Update on the Maryland Patient Safety Program

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Mission of Office of Health Care Quality (OHCQ)

- *Protect Maryland's Citizens through Regulation and Enforcement*
- *Develop Standards for Providers*
- *Educate Providers and Consumers*
- *Respond to the Public*
- *Improve Quality*

What OHCQ Does

- *The OHCQ is the agency within the Department of Health and Mental Hygiene charged with monitoring the quality of care in Maryland's 8,000 health care and community residential programs.*
- *The OHCQ licenses and certifies the state's health care facilities.*
- *The OHCQ uses state and federal regulations, which set forth minimum standards for provision of care and conducts surveys to determine compliance.*
- *The OHCQ also educates providers, consumers, and other stakeholders through written materials, presentations, its Web site and at conferences and seminars.*

Start Up Challenges Faced By OHCQ Patient Safety Program

- *Developing a system of Event and RCA review.*
- *Data Collection/Review.*
- *Staffing*

(Effective Spring 2006, staffing allows OHCQ to have a dedicated Patient Safety Unit.)

From March15, 2004 - March 8, 2006

- *284 total events reported.*
- *237 (83%) of the 284 were Level 1 Adverse Events.*
- *47 events(17%) were reclassified to level 2, 3 or were determined to non reportable events.*
- *3 of the 237 events were also received as complaints from patients/families.*
- *2 additional events were identified through complaints*

Which Hospitals Have Reported ?

- *55 of 69 hospitals (80%) have reported a Level 1 event.*
- *24 of the 25 hospitals (96%) with >200 beds.*
- *14 hospitals (20%) have reported 148 Level 1events (62%). These 14 hospitals reported at least 6 events each.*
- *Acute care hospitals report more frequently than special hospitals.*

Level 1 Adverse Events by Hospital Types

Hospital Type	No. of Hospitals	No. of Reporting Hospitals	No. of Reports	% of Reports
Acute Care	48	44	217	91
Psychiatric	13	7	9	4
Special Hospitals	8	5	11	5
Totals	69	55	237	100

Level 1 Adverse Events by Hospital Capacity

# of Beds	# of Hospitals	# of Reporting Hospitals	# of Events	% of Events
>300	15	14	104	44
200 -299	10	10	45	19
100-199	24	21	73	31
<100	20	10	15	6

Level 1 Events by Location

Location	# of Events	% of Events
Med Surgical	85	36
OR	37	16
ED	22	9
ICU	22	9
L & D	18	7
Psychiatry	17	7
Radiology	10	5
Pediatrics	5	2
Other	21	9

Examples of OR Level 1 Events

- 7 (19 %) of the Level 1 OR Events are events addressed by the JCAHO Patient Safety goals .
- 30 (81%) of the reported OR events are the result of :
  - Inadequate pre-operative, intra-operative or postoperative assessments
  - Staff breaks during procedures/ Handoffs
  - Coverage
  - Hierarchy (Communication)
  - Malfunctioning Devices / User Error

Examples of OR Events

- *An obese patient having a D&C had a pre-op EKG, which showed irregularities. The MD did not review the EKG & the patient arrested during the D&C & was in a vegetative state.*
- *A patient had an ID consult with an order for an echocardiogram. The ID MD went on vacation before it was read. The patient had abdominal surgery & arrested immediately post op. The physician indicated that he would not have done the surgery if he had known the ECHO results*

Top Ten Reported Events

Falls	*63*
Airway management	*28*
Misdiagnosis	*21*
Delay in treatment	*21*
Medication Error	*19*
Suicide	*17*
Unanticipated complication	*15*
Unanticipated Intra-op or post- op death	*12*
Vascular Access Device	*11*
Fetal Demise	*10*

Airway Management

Airway management events include:

- *Patients with head & neck trauma needing timely intubation;*
- *Surgical patients not correctly intubated;*
- *Ventilator dependent patients who become disconnected with the alarms sounding;*
- *Ventilator dependent patients where the alarms have not sounded or could not be heard.*
- *Many events are associated with conscious sedation.*

Example of Airway Management

A patient with multiple co-morbidities and post-op problems was extubated on post-op day 5 by the ICU RN & the respiratory therapist according to protocol. The patient immediately had an airway occlusion. The RN called the hospitalist (the only MD in the building). During multiple attempts to re-intubate, the patient vomited several times, couldn't be re-intubated and died.

Medication Error #1 (Anticoagulant)

Patient was admitted after a fall. The patient had orders for Lovenox 100 mg sq BID written by the admitting physician in the ED. The patient received the first dose at 0120. A second verbal order was telephoned to the nurse that same night at 0310 for a dose of 1mg/kg sq every 12 hours. Both orders were sent to the pharmacy. The first order was not discontinued. The patient received 550 mg of Lovenox in the next 24 hours. The patient died.

Medication Error #2 (Anticoagulant)

Patient went into A-fib & was started on Lovenox at 1.5 times the recommended dose. This dose was reviewed by the pharmacy & given by the nurse. Three different MDs also re-ordered the dose and the patient received 13 doses before it was stopped. The patient was found to have a large retroperitoneal hematoma & died.

