Community Hospital Risk Management

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EXECUTIVE SUMMARY:

The Panacea community hospital in the Hot springs County, Arkansas is a big community hospital 52-inpatient beds providing medical. Surgical, mental health, pediatrics, Ob-gyn services and emergency care.

Of late there has been serious concern about the patient safety and quality of patient care delivered by the hospital. Close examination for the causes of the unsatisfactory quality of care and patient safety reveals that the hospital lacks proper and adequately supported risk management department. One employee only who is a part of the Quality Improvement cell sees the risk management program of the hospital and there is lack of proper guidelines for risk management and effective communication of the strategies to employees. Also there are no programs to train the employees in this area and to update their knowledge. Incident reporting methods have become obsolete due to lack of training and proper use of information systems. The positive thing about the risk management program is that it is integrated with the quality improvement program, as they are essentially two sides of the same coin. The risk management cell also does an effective job of overseeing risk associated with malpractice, building and estate and equipments and consumables and compliance with federal and state laws and regulations. The conflict and grievance resolution function is effectively overseen by the supervisors and higher-level management and is not a matter of concern in Panacea hospital.

However quality and safety can significantly impact the reputation and financial viability of the hospital in several ways:
- Economic losses due to malpractice litigation
- Economic losses due to decrease in market share because of profiling, variation analysis and benchmarking used by reimbursement agencies
- Loss of accreditation, licensure or certification
- Inability to deliver to the expectation of the community it serves and its stakeholders which affects its reputation and clout
- It also affects the morale of the hospital employees and the potential for future growth of the hospital

In this report on the risk management program of Panacea community hospital, we will discuss about the risk management functions, strategies and its implementation in detail with regards to patient safety and quality, followed by recommendations.

The paper first analyzes all the issues of patient safety and quality from a general perspective and then applies it to the hospital in question: Panacea Community Hospital. It is an attempt to educate the CEO about its various aspects so that he or she can institute necessary changes in the organization.

**PROBLEM STATEMENT:**

The risk management program of the Panacea hospital has not been very effective in influencing the patient safety and quality outcome. Infact the outcomes are getting poorer, which is a matter of concern for the growth and financial viability of the hospital. It also has the potential of affecting accreditation of the hospital as it has to comply by the AHRQ and JCAHO regulations and
above all it has the social obligation of delivering quality care to the population it serves.

WORKING DIAGNOSIS:

On careful analysis of the situation it appears that the risk management program is not performing optimally in the area of patient safety and quality outcome. However handling of the other risk management functions of: claims management, regulatory functions and risk financing.

There is a need for a proper risk management department integrated with the quality improvement department (Quality Improvement & Risk Management, QI&RM) and for proper coordination and communication between different constituents of the hospitals, which can be achieved by building up of proper and effective leadership, proper organizational culture, clinical protocols, effective information systems and increased communication between staff.

Decreased efficacy of risk management program = f (patient safety + quality of services + organizational culture and protocols + continuing education).

METHOD OF ANALYSIS:

The method used for analysis of problem statement was examination of the records of the hospital, interviewing the staff, examining structure and protocols
and analysis of the articles and research papers, articles and statistical data for suggestions to address the problem statement.

LITERATURE REVIEW:

PATIENT SAFETY AND QUALITY CONTROL:

Patient safety has been a dominant healthcare focus in recent years, especially after the IOM report of “To Err Is Human”. Deaths in hospitals due to avoidable adverse events is the seventh leading cause of death in US, exceeding those caused by AIDS, breast cancer and motor vehicle accidents (James Reason, Delivering Patient Safety). The accreditation and reimbursement issues and JCAHO’s 2005 National Patient Safety Goals (NPSG) increased the focus. As stated earlier patient safety and quality control are essentially two sides of the same coin. Echoing this perspective is the survey report by Department of Health and Human Services (DHHS), in which health center respondents identified credentialing (51%), quality improvement (42%), comprehensive medical records (41%) and clear communication with the patients and staff (38%) as the most important risk management activities (George Grob, DHHS, February 2005). Costs in the revenue spent on implementation of these programs are nominal as compared to high cost incurred in litigations and to treat preventable complications. Realizing this fact, most of the health care organizations now have a combined department for Quality Improvement & Risk Management (QI&RM). But what good be an efficient QI&RM department be if it does not has
the authority to implement revised plans and strategies and active participation by all the staff of the hospital. The efficient organizations realize this and thus have adequate participation from all the departments and staff in the QI&RM program and are supervised by the joint committee of the CEO of the hospital and chiefs of medical staff, besides the QI&RM specialists.

