">2004</p> <p>Goal #4: Eliminate wrong-site, wrong patient, wrong-procedure surgery</p> <p><u>Requirement #4.a</u></p> <p>Use a pre-op verification process, such as a checklist, to confirm appropriate documents are available.</p> <p><u>Requirement #4.b</u></p> <p>Implement a process to mark the surgical site and involve the patient in the process.</p>	<p style="text-align: center;">2005</p> <p>Goal #4: [Now addressed under the Universal Protocol]</p>
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The National Patient Safety Goals Comparison Chart Cont...


<p style="text-align: center;">2004</p> <p>Goal #5: Improve the safety of using infusion pumps.</p> <p><u>Requirements #5.a</u></p> <p>Ensure free-flow protection on all general-use and PCA intravenous organization.</p>	<p style="text-align: center;">2005</p> <p>Goal #5: Improve the safety of using infusion pumps</p> <p><u>Requirement #5.a</u></p> <p>Ensure free-flow protection on all general-use and PCA (patient controlled analgesia) intravenous infusion pumps used in the organization.</p>
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The National Patient Safety Goals Comparison Chart Cont...


<p style="text-align: center;">2004</p> <p>Goal #6: Improve the effectiveness of clinical alarm systems</p> <p><u>Requirement #6.a</u></p> <p>Implement regular preventive maintenance and testing of alarm systems.</p> <p><u>Requirement #6.b</u></p> <p>Assure that alarms are activated with appropriate settings and are sufficiently audible with respect to distances and competing noise within the unit.</p>	<p style="text-align: center;">2005</p> <p>Goal #6 [Now addressed in EC Chapter]</p>
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The National Patient Safety Goals Comparison Chart Cont...

2004	2005
<p>Goal #7: Reduce the risk of healthcare-acquired infections</p> <p><u>Requirement #7.a.</u></p> <p>Comply with current CDC hand hygiene guidelines.</p> <p><u>Requirement #7.b.</u></p> <p>Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a healthcare-acquired infection.</p>	<p>Goal #7: Reduce the risk of healthcare-associated infections</p> <p><u>Requirement #7.a.</u></p> <p>Comply with current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines</p> <p><u>Requirement #7.b.</u></p> <p>Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a healthcare-associated infection</p>

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The National Patient Safety Goals Comparison Chart Cont...

2005


Goal #8 Accurately and completely reconcile medications and other treatments across the continuum of care

Requirement 8.a

During 2005, for full implementation by January 2006, develop a process for obtaining and documenting a complete list of the patient's current medication upon the patient's admission to the organization and with the involvement of the patient. This process includes a comparison of the medications the organization provides to those on the list.

Requirement 8.b.

A complete list of the patient's medication is communicated to the next provider of service when it refers or transfers a patient to another setting, service, practitioner or level of care within or outside the organization.

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The National Patient Safety Goals Comparison Chart Cont...

2005

Goal 9 Reduce the risk of patient harm resulting from falls

Requirement 9.a.


Assess and periodically reassess each patient's risk for falling, including the potential risk associated with the patient's medication regimen, and take action to address any identified risks.

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Non-Hospital Programs Program Specific Goals


- Assisted Living
- Long Term Care
- Ambulatory and Office-Based Surgery
- Behavioral Health Care
- Critical Access Hospital
- Disease-Specific Care Certification
- Home Care
- Laboratory

Reference Material Available In Workbook

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Surveying and Scoring the National Patient Safety Goals

- The Goals apply to all accreditation programs
- All full surveys and unannounced surveys
- Must implement all Goals/Requirements that are relevant to services provided, or implement an acceptable alternative(s)
- Surveyors evaluate actual performance, not just intent

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Surveying and Scoring the National Patient Safety Goals

- Based on services provided, which NPSG requirements are applicable?
- Leadership interview:
 - How are the Goals being met?
 - How well are the Goals being met?
 - How do you know how well the Goals are being met?

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Surveying and Scoring the National Patient Safety Goals

- Documentation review:
 - There are few documentation requirements and no formal documentation review in 2004 & 2005.
 - Surveyors will use whatever documentation the organization has developed for communicating, implementing, and monitoring its response to the Patient Safety Goals. For example:
 - Verification checklist
 - List of abbreviations not to be used
 - Equipment management records
 - Time-Out



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Surveying and Scoring the National Patient Safety Goals

- Patient care unit visits:
 - Surveyors will spend most of their on-site time on patient care units
 - Survey of the NPSGs will be integrated with the rest of the survey process, including tracer activities
 - Multiple interviews with caregivers
 - Some interviews with patients or families
 - Direct observation of the processes of care and the care environment



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Goal-Specific Survey Considerations

Goal #1: Improve the accuracy of patient identification.

