

General Surgery

Claims Data Snapshot

2023



This publication begins with insight into frequency and financial severity profiles by specialty. Then follows an analysis of aggregated data from clinically coded cases opened between 2012-2021 in which General Surgery is identified as the primary responsible service.

Keep in mind...

A clinically coded 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, and other healthcare professionals.

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.

Specialty benchmarking

Specialties have different frequency and financial severity profiles which combine to produce differing risk levels.

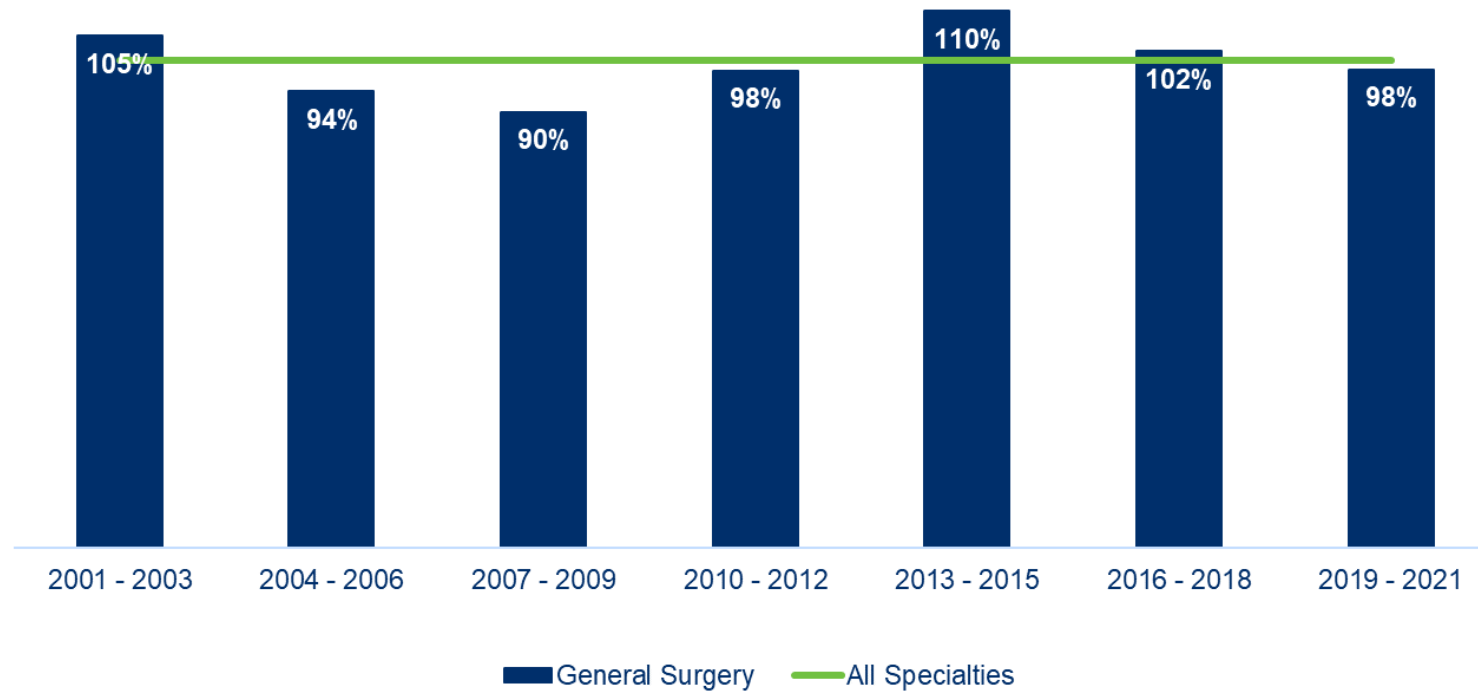
Severity Tier	High	Hematology/Oncology, Pathology, Pediatrics	Anesthesiology, Neurology	Emergency Medicine, Neurosurgery, OB/GYN
	Medium	Family Medicine, Nephrology, Physiatry, Urgent Care	Cardiology, ENT, Gastroenterology, Internal Medicine	Cardiovascular Surgery, General Surgery, Orthopedic Surgery, Radiology, Urology
	Low	Allergy, Dermatology, Occupational Medicine, Psychiatry, Rheumatology	Ophthalmology, Plastic Surgery, Pulmonology	Hospitalists
		Low	Medium	High
		Frequency Tier		

