Obstetrics: Medical Malpractice and Linkage to Quality Efforts
Obstetrics and medical malpractice claims

- One of the highest liability cost service lines in healthcare
- ...and subject of intensive patient safety / risk management efforts over several years

Have these efforts had an impact?
What are key characteristics of OB claims?
What initiatives have been undertaken?
How have captives supported these efforts?
Towers Watson OB Trend / Benchmarking Analysis

- Basic performance metrics
- We are reviewing three basic performance metrics:

1. **Number of claims per 10,000 deliveries** (claim frequency)
2. **Size of the claims in dollars** (average severity for all non-zero claims; includes expense only claims)
3. **Total loss costs** (combination of frequency and severity)

- We dissect these metrics further:
  - Frequency by size of claim (all non-zero; greater than $100,000)
  - Severity and loss costs for indemnity vs. defense and basic ($1M) vs. total limit

- **Future Study**
  - Using predictive modelling techniques, identify relationships between risk management programs and OB medical malpractice cost performance
  - Analyze return on investment associated with implementation of identified improvement programs
Data
- Metrics are organized on an occurrence basis to align with risk management initiatives
- For simplicity we are presenting loss metrics per 10,000 deliveries
  - We have also reviewed results using a blend of deliveries and employed OB physicians as the “denominator” (= “OB exposure”)
- Due to the lag inherent in OB claims, we derive hospital-specific ultimate loss estimates for immature years

Participation
- 43 health systems
- 600 hospitals
- 700,000 deliveries annually
- Approximately 500 claims annually (>0) and $200+ million annual losses

Results for all participants combined is referred to herein as “industry”
There has been a long term decline in industry OB claim frequency countrywide, reflecting claims greater than $100,000.

- Frequency of claims > $100K
- Industry trend is -1.9%, annually
- Cumulative improvement of 19% over the 10 year period

*Frequency shown above is number of claims greater than $100,000 per 10,000 deliveries
Average OB claim severity – indemnity only

- Industry average OB claim severity has been relatively flat over the long term, compared with increasing broader severity trends.

*Average severity shown above is incurred indemnity divided by claim counts.
The average expense per OB claim has been relatively flat over the long term, though trending slightly higher than average indemnity.

*Average severity shown above is incurred expense divided by claim counts.*
Loss cost per delivery – Unlimited indemnity plus expense

- Industry OB loss cost per delivery have trended downward over the past 10 years, driven by claim frequency.
- The hypothetical inflationary trend line illustrates how costs would have grown if nothing had changed. The resulting current gap is $180 per delivery, a difference of about 34%.

*Average severity shown above is incurred expense divided by claim counts.*
Teaching hospitals — 10-Year OB Loss Costs

Teaching hospital loss costs per delivery are more than double non-teaching.

Factoring in employed OBs, the gap narrows to 70%.

Half the difference is explained by jurisdiction.
Does quantity matter?

Adjusting for jurisdiction and employment model, hospitals with relatively low number of deliveries have highest loss costs.
Jurisdiction does matter

Loss Cost per OB Exposure

Quartile 1  Quartile 2  Quartile 3  Quartile 4
Comparative Benchmarking System Overview

- Open and closed - claims & suits (observations not included in comparatives)
- Clinical, legal and financial attributes
- Denominators e.g., births, visits, surgeries, days
- Multiple peer groups for comparative analysis
- Represents ~ 30% of the National Practitioner Data Base

Clinical Coding Taxonomy – “mining’ malpractice claims for learning
- Hundreds of causation codes for rich analysis of clinical process/errors

<table>
<thead>
<tr>
<th>CBS National Database of Medical Malpractice Cases</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cases</td>
<td>&gt;300K</td>
</tr>
<tr>
<td>Hospitals / Healthcare entities:</td>
<td>~400</td>
</tr>
<tr>
<td>AMC’s / Teaching and Community</td>
<td></td>
</tr>
<tr>
<td>Physician Providers</td>
<td>165K</td>
</tr>
<tr>
<td>New cases per year</td>
<td>8-10K</td>
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</table>
OB case rate is trending down

N=2,056 MPL cases with a loss date 1/1/02–12/31/11 with Obstetrics or Midwifery as the primary responsible service.
Delay in treatment of fetal distress is the most common and costly allegation