Requirement #1.a.-- 2 patient identifiers

- How are patients identified on admission?
- How are the patient-specific identifiers "attached" to the patient, record, orders, medications, blood components, lab specimens, etc?
- Make sure room/bed # is not used
- Scoring based on situations involving administration of medications, blood, and drawing blood samples and other specimens for clinical testing, or providing any other treatments or procedures.



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Goal-Specific Survey Considerations

Goal #2: Improve the effectiveness of communication among caregivers.

Requirement #2.a.-- "Read-back" process

- Interview nurses/physicians, and other clinicians about process for taking verbal/phone orders
- Observe process during patient unit visits
- How do they track the consistent use of this process?
- Voice mail orders are not acceptable
- Note that in 2004 and 2005, "critical test results" reported verbally or by telephone will require a "read-back"



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Goal-Specific Survey Considerations

Goal #2: Improve the effectiveness of communication among caregivers.

Requirement #2.b.--Standardize abbreviations, acronyms, and symbols not to use

- This applies to all use of abbreviations, symbols, acronyms, not just medication-related, but HCO can limit scope
- Score only for hand-written documentation in 2004
- Score electronic documentation (exception Lab) in 2005
- Look for list of abbreviations ... that are not to be used
- Make sure the list includes the "minimum required" items
- Review open records for evidence of use of prohibited abbreviations, symbols, and acronyms
- Review closed records as necessary for validation of findings and track record assessment
- Review organization's established turn around times for critical test results and values, and process to measure and assess.



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Goal-Specific Survey Considerations

Goal #3: Improve the safety of using medications.

Requirement #3.a.--Concentrated electrolytes

- Includes potassium phosphate and hypertonic saline in addition to KCl
- Check medicine cabinets; automated dispensing units; crash carts; dialysis unit
- Interview pharmacy director
- Storage on patient care unit requires
 1. Clinical need
 2. Segregation from other drugs
 3. Limited access
 4. Special warning labels



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Goal-Specific Survey Considerations

Goal #3: Improve the safety of using medications.

Requirement #3.b. and 3c.—Drug concentrations/look-alike/sound alike drugs

- Interview pharmacy director; P&T chair
- Written policy not required, but review if there is one
- Focus on preparations of insulin, heparin, antibiotics, antineoplastics
- Multiple concentrations based on clinical need, not individual practitioner preference
- Look-alike/sound-alike drugs identified and reviewed annually



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Goal-Specific Survey Considerations

Goal #5: Improve the safety of using infusion pumps.

Requirement #5.a.—Free-flow protection on IV pumps

- Interview safety officer/equipment manager: Are all pumps on equipment inventory? How is free-flow protection assured?
- Check pumps in use on units against equipment inventory
- Look for rental units
- Add-on devices (e.g., anti-siphon valves) must be reviewed as alternative approaches – not permitted after 2003



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Goal-Specific Survey Considerations

Goal #7: Reduce the risk of health care-associated infection.

Requirement #7.a.—Comply with CDC Guidelines

- Determine how staff, including L.I.P.s, are informed about the Guidelines
- Through interviews, assess level of understanding of Guidelines by staff, including L.I.P.s
- Observe implementation of Guidelines during tracer and other survey activities on patient care units



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Goal-Specific Survey Considerations

Goal #7: Reduce the risk of health care-associated infection.

Requirement #7.b.—Manage as sentinel events ...

- Ensure that the organization's definition of "sentinel event" does not exclude events that are associated with infection
- Review IC surveillance data to determine whether qualifying sentinel events are reported internally for review (RCA)
- Assess RCA process for this type of event (by example provided by the organization or by discussion of methodology)
 - Participants (should be a team, not just the ICP)
 - Scope (should be the patient's care, not just the infection)



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Goal-Specific Survey Consideration

Goal #8: Accurately and completely reconcile medications across the continuum of care.

Requirement #8.a. and 8.b. – Process Development/ Provider Communication

- Interview leadership
- Interview Pharmacy Director, P & T chair
- Patient Tracer Activity
- System Tracer Activity



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Goal-Specific Survey Consideration

Goal 9 Reduce the risk of patient harm resulting from falls

Requirement 9.a.—Risk Assessment

- Patient Tracer Activity
- Medical Record Reviews
- Review assessment and re-assessment process
- Interview direct caregivers
- Review organization's written policies



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For more information:

The Joint Commission Web Site

dchristiansen@jcaho.org



The Joint Commission ORYX Initiative

Using Performance Measures to Improve the Quality of Health Care

Japanese Council on Quality Healthcare
August 30, 2004

Frank S. Zibrat
Associate Director
ORYX Implementation
Division of Accreditation Operations
630/792-5992



Improving the Accreditation Process

Agenda for Change 1987



The Agenda for Change

Establish a *data-driven* continuous accreditation process designed to:

- Increase relevance and value of Joint Commission accreditation
- Strengthen Joint Commission standards development process
- Enhance comparative evaluation of health care organizations
- Support process improvement in health care organizations



Standards vs. Performance Measures

Standard

- A statement that defines the performance expectations, structures, or processes that must be substantially in place in an organization or service to enhance quality of care



Standards vs. Performance Measures

Performance measure

- A qualitative tool reported as a rate, ratio or percentage.
- Provides an indication of an organization's or service's performance in relation to a specified process or outcome.