Source: Annie Risk, Patient Safety: What Does It Have To DO With Me, NHS.

**Patient Safety: A Global Issue (As % of Acute Admissions)**

First lets discuss about the factors affecting patient safety followed by steps to prevent them. This is followed by the discussion of implications of organizational culture and work conditions and its effect on patient safety.

Errors affecting patient safety can involve any of the five broad categories of: Medicine, Surgery, Diagnosis, Equipment and Lab reports.
Factors affecting patient safety:

- **Medication delivery**: including wrong dose, wrong medicine, prescriptions for children, failure to monitor and treat side effects, blockage of infusion pumps.

- **Mismatching patients and their treatment**: misidentification of the patient because of improper identity tags or identification protocols, leading to prescription of wrong medicine or service, for example mismatched blood transfusion.

- **Equipment error**: errors associated with equipment may be due to user error, faulty equipment, wrong device used or unavailability of the equipment.

- **Working beyond competency**: being overzealous with the treatment and ignoring evidence based medicine, difficulty in getting professional assistance or advice, yet going ahead with the assessment or treatment.

- **Failure or delay to make an accurate diagnosis**: for example, poor history taking, not processing the complete information to arrive at diagnosis, failure to link symptoms with test results, delay in diagnosis of disease or complication.

- **Sub-optimal handover**: failure to pass over or obtain information to other provider, improper coordination and communication, poor team briefings or taking of and documenting notes.

- **Sub-optimal continuity of care or failure to arrange for follow-up**: premature discharge of the patient, lack of coordination with different
departments of the same hospital or other providers, failure to follow up on
the test results.

- **Lack of awareness of local procedures and policies**: for example clinicians
  not adapting to different systems as they move between organizations.

- **Inadequate staffing**: failure to match healthcare needs with service
delivery capacity and understaffing which increases the probability of
human error.

- **Lack of policies and procedures or protocols**: which causes problem
during the movement of the patient within the organization. For example,
nurses and physicians not passing whole information about the patient
while transferring him from the emergency department or being unsure
about the department to which to send the patient after stabilization of a
polytrauma patient.

- **Improper layout of the hospital or improper equipment**: for example having
psychiatry ward and neurosurgery ward on the sixth floor and that to
without window grills or not having side bars on beds and alarms for
incoherent or agitated patients.

- **Lab reports or point of care testing error**: Many a times lab reports are
obtained on phone or through word of mouth. Not following the proper
procedure of reconfirming the reports and documenting it may lead to
errors. Point of care testing are relatively common and their effects are
often magnified by rapid availability of results and their immediate
therapeutic implications (FA Meier and BA Jones, Point of care testing error).

<table>
<thead>
<tr>
<th>Table 2. Modified Kost Point-of-Care Testing (POCT) Error Classification</th>
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<tr>
<td>Phases/Steps in POCT Process</td>
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<tr>
<td>-----------------------------------------------</td>
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<tr>
<td>1. Preanalytic phase</td>
</tr>
<tr>
<td>a. Test ordering</td>
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<tr>
<td>b. Patient/specimen identification</td>
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<td>c. Specimen collection</td>
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<tr>
<td>d. Specimen evaluation</td>
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<td>2. Analytic phase</td>
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<tr>
<td>a. Method calibration</td>
</tr>
<tr>
<td>b. Specimen/reagent interaction</td>
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<td>d. Result validation</td>
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<td>3. Postanalytic phase</td>
</tr>
<tr>
<td>a. Report formatting</td>
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<tr>
<td>b. Critical value reporting</td>
</tr>
<tr>
<td>c. Other result reporting</td>
</tr>
<tr>
<td>d. Report recording/retrieval</td>
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</tbody>
</table>

Source: FA Meier and BA Jones, Point of care testing error: Sources and Amplifiers, Taxonomy, Prevention Strategies and Detection Monitors.