<table>
<thead>
<tr>
<th>TOP OB ALLEGATION</th>
<th># CASES</th>
<th>TOTAL INCURRED</th>
<th>% CASES (N=2,056)</th>
<th>% TOTAL INCURRED ($1B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay in treatment of fetal distress</td>
<td>341</td>
<td>$355M</td>
<td>17%</td>
<td>35%</td>
</tr>
<tr>
<td>Improper management of pregnancy</td>
<td>263</td>
<td>$110M</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Delay in delivery (induction/surgery)</td>
<td>119</td>
<td>$109M</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td>Improperly managed labor</td>
<td>136</td>
<td>$103M</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Improper performance of vaginal delivery</td>
<td>294</td>
<td>$90M</td>
<td>14%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Total Incurred includes reserves on open and payments on closed cases.

N=2,056 MPL cases with a loss date 1/1/02–12/31/11 with Obstetrics or Midwifery as the primary responsible service.
**Intrauterine hypoxia/birth asphyxia** is most frequent diagnosis seen in OB cases

Leading final diagnoses in OB cases

<table>
<thead>
<tr>
<th>FINAL DIAGNOSIS</th>
<th>% CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrauterine hypoxia and birth asphyxia</td>
<td>18%</td>
</tr>
<tr>
<td>• hypoxic-ischemic encephalopathy</td>
<td></td>
</tr>
<tr>
<td>Birth trauma</td>
<td>14%</td>
</tr>
<tr>
<td>• brachial plexus injury</td>
<td></td>
</tr>
<tr>
<td>Complication of surgical procedures or medical care</td>
<td>11%</td>
</tr>
<tr>
<td>• retained foreign body</td>
<td></td>
</tr>
<tr>
<td>• puncture / laceration</td>
<td></td>
</tr>
</tbody>
</table>

N=2,056 MPL cases with a loss date 1/1/02–12/31/11 with Obstetrics or Midwifery as the primary responsible service.
Clinical judgment and Communication are leading contributing factors in OB cases

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>% CASES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Judgment</td>
<td>71%</td>
</tr>
<tr>
<td>Communication</td>
<td>34%</td>
</tr>
<tr>
<td>Technical Skill</td>
<td>29%</td>
</tr>
</tbody>
</table>

**TOP CLINICAL JUDGMENT FACTORS % CASES***
- Selection/management therapy—labor and delivery: 39%
- Patient assessment—misinterpretation of dx studies (X-rays, slides, films): 12%

**TOP COMMUNICATION FACTORS % CASES**
- Communication among providers: 21%
- Communication—patient/family & provider: 17%

**TOP TECHNICAL SKILL FACTORS % CASES**
- Technical performance: 24%
- Retained foreign body: 4%

*A case will often have multiple factors identified.
N=2,056 MPL cases with a loss date 1/1/02–12/31/11 with Obstetrics or Midwifery as the primary responsible service.*
Interventions address leading contributing factors in OB cases

*A case will often have multiple factors identified.

N=2,056 MPL cases with a loss date 1/1/02–12/31/11 with Obstetrics or Midwifery as the primary responsible service.
Clinical Guidelines for Obstetrical Services

- Provide guidance to support safest maternal and fetal outcomes
- Developed and revised by expert, multi-disciplinary group, including obstetricians, nurse leaders, nurse midwives, and anesthesiologists
- Codification of:
  - Existing best practices
  - Recommendations from American College of Obstetricians and Gynecologists (ACOG)
  - Guidelines for Perinatal Care (American Academy of Pediatrics and ACOG)
  - Practice Guidelines for Obstetrical Anesthesia
- 2015 request by ACOG Council on Patient Safety to incorporate OB guideline 16: Assessment and monitoring of labor and delivery into content on their own web site(s).
• An increase in maternal mortality has been noted over the past decade

• Improving systems to recognize and treat early indicators of maternal complications may reduce severity or prevent occurrence

• MEWS guideline and algorithm were developed to aid in early recognition and treatment of potentially critical complications in postpartum mothers
The OB Risk Reduction Program

• 6 Entry Requirements Year 1
  – Team Training and Simulation Training
  – Safety Climate Survey
  – OB Clinical Practice Guidelines Test
  – On-Line CME courses: EFM and Shoulder Dystocia
  – Physician Satisfaction Survey