Use of Performance Measure Data The Accreditation Process


Use performance measure data to supplement and guide the standards-based survey process:

- To provide a more targeted focus
- To enhance the surveyor's ability to assess the way HCOs analyze and use performance measurement data
- As a basis for monitoring actual ongoing performance
- As a tool for guiding and stimulating continuous improvement in accredited organizations




Use of Performance Measure Data Health Care Organizations

- Assess current performance – establish baseline
 - How have we done over time?
 - How do we compare with other organizations?
 - In what areas can we improve?
- Control performance
 - Are key processes in control?
 - Early warning system that identifies potential areas of poor performance
 - Allows for immediate corrective action




Use of Performance Measure Data Health Care Organizations

- Verify improved performance
 - How have design changes affected processes and outcomes
- Improve Outcomes
 - Continuously monitoring and improving performance leads to improved outcomes and increased patient satisfaction

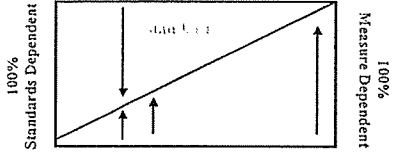


Use of Performance Measurement Data in the Accreditation Process


- Accreditation decisions continue to be standards-based
- Survey Process:
 - Data use will be assessed during on-site surveys
 - Data will contribute to evaluation of standards compliance



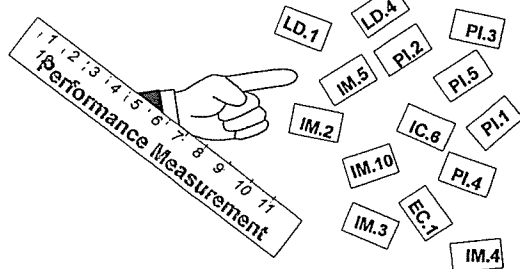

Standards and Performance Measures Are Complementary



Complex interrelationships exist among any given standard and an array of relevant performance measures




Performance Measures May Point to Standards Compliance Issues

ORYX: The Next Evolution in Accreditation™

Initial Phase
1996



ORYX Initial Phase

Advisory Council on Performance Measurement

- Identify criteria against which performance measurement systems could be evaluated
- Advisory body to the Joint Commission
 - Enhance understanding of the state of performance measurement nationally through evaluation of current measurement methods
 - Advise on the uses of performance measurement data



Performance Measure

- Performance measure:
 - A quantitative tool
 - Calculated from a group of data elements
 - Provides an indication of a health care organization's performance in relation to a specific process or outcome



Performance Measurement System

- Performance Measurement System:
 - An entity consisting of an automated database(s) that facilitates performance improvement in health care organizations through the collection of data on process and/or outcome measures of performance.
 - Must be able to generate internal comparisons of organization performance over time, and external comparisons of performance among participating organizations at comparable times.



What Is A Good Measure?

- Description of rationale and intent
- Documented description of population
- Defined data elements and allowable values
- Defined sampling procedure (if applicable)
- Specified calculation methodology
- Useful to health care organization



Types of Performance Measures

- Clinical Measures:
 - Evaluate the processes or outcomes of care associated with the delivery of clinical services
 - Allow for intra- and inter-organizational comparisons to continuously improve patient health outcomes
 - May focus on the appropriateness of clinical decision making and implementation of these decisions
 - Must be condition specific, procedure specific, or address important function of patient care, e.g.
 - medication use
 - infection control
 - patient assessment, etc.



Types of Performance Measures

- Clinical measures (cont'd)
 - **Process:** A measure that assesses a process of care, i.e., an interrelated series of events, activities, actions, mechanisms, or steps that transform inputs into outputs
 - **Example:** aspirin at arrival for patients experiencing an AMI
 - **Outcome:** A measure that indicates the result of the performance (or non-performance) of a function(s) or process(es).
 - **Example:** mortality following coronary bypass surgery



Types of Performance Measures

- **Perception of Care/Service:** focus on satisfaction with the delivery of clinical care, e.g., medication use, pain management, communication regarding plans/outcomes of care, prevention and illness, improvement in health status, etc.
 - **Example:** patient education about discharge medications
- **Health Status:** address the functional well-being of specific populations in relation to specific conditions, demonstrating change over time.
 - **Example:** physical well-being before and after treatment



Calculation of Performance Measures

- **Proportion (rate):** Derived by dividing the numerator (i.e., cases that meet the criterion for good/poor care) by the denominator (i.e., all cases to which the criterion applies) within a given time frame. The numerator is a subset of the denominator.
- **Ratio (rate):** A rate-based measure in which a relationship exists between two counted sets of data which may have a value of zero or greater. In a ratio, the numerator is not necessarily a subset of the denominator
- **Continuous variable:** An aggregate data measure in which the value of each measurement can fall anywhere along a continuous scale.