Specialty trends – General Surgery

INTRODUCTION | KEY POINTS | GENERAL DATA ANALYSIS | CONTRIBUTING FACTORS | FOCUSED DATA ANALYSIS | CASE EXAMPLES | RISK MITIGATION

General Surgery has an average financial severity per case and a higher claim frequency compared to all specialties.

Average Severity - General Surgery Relative to All Specialties



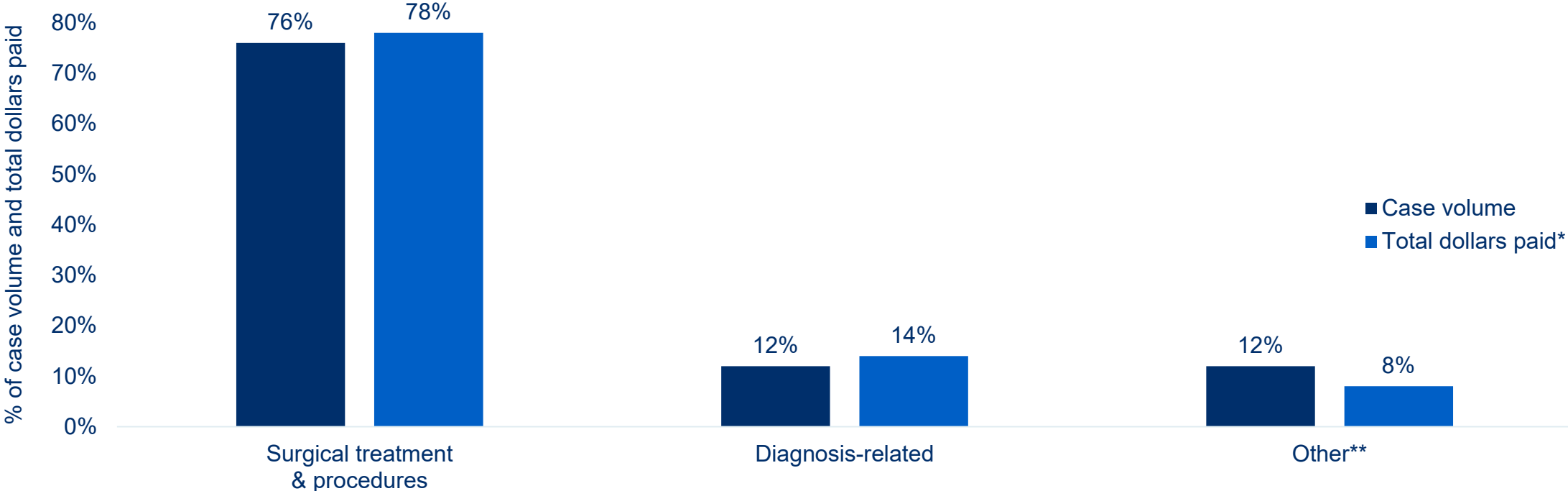
Key Points - Clinically Coded Data

INTRODUCTION | **KEY POINTS** | GENERAL DATA ANALYSIS | CONTRIBUTING FACTORS | FOCUSED DATA ANALYSIS | CASE EXAMPLES | RISK MITIGATION

