Annual Update on Reported Adverse Events

Maryland Patient Safety Conference
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Renee Webster, Assistant Director
Hospitals and Laboratories

Anne Jones RN, BSN, MA
Nursing Program Consultant
Maryland Patient Safety Program
Office of Health Care Quality

These speakers have indicated no conflict of interest to disclose.
• The agency within DHMH charged with monitoring the quality of care in Maryland’s 14,000 health care facilities and community residential programs
• Licenses and certifies health care facilities
• Conducts surveys to determine compliance with state and federal regulations which set forth minimum standards for provision of care
• Educates providers, consumers, and other stakeholders through written materials, websites, and presentations
What Do We Regulate?

- Hospitals
- Nursing Homes
- Assisted Living Facilities
- Home Health Agencies
- Ambulatory Surgery Centers
- Residential Treatment Centers
- Prison Hospitals
- Health Care Staffing Agencies
- ICF- IID
- Freestanding Medical Facilities
- Community Mental Health
- Federally Qualified health Centers
- Tissue Banks
- Group Homes
- Laboratories (CLIA)
- Adult Medical Day Programs
- Outpatient PT
- ESRD
- Substance Abuse Treatment Facilities
- Cosmetic Surgery Centers
- Residential Service Agencies
- Birthing Centers
- Surgical Abortion Centers
- Forensic Laboratories
- Cosmetic Surgery
- HMOs
Objectives

• Provide notice of changes at OHCQ
• Understand fiscal and calendar year 2014 trends in reported adverse events.
• Discuss case studies of selected reported events.
• Understand commonly noted problems with root cause analyses, specifically implementing effective and lasting corrective actions.
Changes In Patient Safety

• Anne Jones has been reassigned to the OHCQ Quality Initiatives Unit & now reports to John Parrish, Director of that unit.
• Hospitals will continue to report events and submit RCAs to Anne at the same email & phone number.
• Hospitals should expect the program to operate the same as it did when under the Hospital unit.
• Anne will still maintain a presence within the hospital unit assisting with some surveys and complaints.
Changes in Patient Safety

• Provides some separation from the regulatory process.

• Allows office wider dissemination of some of the quality initiatives Anne has cultivated such as Clinical Alerts.

• Allows for continued coordination with the hospital unit.
Adverse Event Reports

- 2220 Level 1 adverse events from 3/15/04 to 6/30/14.
- 227 in FY14, consistent with 223 in FY13
  - 286 in FY12
  - 348 in FY11
- AHRQ reported a nation-wide 17% reduction in adverse events from 2010 through 2013. For the same time, Maryland hospitals showed a 22% reduction in reported events.
- Total events reported since 3/15/04
  - 2699 total event reports
  - Includes 479 Level 2, Level 3, near misses, and downgraded events.
Complaints Vs. Adverse Events

- Complaints received by OHCQ from 2004 to 6/30/2014 - 3475
- Level 1 Adverse Events – 2220
- Level 1 Adverse Events also received as complaints to Office of Health Care Quality—less than 45 over 10 years.
• More hospitals are reporting adverse events to The Joint Commission.
  – Potential media events
  – Suicides
  – Surgical events

• Most hospitals report that they have informed the family or patient of the adverse event at the time of the report.
  >90% compliance
### Top 10 Adverse Events (3/15/04 – 6/30/14)

<table>
<thead>
<tr>
<th>Death or serious disability associated with:</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falls</td>
<td>768</td>
</tr>
<tr>
<td>HAPU* (Often reported as cohorts affecting multiple patients)</td>
<td>304</td>
</tr>
<tr>
<td>Delays in Treatment</td>
<td>197</td>
</tr>
<tr>
<td>Medication Errors (Includes anticoagulants and untreated hypoglycemia)</td>
<td>133</td>
</tr>
<tr>
<td>Airway Events</td>
<td>105</td>
</tr>
<tr>
<td>Retained Foreign Bodies</td>
<td>95</td>
</tr>
<tr>
<td>Suicides and Attempts</td>
<td>83</td>
</tr>
<tr>
<td>Birth Process (Maternal &amp; Fetal)</td>
<td>67</td>
</tr>
<tr>
<td>Health Care Associated Infections <em>(Often reported as cohorts affecting multiple patients)</em></td>
<td>59</td>
</tr>
<tr>
<td><strong>Wrong site/procedure/patient</strong></td>
<td><strong>50</strong></td>
</tr>
<tr>
<td>Number of Licensed Beds</td>
<td>Number of Hospitals</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Over 301</td>
<td>12</td>
</tr>
<tr>
<td>201 to 300</td>
<td>18</td>
</tr>
<tr>
<td>101 to 200</td>
<td>13</td>
</tr>
<tr>
<td>Less than 100</td>
<td>20</td>
</tr>
</tbody>
</table>
Types of Events Reported per Bed Capacity

FY14

>301 Beds
201-300 Beds
101-200 Beds

Falls
HAPU
Delays
Airway
All Med Errors
All Surgical
Suicides

Patient Safety Center
127
Past Four Years of Events

- Delays in Treatment
- OR events
- Suicides
- Airway Events
- Medication Errors

FY11
FY12
FY13
FY14
FY14 Event Outcomes

- All Surgical: n=14
- All Medication: n=12
- Delays: n=19
- Airway: n=11
- Falls: n=73
- HAPU: n=64

- Death
- Functional Loss
- Loss of Limb/Organ
- Transfer
- PVS/Anoxic Injury
- Increased LOS
- Surgery
• 19 delays in treatment reported in FY14 with 17 fatalities and two limb amputations.