Fetal Demise #1

Patient arrived for elective induction one week early & refused a C-section. Patient failed to progress but was allowed to be in labor for almost four days before forceps were used. The use of forceps resulted in obvious deceleration in fetal heart rate & an emergency C-section was done but the baby's Apgars were 0 & 0. Resuscitation was attempted but was unsuccessful. Later review of the fetal monitor strips showed subtle signs of trouble for quite awhile before the forceps were used.

Fetal Demise #2 & #3

- *Fetus had a known cardiac condition diagnosed while intrauterine. OB elected to deliver at a hospital without specialized neonatal services. Baby born with Apgars of 1,4 & 5 & died that day after transfer to a regional referral center.*
- *Patient at maternity clinic had abnormal urinalysis results that prompted the staff to request a 24-hour urine. These results were not followed up on for 2 weeks, by which time the patient had delivered a non-viable fetus*

How Does OHCQ Review RCAs

- *Nurse surveyor uses OHCQ evaluation tool to review the event.*
- *Patient Safety team (medical director, physician advisor, chief nurse, nurse surveyor) meets weekly to review all RCAs.*
- *Based on review, team will identify additional information or clarification needed to complete the review.*
- *Conference calls, meetings, telephone calls and letters.*

Problems with RCAs

- *Failure to identify root causes.*
- *Failure to develop action plans to correct human factors and other system problems.*
- *Failure to develop quantifiable measures to monitor implementation of the action plans.*
- *Failure to establish reasonable times frames to correct systems problems.*
- *Failure to measure outcomes rather than processes.*
- *Failure to move beyond a "Blame & Shame" mentality.*

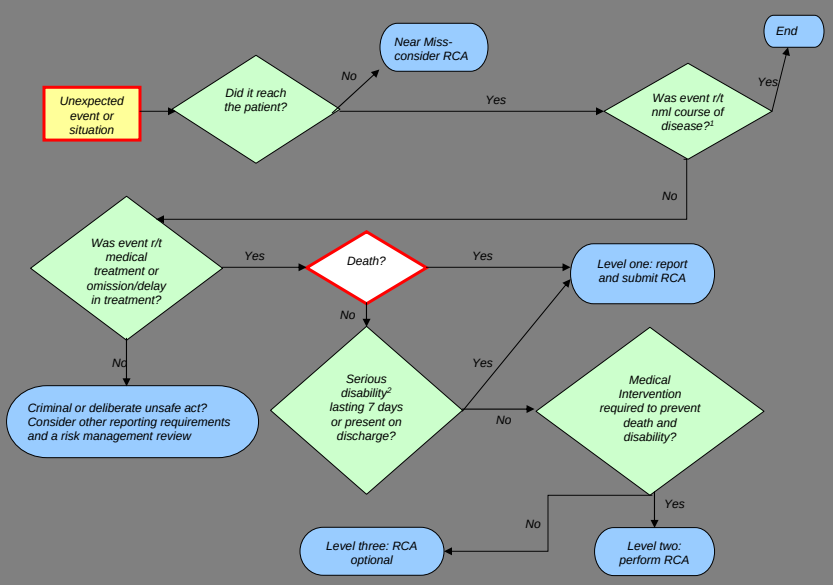
Best Practices

- *One hospital instituted a "Pregnancy Passport" for OB patients to use to track care throughout the pre-natal period after critical labs were missed in a patient who had seen many providers.*
- *Another hospital had an event where a patient went into renal failure when staff did not measure the blood values of certain medications. The hospital made the pharmacy and lab responsible for coordinating lab draws with doses and monitoring the results without a MD order.*

Patient Safety Workgroup

- *Developed a draft "Short" RCA form for reporting & investigation of Falls.*
- *Developed a draft form for use by the hospitals when it is determined after reporting that an event is not a Level 1 Adverse Event or that the event may strictly be a case for Peer Review.*
- *Developed "Patient Event Decision Tree."*

Patient Event Decision Tree



Onsite Patient Safety Program Reviews

- Two have been performed .
- Problems noted in each survey.
- Unreported Level 1 Adverse Events were noted on each survey
- Deficiencies were cited and the hospitals submitted Plans of Corrections.
- Surveys have provided an opportunity for hospitals to work with OHCQ staff to resolve compliance problems.

Future Plans

- *Annual Report*
- *Onsite surveys of Patient Safety Programs will be regularly scheduled.*
- *Hospitals that submit RCAs that do not comply with 10.07.06 may be cited with deficiencies.*
- *Hospitals may receive deficiencies or fines for failing to report a Level 1 Adverse Event. (Department may fine up to $500/day for failure to report)*

Future Plans

- *Analysis of data for repeated similar events.*
- *More Clinical Alerts and information sharing.*
- *Development of a Patient Safety page on OHCQ website.*
- *Interface Patient Safety Programs with other DHMH Public Health Programs.*

Contact Information

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