- **Surgical allegations account for more than three-fourths of General Surgery case volume and total dollars paid***. Performance-related allegations account for half of those, with the majority involving cholecystectomies, hernia repairs, appendectomies and colorectal resections. **Cases involving the management of surgical patients, including pre-, intra-, and post-operatively**, are often related to the surgeon's response to developing complications. 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.
- **Diagnosis-related allegations** account for 12% of General Surgery case volume. These most commonly reflect missed/delayed diagnoses of cancers and post-operative complications and infections. **These cases commonly reflect breaks in the diagnostic process of care**, most often during the initial diagnostic phase, including assessment and evaluation of patient symptoms, establishment of differential diagnoses and ordering of diagnostic testing.
- **Contributing factors, which are multi-layered issues or failures in the process of care that appear to have contributed to the patient's outcome**, and/or to the initiation of the case, provide valuable insight into risk mitigation opportunities. Clinical judgment factors, including the selection of the most appropriate procedure for the patient's condition and those related to diagnostic decision-making, technical skill factors including recognition/management of known complications and poor procedural technique, and suboptimal communication among members of the patients' care teams, are key drivers of both clinical and financial General Surgery case severity.

Major Allegations & Financial Severity

Each case reflects one major allegation category. Categories are designed to enable the grouping and analysis of similar cases and to drive focused risk mitigation efforts. The coding taxonomy includes detailed allegation sub-categories; insight into these is noted later in this report.



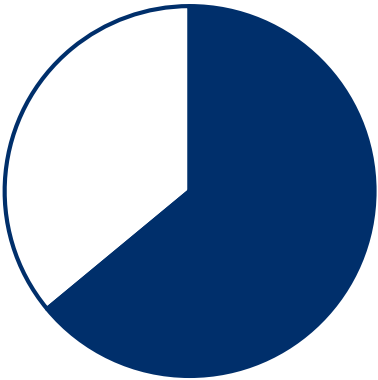
MedPro Group + MLMIC cases opened 2012-2021, General Surgery as responsible service (N=1198); *Total dollars paid = expense + indemnity; **Other includes allegations for which no significant case volume exists

Clinical Severity*

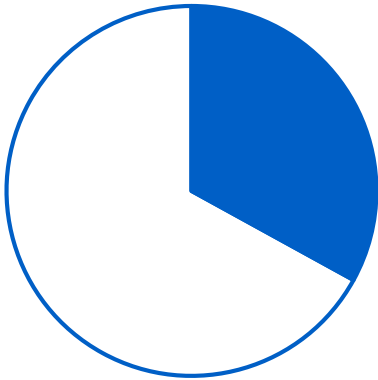
Clinical Severity Categories	Sub-categories	% of case volume	<p>Typically, the higher the clinical severity, the higher the indemnity payments are, and the more frequently payment occurs.</p>
LOW	Emotional Injury Only	2%	
	Temporary Insignificant Injury		
MEDIUM	Temporary Minor Injury	48%	
	Temporary Major Injury		
	Permanent Minor Injury		
HIGH	Significant Permanent Injury	50%	
	Major Permanent Injury		
	Grave Injury		
	Death		

MedPro Group + MLMIC cases opened 2012-2021, General Surgery as responsible service (N=1198); *Severity codes reflect National Association of Insurance Commissioners (NAIC) injury severity scale

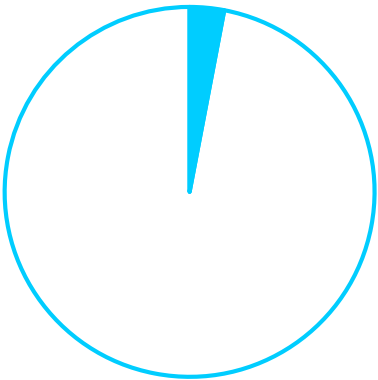
Claimant Type & Location



Inpatient
64%



Ambulatory
33%



Emergency
3%

Top Locations	% of case volume
Inpatient surgery	40%
Patient room/ICU	27%
Ambulatory surgery	14%
Office/clinic	11%

Contributing Factors

“Contributing factors reflect both provider and patient issues. They denote breakdowns in technical skill, clinical judgment, communication, behavior, systems, environment, equipment/tools, and teamwork. The majority are relevant across clinical specialties, settings, and disciplines; thus, they identify opportunities for broad remediation.”