• Both patient who lost limbs had clear signs of arterial occlusion but were treated as if they had venous occlusion—ice, elevation, etc.

• Five events associated with physiologic monitoring.

• Noted human factors failure with EMR early warning systems.
Patient presented to ED several days after a small house fire. Had infected burns on face and inside nose, also had low SpO2. Admitted to M/S bed.

Next evening, SpO2 dropped even further, he had a fever and was tachycardic.

Many calls overnight between LPN and PA-C but PA-C did not examine patient.

PA-C put order into CPOE for monitored bed, but did not tell LPN and no one noted order.

Attending MD saw patient in the AM and ordered an inhaler and nasal spray. Remained in an unmonitored bed.

During the following night shift, patient found unresponsive and apneic. Code called but staff did not attempt resuscitation until code team arrived.
• Obvious problems with chain of command and supervision of non-independent practitioners.
• Poor communication between all providers led to orders not being noted and inadequate medical response.
• Hospital’s EWS tracked VS and other parameters, RRT was supposed to be called for any score >5. This patient had continually been a 5 or 6.
• During RCA, practitioners said they did not pay attention to EWS because “Patient looked OK.”
12 Medication Errors reported in FY14.

Seven fatalities: One of the two untreated hypoglycemia, all three of the events associated with anticoagulants, and three others.

Two adverse events occurred to patients who were NPO for long periods with no provision made for giving meds any route other than oral.

One patient forgot to stop his Factor Xa inhibitor anticoagulant and ASA prior to joint surgery. Pre-op nurse apparently did not recognize that the Factor Xa was an anticoagulant. Patient had uncontrollable post-op bleeding and died.
Surgical Events

• Five wrong site/wrong patient/wrong procedures with no fatalities. RCs are usually incorrect postings from surgeon’s office and/or inadequate patient/site identification.

• Ten RFBs in FY14. Fewer than the 18 reported in FY13. RCs are usually failure to account for everything going into the patient and/or failure to follow up on incorrect counts. Two of the RFBs involved pieces of latex gloves retained following chest tube insertion.
• Eleven airway events reported in FY14, up from a prior average of eight per year. Nine fatalities and two anoxic injuries.

• Two occurred to IID patients with known abnormal airways and difficult intubation.

• One patient suffered airway occlusion following neck surgery.
Airway Events

• Elderly patient to ED with SOB due to COPD exacerbation. Deteriorated, was put on BiPap. No ICU beds so she was kept in ED. ED very busy, so there was little coordination and communication between staff leading to the patient suffering an unnoticed respiratory arrest.

• IID patient with prolonged hospitalization and three reintubations after controlled weaning and extubation. No guardianship so multiple attempts made to get consent for trach without success. Sent to LTC with oral ETT. No notification to vent unit of airway problems so they weaned and extubated patient. No policy or training for difficult airways and no available equipment.
Unusual Events

• Three severe restraint injuries. Two occurred to patients over age 90, and the fatality occurred when a patient in four point restraints with a sitter aspirated and died.
• Two mentally incompetent patients eloped from facilities. One died of exposure.
• One instance of intentionally unsafe care in which an ED nurse rectally inserted the pills a psychiatric patient had just spit out on the floor.
• Three confirmed patient to patient sexual assaults.
• Three burn events with one fatality. One facial disfigurement from a chemical burn in the OR and another serious burn from a foot soak for a patient with diabetic neuropathies.
• Three assaults by non-hospital personnel. Two involved law enforcement and the other involved caregivers from an IID group home.
IT-Mediated Adverse Events

• Standardized care plan for knee replacement: Lovenox SQ, INR x 2 days, discharge on the 3rd day.

• Patient with respiratory complications did not get discharged on 3rd day.

• Lovenox (plus 2 oral platelet aggregation inhibitors from prior heart surgery) continued.

• INRs were automatically discontinued by EMR.

• Patient had massive GI bleed on 9th post-op day and died.
• Use manual or automated surveillance techniques to report errors and close calls caused by HIT.
• Use an Issues Log to track problems, and address ASAP.
• Involve all users in monitoring for the use of paper work-arounds, cut and paste, and error reports.
• Review all skipped or rejected alerts in the CDSS.
• Require pharmacy or department head sign off of orders outside the usual parameters.
• Multi-D brainstorming for QI and feedback to vendors.
RCAs

• Two hospitals cited for not meeting 10.07.06.06 requirements for RCAs. Re-do action plans requested of three others.

• Poor RCAs usually:
  – Focused on “what” not “why”
  – Information insufficient to determine causation.
  – Analysis and corrective actions focused on bedside or point of care. No awareness of latent issues.
  – Infrequent mention of supervision as a causative factors.
  – Project milestones substituted for outcome measurements.

• The Joint Commission RCA form does not meet Maryland requirements.
• Reporting down by 22% from FY11 to FY14. Consistent with 17% Nationwide drop of adverse events identified by AHRQ.

• CDC identified reduction in overall HAIs for same time period. Maryland CLABSI rate is 45% of the national average but CAUTI rate is 89% higher than national average.

• Too many delays in treatment, airway events, and RFB. Delays and airway events carry a disproportionately high mortality rate.
Resources

- www.cdc.gov/hai/progress-report
- http://mhei.org/
- http://dhmh.maryland.gov/ohcq/SitePages/Home.aspx
Contact Information

• Renée Webster, Assistant Director
  410-402-8090
  renee.webster@maryland.gov

• Anne Jones RN, BSN, MA
  410-402-8241
  anne.jones@maryland.gov