Neurosurgery
Claims Data Snapshot
This publication contains an analysis of the aggregated data from MedPro Group’s cases closing between 2009-2018 in which a neurosurgeon is identified as the primary responsible service.

A malpractice case can have more than one responsible service, but the “primary responsible service” is the specialty that is deemed to be most responsible for the resulting patient outcome.

Our data system, and analysis, rolls all claims/suits related to an individual patient event into one case for coding purposes. Therefore, a case may be made up of one or more individual claims/suits and multiple defendant types such as hospital, physician, or ancillary providers.

Cases that involve attorney representations at depositions, State Board actions, and general liability cases are not included.

This analysis is designed to provide insured doctors, healthcare professionals, hospitals, health systems, and associated risk management staff with detailed case data to assist them in purposefully focusing their risk management and patient safety efforts.
Multiple allegation types can be assigned to each case; however, only one “major” allegation is assigned that best characterizes the essence of the case.

Performance of surgical procedures, management of surgical patients and diagnosis-related allegations account for 83% of neurosurgery cases.

Performance of surgery cases account for the largest individual share of total dollars paid, although on average, diagnosis-related cases are most expensive to resolve.

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018
Allegations & dollars

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018; total paid = expense + indemnity dollars; “other” includes allegations for which no significant case volume exists.
Claimant type & top locations

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018
Typically, the higher the clinical severity, the higher the indemnity payments and the more frequently an indemnity payment occurs.

Within the high severity cases are permanent patient injuries ranging from serious to grave, and patient death.

There has been a slight downward trend in the volume of high severity patient outcomes over the last 10 years.

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018; *NAIC severity scale
Most frequent procedures in surgical performance allegations

- Exploration/decompression spinal canal: 19%
- Excision of intervertebral disc: 18%
- Cervical fusion, anterior: 14%
- Lumbar fusion, posterior: 10%

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018
Cases involving the management of neurosurgery patients, which include the surgeon’s recognition of and response to developing complications either intra-operatively or post-operatively, result slightly more often in clinically severe patient injuries (60% of cases vs. 52% of procedural cases).

While complications of procedures may have been the result of procedural error, the failure to timely recognize and/or monitor/manage the issue prevents the opportunity for early mitigation of the risk of serious adverse outcome.

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018
Diagnosis-related allegations

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018; *includes MRSA, meningitis, osteomyelitis & post-op infection
Contributing factors are multi-layered issues or failures in the process of care that appear to have contributed to the patient outcome and/or to the initiation of the case.

Multiple factors are identified in each case because generally, there is not just one issue that leads to these cases, but rather a combination of issues.
Top contributing factor categories – by allegation

- Technical skill: 56% (Performance of surgery) - 97% (Clinical judgment) - 96% (Communication) - 5% (Patient behavior) - 12% (Documentation)
- Clinical judgment: 66% (Performance of surgery) - 89% (Clinical judgment) - 57% (Communication) - 29% (Patient behavior) - 18% (Documentation)
- Communication: 36% (Performance of surgery) - 55% (Clinical judgment) - 57% (Communication) - 24% (Patient behavior) - 16% (Documentation)
- Patient behavior: 24% (Performance of surgery) - 29% (Clinical judgment) - 16% (Communication) - 2% (Patient behavior) - 12% (Documentation)
- Documentation: 12% (Performance of surgery) - 18% (Clinical judgment) - 12% (Communication) - 12% (Patient behavior) - 12% (Documentation)

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018
Focus on surgical performance cases - these specific factors...