Despite best intentions, processes designed for safe patient outcomes can, and do, fail.

Contributing factors are multi-layered issues or failures in the process of care that appear to have contributed to the patient's outcome, and/or to the initiation of the case, or had a significant impact on case resolution.

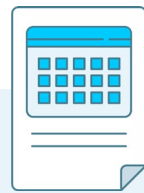
Multiple factors are identified in each case because generally, there is not just one issue that leads to these cases, but rather a combination of issues.



Administrative



Behavior-related



Clinical environment



Clinical judgment



Clinical systems



Communication



Documentation



Supervision



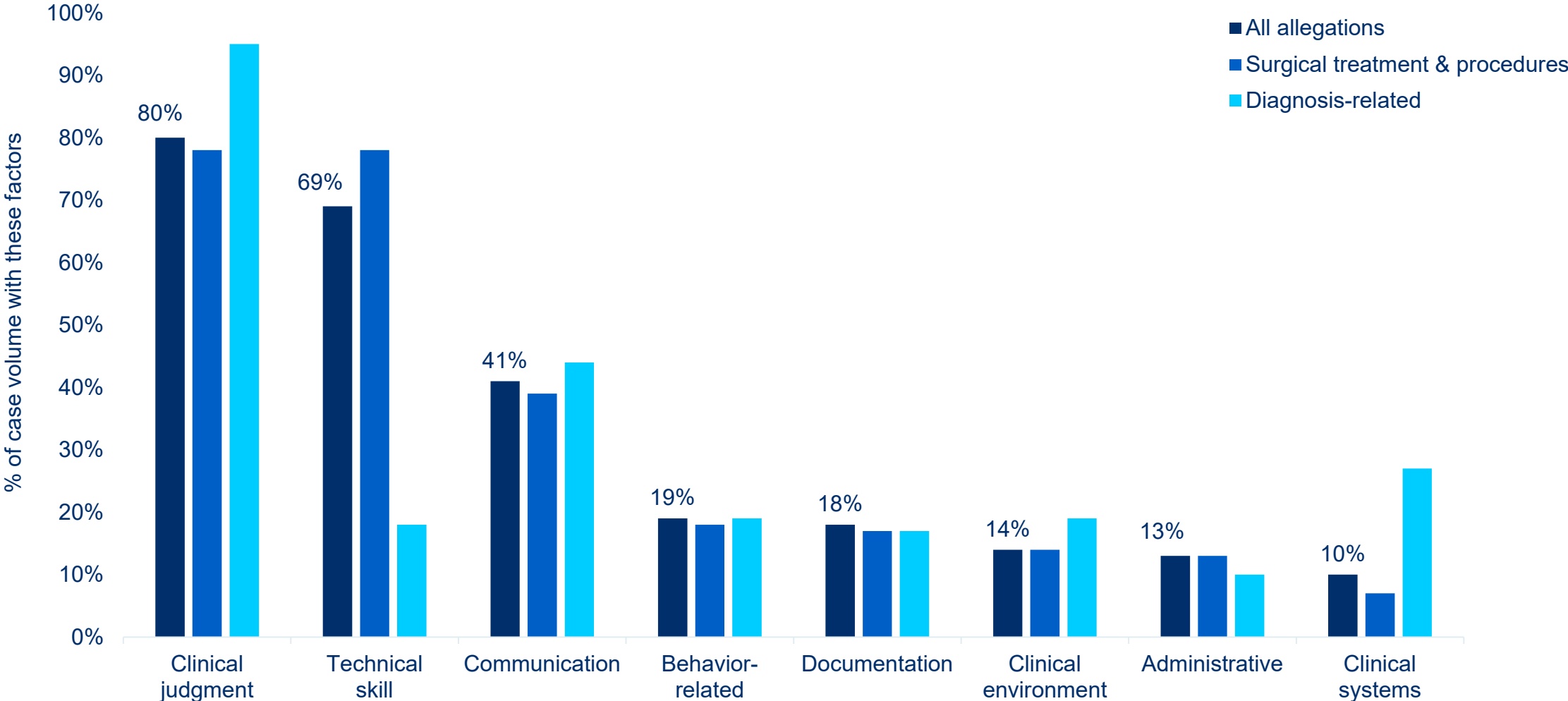
Technical skill

Contributing Factor Category Definitions

INTRODUCTION | KEY POINTS | GENERAL DATA ANALYSIS | **CONTRIBUTING FACTORS** | FOCUSED DATA ANALYSIS | CASE EXAMPLES | RISK MITIGATION

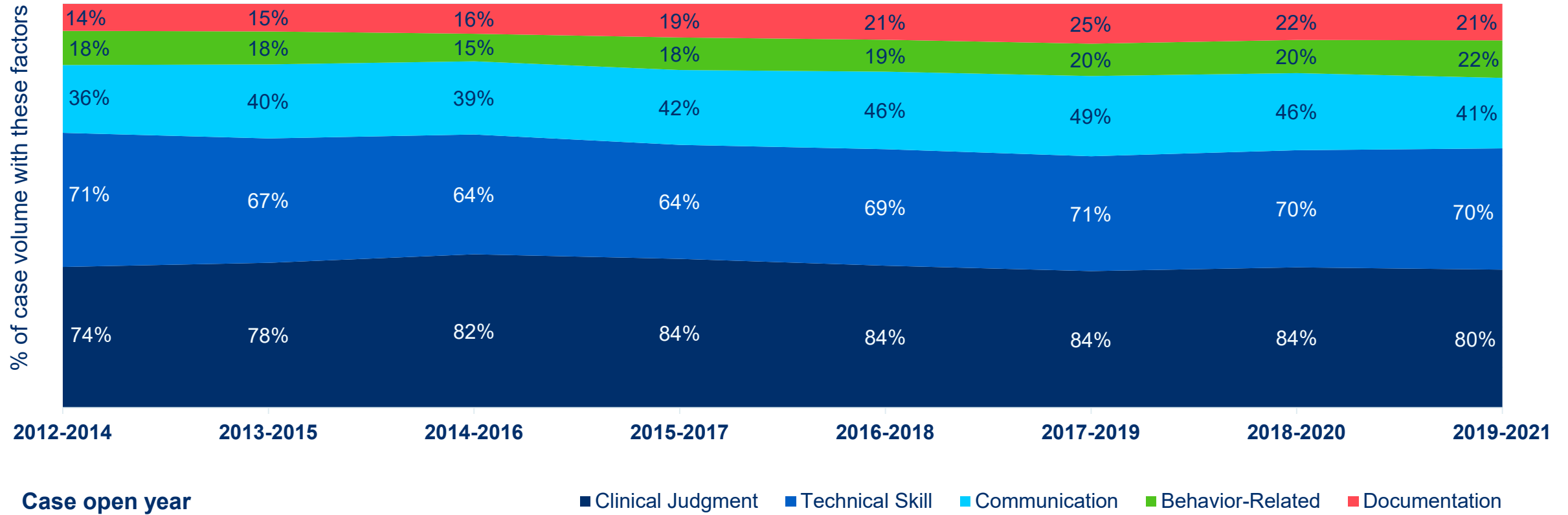
Administrative	Factors related to medical records (other than documentation), reporting, staff, ethics, policy/protocols, regulatory
Behavior-related	Factors related to patient nonadherence to treatment or behavior that offsets care; also provider behavior including breach of confidentiality or sexual misconduct
Clinical environment	Factors related to workflow, physical conditions and “off-hours” conditions (weekends/holidays/nights)
Clinical judgment	Factors related to patient assessment, selection and management of therapy, patient monitoring, failure/delay in obtaining a consult, failure to ensure patient safety (falls, burns, etc), choice of practice setting, failure to question/follow an order, practice beyond scope
Clinical systems	Factors related to coordination of care, failure/delay in ordering test, reporting findings, follow-up systems, patient identification, specimen handling, nosocomial infections
Communication	Factors related to communication among providers, between patient/family and providers, via electronic communication (texting, email, etc), and telehealth/tele-radiology
Documentation	Factors related to mechanics, insufficiency, content
Supervision	Factors related to supervision of nursing, house staff, advanced practice clinicians
Technical skill	Factors related to improper use of equipment, medication errors, retained foreign bodies, technical performance of procedures