**Point of care testing errors and its causes**

The list of the factors affecting patient safety goes on and on and is quite formidable, but the ones mentioned above are most frequently encountered and can be managed with little effort, proper education and promotion of a culture of safety.

**Safety and Quality Improvement Programs:**

JCAHO's 2005 National Patient Safety Goals (NPSG) "highlights problematic areas in health care and describes evidence- and expert-based solutions to these problems. They focus on system wide solutions to deliver safe, high quality care (Regina Salyer, Improving medical/surgical practice through
JCAHO’s 2005 NPSG). Some of the programs aimed at improving patient safety are:

- **Improve the accuracy of patient identification:** JCAHO states that we must use at least two patient identifiers. Patients’ room number is not considered a valid identifier. Valid identifiers are patients name, last four digits of social security number, address and the medical record number that is unique for the patient. Hospital can use any combination of these identifiers. They should verify with patient on admission all the identifiers and show it to and crosscheck with the patient before applying it. Once it has been crosschecked, it should be applied on the bracelet, all the medical records and prescriptions and on the door of patients’ room. It should be computerized and not handwritten. Most important of all, staff should be informed and educated for strict adherence with this protocol before any intervention or procedure.
Improve medication safety: This is especially important in case of look alike and sound alike drugs (dopamine and dobutamine, ranitidine and amantadine, etc) and in high alert medications (heparin, insulin, opioids and chemotherapeutic agents). Few of the strategies used to prevent mix up are using different font for medications printed in the form of large stickers on dispensers (DOPAmine, DOBUTamine). High alert medications should always be double crosschecked with regard to accuracy and dose and should require signing by two people (a staff nurse and a registered nurse or a staff nurse and the physician) and there should be restricted access to them. Concentrated electrolyte solutions should not be kept in patient care areas and their use should be monitored by timely review and limiting the availability of solutions for use.

An example of garbled instructions and different medications in identical bottles

Source: Annie Risk, Patient Safety: What Does It Have To DO With Me, NHS.
➢ Improve the safety of infusion pump use: wrong infusion rates of medications can be potentially fatal. So the hospital should use infusion pumps for infusing medications as rate of infusion vary by site of venipuncture. Hospital should replace obsolete free flow capable pumps with free flow protected pumps. Atleast two people should sign the medication records and patient files before adjusting the rate of infusion or adding an extra bag.

➢ Reduction of the risk of nosocomial infections: A simple habit of washing hands before and after every patient interaction goes a very long way in controlling nosocomial infections. It is beneficial not only for the patients but also for the caregivers. JCAHO guidelines require every hospital to follow the protocols established by Center for Disease Control and Prevention (CDC) regarding hand washing. Patient care areas should have washbasins for washing hands. It should also be strategically placed like just at the exit of the patient room or the examination room. Not visibly soiled hand should be washed with alcohol-based solutions and visibly soiled hand should be washed with soap and water, whether or not gloves are worn. All incidents of hospital acquired infections like UTI or RTI, should be reported and investigated and thereafter strategies should be devised to prevent their future occurrence. The area where there has been more than one case of infection with a particular agent should be evacuated and sterilized before use.
Accurately and completely reconcile medications across the continuum of care: JCAHO 2005 NPSG require this procedure to be fully implemented by year 2006 by all hospitals. On admission of the patient or before prescribing medications in the outpatient setting, a thorough enquiry should be made by both the nurses and physician regarding a complete list of all the medications taken by the patient, current medications and history of allergic reaction to any medication or compound. This data is entered in the Electronic Medical Records (EMR) and should be communicated to other providers in case of referrals or transfer to other facilities.

Reduce the risk of falls: United States spends every year $20.2 billion on treatment and complications associated with falls (http://orthoinfo.aaos.org.htm). All the patients should be evaluated frequently for the risk of falling, either due to the underlying medical condition or patient characteristics or due to medications. Some of the strategies used to prevent the incidence of falls are: separate identifier for this group of patients like a different color of bracelet, low beds with...
side bars, bed or chair exit alarms, placing the alarms and bells within patients reach, frequenting checking and toileting of the patient at night, etc. Use of tools like Morse Fall Risk Assessment Tools is also very helpful in proper assessment (S Wertenberger and J Wilson, The development of a patient safety program across the continuum of care). Proper layout of the building is also helpful in reduction of incidence of falls like, use of ramp instead of stairs, side holding bars in the bathrooms of old patients, placement of geriatric, psychiatric, orthopedic and neurosurgery wards on first floor.