...are among those frequently noted in cases with clinically severe patient outcomes, and are more expensive.*

<table>
<thead>
<tr>
<th>Factor category</th>
<th>The details</th>
<th>How much more expensive?*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical skill</td>
<td>Poor technique</td>
<td>101%</td>
</tr>
<tr>
<td>Clinical judgment</td>
<td>Inadequate patient assessments, including failure to appreciate/reconcile signs/symptoms</td>
<td>31%</td>
</tr>
<tr>
<td>Communication</td>
<td>Failed communication among providers - specifically, critical patient information which, if shared, could have mitigated the risk of patient injury</td>
<td>83%</td>
</tr>
</tbody>
</table>

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018; *more expensive than the average total dollars paid for all cases
**Focus on surgical management cases - these specific factors...**

...are among those frequently noted in cases with clinically severe patient outcomes, and are more expensive.*

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<tr>
<th>Factor category</th>
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<th>How much more expensive?*</th>
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<tr>
<td>Clinical judgment</td>
<td>Inadequate patient assessments, including failure/delay to order diagnostic testing</td>
<td>73%</td>
</tr>
<tr>
<td>Communication</td>
<td>Failed communication among providers - specifically, critical patient information which, if shared, could have mitigated the risk of patient injury</td>
<td>105%</td>
</tr>
<tr>
<td>Patient behavior</td>
<td>Issues including dissatisfaction with care and non-adherence to recommended follow-up treatment</td>
<td>19%</td>
</tr>
</tbody>
</table>

Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018; *more expensive than the average total dollars paid for all cases
Focus on diagnosis-related cases - these specific factors...  

...are among those frequently noted in cases with clinically severe patient outcomes, and are more expensive.*

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<th>How much more expensive?*</th>
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<tr>
<td>Clinical judgment</td>
<td>Issues involving the diagnostic decision-making processes involved in selecting the most appropriate treatment plan given the patient’s presentation/symptoms/co-morbidities</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td>Inadequate patient assessments, including failure/delay to order diagnostic testing</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td>Narrow diagnostic focus/failure to establish differential diagnoses</td>
<td>6%</td>
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<tr>
<td>Communication</td>
<td>Failed communication among providers - specifically, critical patient information which, if shared, could have mitigated the risk of patient injury</td>
<td>82%</td>
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</tbody>
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Data source: MedPro Group closed cases, neurosurgery as responsible service, 2009-2018; *more expensive than the average total dollars paid for all cases
In summary: where to focus your efforts

- Ongoing evaluation of procedural skills and competency with equipment is critically important.

- Conduct a thorough assessment of the patient pre-operatively.
  - Ensure that all testing and specialty evaluations are available for review prior to induction; in an ambulatory setting, these details might not always be as readily available as in the inpatient setting.

- Communicate with each other.
  - Actively collaborate with other members of the patient’s surgical care team - including all operating and recovery room staff. Coordinate the steps of the patient’s care, including post-operatively.
  - Talk also to the patient/family, elicit a comprehensive patient history and conduct a thorough informed consent with the patient - separate from the surgical consent.
  - Focus on care coordination if other specialties are involved, including next steps and determining who is responsible for the patient.

- Engage patients as active participants in their care.
  - Consider the patient’s health literacy and other comprehension barriers.

- Document.
  - The surgical record is critically important for detailing the pre-operative patient assessment, intra-operative steps, and post-operative sequence of events. Discrepancies or gaps in the details/timing make it much more difficult to build a supportive framework for defense against potential malpractice cases.
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- **Tools & resources**
- **Educational opportunities**
- **Consulting information**
- **Videos**
- **eRisk Hub Cybersecurity Resource**

<table>
<thead>
<tr>
<th>Education</th>
<th>Materials and resources to educate followers about prevalent and emerging healthcare risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>Information about current trends related to patient safety and risk management</td>
</tr>
<tr>
<td>Promotion</td>
<td>Promotion of new resources and educational opportunities</td>
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MedPro Group has entered into a partnership with CRICO Strategies, a division of the Risk Management Foundation of the Harvard Medical Institutions. Using CRICO’s sophisticated coding taxonomy to code claims data, MedPro Group is better able to identify clinical areas of risk vulnerability. All data in this report represent a snapshot of MedPro Group’s experience with specialty-specific claims, including an analysis of risk factors that drive these claims.

Disclaimer
This document should not be construed as medical or legal advice. Because the facts applicable to your situation may vary, or the laws applicable in your jurisdiction may differ, please contact your attorney or other professional advisors if you have any questions related to your legal or medical obligations or rights, state or federal laws, contract interpretation, or other legal questions.

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