• 4 Maintenance Requirements Years 2 & 3
  – Team training refreshers
  – On-Line CME courses
  – Pass Ob Guidelines Test
  – Participate in Ob Safety Drills
Decrease in OB cases observed after Risk Reduction Program implemented
CRICO major institutions – OB Risk Reduction Program
Individual Nurse Assessment Results
Fetal Monitoring

Fetal Assessment and Monitoring, Nurse, 1st time scores
N=257 Cleveland Clinic nurses in 5 hospitals
APS Peer Group= 12,614 nurses in 365 hospitals
Nurse Score Improvement: Assessment 1 v. Assessment 2
Obstetrical Hemorrhage

N=40 Cleveland Clinic nurse in 4 hospitals
Nurse Assessment Scores: Cleveland Clinic v. APS Facilities
Shoulder Dystocia

Scores by Practice Area
1 - Appropriate documentation for a shoulder dystocia event
2 - Identify common maneuvers used for delivery management
3 - Understand and explain the importance of training and teamwork
4 - Identify potential outcomes of shoulder dystocia
5 - Identify recognized risk factors for shoulder dystocia
6 - Define and describe the mechanics of shoulder dystocia

N=192 Cleveland Clinic nurse in 5 hospitals v. APS Peer Group of 6,338 nurses in 184 hospitals
Obstetrical Claims Real Cause Analysis

[Diagram showing the distribution of causes in Obstetrics]

- Clinical Judgment: 68%
- Documentation: 10%
- Communication: 4%
- Clinical Systems: 4%
- Administrative Systems: 6%
- Technical (Knowledge and Skill): 6%
- Supervision: 2%
MedStar’s OB Claims Study
Real Cause Analysis – Top Common Causes

- Communication breakdown
- Failure to respond to available clinical information
- Failure to monitor patient’s physiological status
- Failure to order diagnostic test in a timely fashion
- Failure to provide adequate supervision
- Failure to obtain consult or referral in a timely fashion
Risk Management Interventions

Council for Ideal Obstetrical Care (CIOC) Formed: charged with developing measurable interventions for system-wide implementation:

- Uniform OB care practices and clinical pathways
  - E.g., oxytocin protocol
- Embedded uniform care practices and clinical pathways into EMR
- Mandatory web-based training – tied to credentialing
- MedStar Obstetrical Training (MOST)
  - Simulation training focused on high risk OB emergencies
    - Shoulder dystocia, operative vaginal delivery, post partum hemorrhage
- Shoulder Dystocia Injury – Rehab Program
Cleveland Clinic
Obstetric Claims Frequency
Based on Resolution Year
Per 10,000 Deliveries

<table>
<thead>
<tr>
<th>Year</th>
<th>CCF</th>
<th>Berkley Avg</th>
</tr>
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<tbody>
<tr>
<td>2011</td>
<td>1.76</td>
<td>1.00</td>
</tr>
<tr>
<td>2012</td>
<td>2.80</td>
<td>2.00</td>
</tr>
<tr>
<td>2013</td>
<td>3.73</td>
<td>3.00</td>
</tr>
<tr>
<td>2014</td>
<td>2.30</td>
<td>2.30</td>
</tr>
<tr>
<td>2015</td>
<td>2.30</td>
<td>2.30</td>
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</tbody>
</table>
MedStar
Claims Management Approaches

• Early Identification and Intervention
  – Disclosure
  – Apology
  – Financial support

• Settlements
  – Good mediators get to the families
  – Structures
  – Special Needs Trusts

• Trials
  – Virtual law firm
  – Identify cases early and position for trial (experts, witness prep, focus groups)
  – ACA
MedStar
Claims

• Claims are inevitable: Even more so for inner city programs with disproportionate high-risk populations
  – No prenatal care
  – Alcohol/drug abuse
  – Obesity
  – Genetics
  – Chronic disease

• Claims are more driven by damages than by medicine
  – Big business for plaintiff firms
  – Opportunistic jurisdictions
  – Life care planning is a cottage industry
  – Jury sympathy (Reptile Theory)

• Claims Commonly Seen in OB
  – Delay in responding to fetal distress
  – VBAC
  – Shoulder Dystocia
  – Instrumented Deliveries
Questions?
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IMAC
Insurance Managers Association of Cayman