ORYX Initial Phase

Great degree of flexibility

- Choice of over 100 measurement systems
- Over 8,000 disparate measures
 - Lack of standardization of measure specifications across systems
 - Valid comparisons only between organizations using the same measures
 - Limited size of comparison groups and hindered statistically valid data analyses.



Disparate Measurement Strategies

- Clinical measures with predefined numerators and denominators
- Severity indices
- Care planning tools
- Survey instruments
- Clinical registries



Variable Approaches to Data Collection

- Administrative data
- Medical record data
- Combination of medical record and administrative data
- Clinician or patient-based assessment instruments (i. e., survey data)




ORYX: The Next Evolution in Accreditation™

Data Collection & Submission




Data Collection and Submission

- Hospital
 - Contacts with a measurement system and advises the Joint Commission
 - Selects required number of relevant performance measures from among those offered by measurement system and approved by Joint Commission
 - High risk
 - High volume
 - Problem prone
 - Collects and submits patient level measure data monthly to measurement system




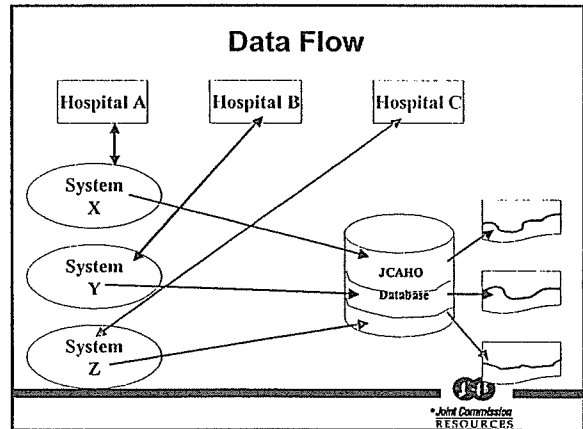
Data Collection and Submission

- Measurement System
 - Quarterly electronic submission of measure data
 - Monthly aggregate data points
 - Healthcare organizational-level data
 - System-level data
 - Data are due to Joint Commission 4 months after the last day of each quarter
 - Example: January-March data due July 31




Top Ten ORYX Measures Chosen for Hospitals

1. Perioperative Complications	6. Respiratory function
2. Perioperative Mortality	7. Rehabilitation
3. ER Dept.	8. Pneumonia
4. CHF	9. Cardiovascular
5. Acute myocardial infarction	10. Patient satisfaction





ORYX Performance Measure Report




Joint Commission's Measure Analysis

1. Missing data
 - Aberrant data
2. Control charts
 - Internal comparisons
3. Comparison charts
 - External comparisons




ORYX Performance Measure Report

Control Charts




Control Chart Requirements

- Time ordered data
- 12 – 15 data points considered “trial limits”
 - Process capability is known when 24 data points available if “in statistical control”
- Select the correct control chart type based on how the measure is calculated...



Control Chart Types


Measurement Data:	Control Chart	IF small sample size
PROPORTION	p-chart	Adjusted p-chart
RATIO	u-chart	Adjusted u-chart
CONTINUOUS	X-bar S chart	XmR chart (Individual's chart)



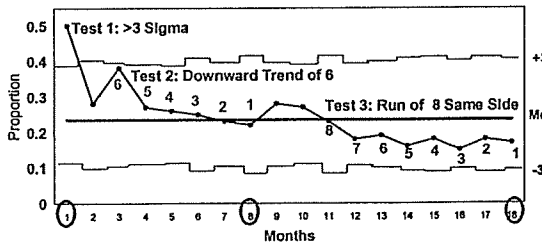

Control Chart Signals

“Out of Statistical Control” Tests for Special Cause Variation:

1. A data point above the UCL or below the LCL (Shewhart’s test)
2. A run of 8 consecutive data points on one side of the center line
3. A trend of 6 consecutive data points steadily increasing or decreasing



Control Chart Tests

Interpretation of Control Charts

- In statistical control = *common cause variation*
 - A stable process that is performing as it was designed
 - Lacks out of statistical control signals
- Out of statistical control = *special cause variation*
 - Signals are present that suggest the process (behind the measure) is not performing as it was designed
 - Process is unstable, and performance in the future is not predictable