➢ **Reduction of errors in lab reports and point of care testing errors:** In healthcare setting, often the test results are obtained over phone or by word of mouth for immediate therapeutic intervention. This process is fraught with high chances of error. To reduce these errors, it should be mandatory to write down the verbally obtained test results in patient records, reconfirm it by asking again, report it to physician in charge and supplement it with official reports. Various protocols for reducing point of care testing errors are shown in the chart below.
Prevention strategies

- Direct observation of instrument/method functionality (QC)
- Structured observation of method performance (checklists)
- Proficiency testing/relevant test scenarios (evaluations)
- Automation (lockout and forcing functions)

Error monitors

- Order documentation
- Identification validity
- Specimen acceptability
- Result report accuracy

Source: FA Meier and BA Jones, Point of care testing error: Sources and Amplifiers, Taxonomy, Prevention Strategies and Detection Monitors.

**Prevention strategies and error monitors in point of care testing**

- **Proper incident reporting system and its follow-up:** All the hospitals should have a proper incident reporting system. It’s important not only for eliminating malpractice suits liability but it also fosters growth and learning of the organization as a whole. Protocols should be designed for incident reporting and all the incidents should be investigated, inferences drawn from it, policies and procedures should be reformulated or put in place in the light of this learning and should be communicated to all the employees.

Apart from these general precautions, there are numerous safety practices advocated by patient safety promoting agencies like AHRQ, JCAHO and CDC. The National Quality Forum endorsed sets of safe practices are:

A full list of safe practices for every applicable care setting is available on its website (30 Safe Practices for Better Health Care: Fact Sheet). The risk management personnel should study and analyze it and disseminate the findings and recommendations to every staff.

The physicians and other staff should also engage the patient in addressing this issue. They should make patients aware of some of the safe practices that they
can follow for better outcome, give them detailed and correct information based on best practices and can and should also use software's available in the market such as EMMI™, for this purpose. A comprehensive list of safe practices intended for use by patients or their significant others are available on AHRQ website. An information brochure compiling all this information should be dispensed to the patients, every time they visit the hospital.

Links:

Five Steps to Safer Health Care

20 Tips to Help Prevent Medical Errors: Patient Fact Sheet

20 Tips to Help Prevent Medical Errors in Children

Ways You Can Help Your Family Prevent Medical Errors!

The organizational variables also have a significant impact on patient safety and quality of care delivered and its staff approach to patient safety. Some of the important ones are discussed below.

Emphasizing a non-punitive and open environment: Humans provide the healthcare services and errors do occur in it. Goal of the organization should be learn from these mistakes, apply the knowledge gained and prevent its future occurrence. To achieve this, there should be active participation from all, and promoting an open and non-punitive environment can only ensure active participation. The QI&RM department should serve as liaison in disseminating this philosophy and it should be implemented from top down.
Sensitizing and educating employees: Patient safety being a global issue and one of the top priorities of hospitals, there’s a plethora of information available on this subject. QI&RM department should make a compendium of it and distribute it in the form of frequent brochures and through monthly seminars to physicians and teams.

Establishing policies and procedures: Proper policies and procedures go a long way in ensuring patient safety and quality outcome. It enables the staff to perform in a desirable manner in a particular situation, ensures continuity of care, eliminates miscommunication, has a positive effect on hospitals reputation and fosters harmony. Hospitals should develop clinical process guidelines and protocols, a policy for incident reporting, sentinel event reporting and near misses and communicate it in a proper way to patients, families and authorities. A committee should be in place to analyze them and give recommendations, without putting the blame on anyone.
Source: NHS, National Patient Safety Agency

**Working Conditions:** Working conditions like staffing levels, working hours, physical environment, stress level and health of individual, distractions, workflow design and organizational culture, influence the likelihood of errors and the quality of care (RG Hughes & CM Clancy, Working conditions that support patient safety). The impact it can have on the issue of safety and quality can be appreciated by the fact that total number of errors would be far greater if nurses did not intercept 86% of all potential errors, which could result in potential harm (Leap et al, Systems analysis of adverse drug events. ADE prevention study group).

**Leadership:** Leadership's understanding and active commitment serve as the basis for implementing the guidelines discussed above. Leadership should share the vision, model and principles and promote teamwork. CEO of the hospital should actively participate with give support to all the initiatives of QI&RM
department (Jaideep Motwani, Striving towards continuous quality improvement: A case study of Saint Mary’s hospital).

CONCLUSION:

Review of the literature and statistical analysis from the national perspective, shows that patient safety and quality outcome are one of the most important risk management functions. They often fall in the combined jurisdiction of the quality control department and to achieve the desired results, there should be proper external and internal coordination. By external coordination I mean coordination and communication with other providers, regulatory agencies and the patient themselves. Internal coordination means working of the whole organization as a team for attainment of the goal in quality and patient safety. Ample information and suggestions are available on the websites of agencies active in this field on ways to promote patient safety, and the QI&RM department should use them to educate staff and for modifying organizational culture. System and processes factors are also an integral part and deeply affect this issue. Performance of Panacea Community Hospital, Hot Springs, Arkansas, is unsatisfactory in the field of patient safety and quality outcomes. In depth analysis of the statistical data, system design and processes and interviews with the staff, reveals that, these laxities can be attributed to the lack of a full-fledged and active risk management department and its coordination and communication with quality control department, and managers and employees. Due to this it fails to educate its staff about patient safety issues and new developments in it, and in
promoting the culture of patient safety. Most of the efforts of risk management department, manned by only two personnel, are directed towards risk management functions of claims management and regulatory functions. There is an urgent need for redesign of the department and processes and functions of risk management department in Panacea hospital, for it to regain its status of the regional leader and delivery of quality services and patient satisfaction. The managerial policy recommendation gives some advices for the rectification of the problem.

RESTATEMENT OF WORKING DIAGNOSIS:

Analysis of the facts and literature reinforces the initial working diagnosis that there is a need for a proper risk management department integrated with the quality improvement department (Quality Improvement & Risk Management, QI&RM) and for proper coordination and communication between different constituents of the hospitals, which can be achieved by building up of proper and effective leadership, proper organizational culture, clinical protocols, effective information systems and increased communication between staff.

Decreased efficacy of risk management program = f (patient safety + quality of services + organizational culture and protocols + continuing education).

MANAGERIAL POLICY RECOMMENDATIONS:
First priority for Panacea community hospital is to restructure the risk management department. It should combine the quality improvement and risk management department into a single entity (QI&RM Department). Next step is proper staffing of the department. The CEO himself/herself should oversee it.

An example of what the framework should look like is to manage the risk (of quality of services provided and safety of patients, risks to staff and subsequent risks to quality, adhering to rules and regulations and delivering on targets, financing and efficiency of services, and risk management of reputation) is like: RISK MANAGEMENT ORG CHART

Shown below:
Source: adapted from class reading materials and study of various journal articles
➢ Next step is to define the mission, vision and goals of the department that is consistent with that of organizations and the community it serves.

➢ Jobs and responsibility should be defined, written and communicated to all.

➢ Now that the structure is in place, the next challenge is to engage all the employees and sensitize them for an organizational culture of patient safety and striving for excellence. To achieve this education and training programs and monthly workshops should be executed. A non-punitive and open environment should be attained and employees should be encouraged to report the incidents, seek help from competent people or the authority, investigate the root causes, deduce inferences, learn from it, apply it and disseminate it to everyone in the organization.
The above exercise deals with the building up of proper and effective leadership, proper organizational culture, clinical protocols, effective information systems and increased communication between staff, part of problem statement. Now it’s the work of the QI&RM department to implement the patient safety initiatives discussed above.

- In addition to mandatory implementation of patient safety practices discussed above, is the basic list of sixteen basic risk management and quality improvement practices identified and recommended by Health Resources and Services Administration, Department of Health and Human Services, United States (http://oig.hhs.gov/oei/reports/oei-01-03-00050.pdf):
### Table 1. The Level of Importance of Risk Management Practices According to Respondents

<table>
<thead>
<tr>
<th>Risk Management Practice</th>
<th>Percentage of Respondents Who Selected the Practice as One of the Three Most Important</th>
<th>Percentage of Respondents Who Indicated the Practice Was Very or Somewhat Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credentialing of Health Care Professionals*</td>
<td>51</td>
<td>96</td>
</tr>
<tr>
<td>Active Quality Improvement Program*</td>
<td>42</td>
<td>99</td>
</tr>
<tr>
<td>Comprehensive Patient Medical Records*</td>
<td>41</td>
<td>100</td>
</tr>
<tr>
<td>Clear Communication With Patients*</td>
<td>36</td>
<td>99</td>
</tr>
<tr>
<td>Patient Tracking System</td>
<td>20</td>
<td>97</td>
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<tr>
<td>Ongoing Peer Review of Patient Cases</td>
<td>16</td>
<td>94</td>
</tr>
<tr>
<td>Internal Incident Reporting System</td>
<td>15</td>
<td>98</td>
</tr>
<tr>
<td>Appropriate Use of Clinical Protocols*</td>
<td>14</td>
<td>96</td>
</tr>
<tr>
<td>Regular Staff Training on Risk Management*</td>
<td>14</td>
<td>96</td>
</tr>
<tr>
<td>Privileging of Health Care Professionals*</td>
<td>11</td>
<td>95</td>
</tr>
<tr>
<td>Onsite Assessment of Risks and Risk Management Practices</td>
<td>7</td>
<td>92</td>
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<tr>
<td>Documentation of Informed Consent</td>
<td>6</td>
<td>97</td>
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<tr>
<td>Formal Patient Grievance Mechanism*</td>
<td>6</td>
<td>97</td>
</tr>
<tr>
<td>Regular Patient Satisfaction Survey*</td>
<td>5</td>
<td>96</td>
</tr>
<tr>
<td>Clear Communication With Providers</td>
<td>4</td>
<td>99</td>
</tr>
<tr>
<td>Up-To-Date Policies/Procedures on Risk Management*</td>
<td>3</td>
<td>97</td>
</tr>
</tbody>
</table>

*Indicates risk management practices explicitly required by statute or HRSA regulation or policy.


**Risk Management Practices and their Perceived Importance**

The CEO should consult the references for comprehensive list of resources on risk management articles relevant to Panacea Community Hospital.
REFERENCES:

Brennan, M. Role of the hospital risk manager in the prevention and reduction of medication error. National Steering Committee on Patient Safety.

www.npsa.nhs.uk

Factsheet, The leapfrog group for patient safety, Rewarding higher standards.

Grob, G., (February 17, 2005), OIG final report: Risk management at health centers, Department of Health and Human Services.


Phimister, J.R., Ulku, O., Kleindorfer, P.R. (December 2000), and Kunreuther, H. Near-miss system analysis: Phase 1, Risk management and Decision Process Center, Wharton School, University of Pennsylvania.

Reason, J. Delivering Patient Safety – Background notes on the series.


WEB SOURCES:

Five Steps to Safer Health Care (PDF File, 360 KB)

20 Tips to Help Prevent Medical Errors: Patient Fact Sheet (PDF File, 222 KB)

20 Tips to Help Prevent Medical Errors in Children (PDF File, 283 KB)
30 Safe Practices for Better Health Care: Fact Sheet

Advances in Patient Safety: From Research to Implementation

AHRQ Partnerships in Implementing Patient Safety

AHRQ's Patient Safety Initiative: Building Foundations, Reducing Risk: Interim Report to the Senate Committee on Appropriations

http://oig.hhs.gov/oei/reports/oei-01-03-00050.pdf

http://www.ahcpr.gov/qual/errorsix.htm

www.npsa.nhs.uk

http://www.ahrq.gov/

http://www.saferhealthcare.org.uk/IHI/Topics/MedicationPractice/WhatWeKnow/


http://www.oha.com/Client/OHA/OHA_LP4W_LND_WebStation.nsf/page/KeepingPatientsSafe+and+Promoting+Quality+Outcomes