Most Common Contributing Factor Categories by Allegation



MedPro Group + MLMIC cases opened 2012-2021, General Surgery as responsible service (N=1198); More than one factor per case, therefore totals >100%

Distribution of Top Five Factor Categories Over Time



While the distribution of these top (most common) factors across rolling three-year timeframes is relatively consistent, take note of even slight increases over time as indicators of emerging risk issues.

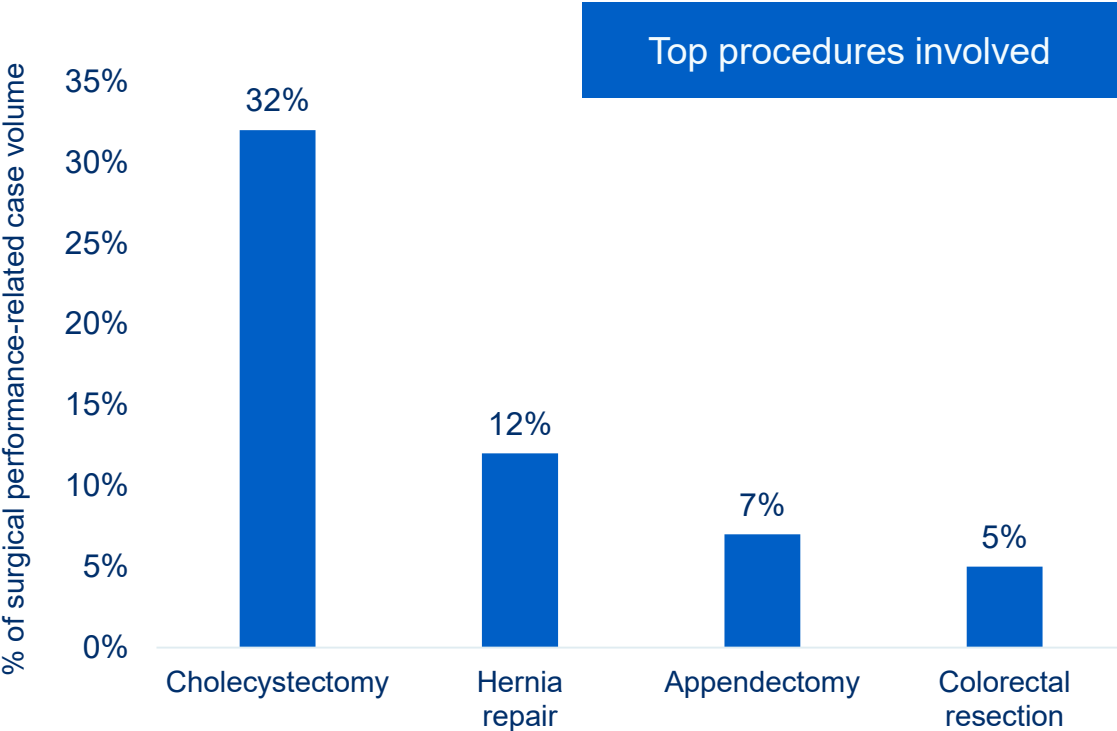
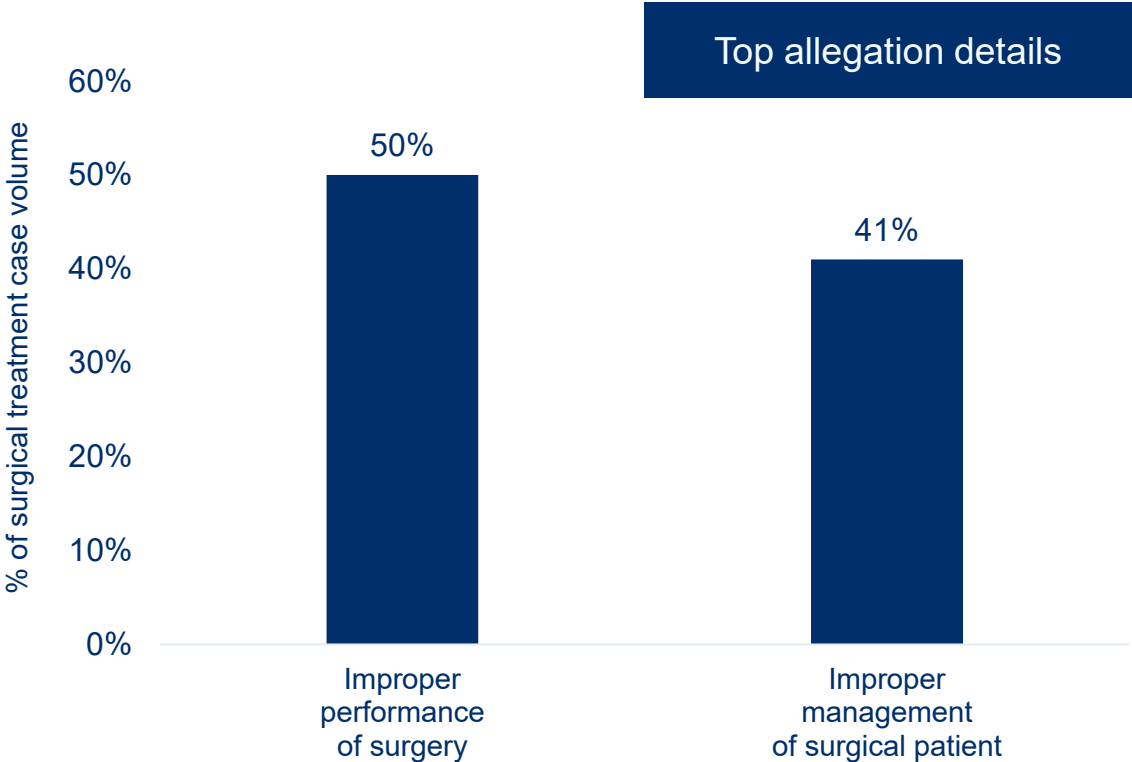
Focus on Most Common Drivers of Clinical and Financial Severity

INTRODUCTION | KEY POINTS | GENERAL DATA ANALYSIS | **CONTRIBUTING FACTORS** | FOCUSED DATA ANALYSIS | CASE EXAMPLES | RISK MITIGATION

Factors associated with high clinical severity outcomes	(CJ) selection/management of most appropriate surgical procedure (57%)	% of high severity case volume
	(CJ) failure to appreciate/reconcile signs/symptoms/test results (41%)	
	(TS) occurrence and management of known complications (33%)	
	(CJ) failure/delay in ordering diagnostic test (23%)	
	(CO) suboptimal communication among providers about patient condition (20%)	
Factors associated with the costliest indemnity payments	(CJ) misinterpretation of diagnostic studies (47%)	% more expensive than the average indemnity payment*
	(CE) events arising on weekends/holidays (29%)	
	(CJ) inadequate patient assessments – history & physical (13%)	
	(CJ) failure/delay in ordering diagnostic test (11%)	

Clinical judgment factors, including the selection of the most appropriate procedure for the patient’s condition and those related to diagnostic decision-making, technical skill factors including recognition/management of known complications and poor procedural technique, and suboptimal communication, are key drivers of both clinical and financial General Surgery case severity.

Focus on Surgical Treatment Allegations

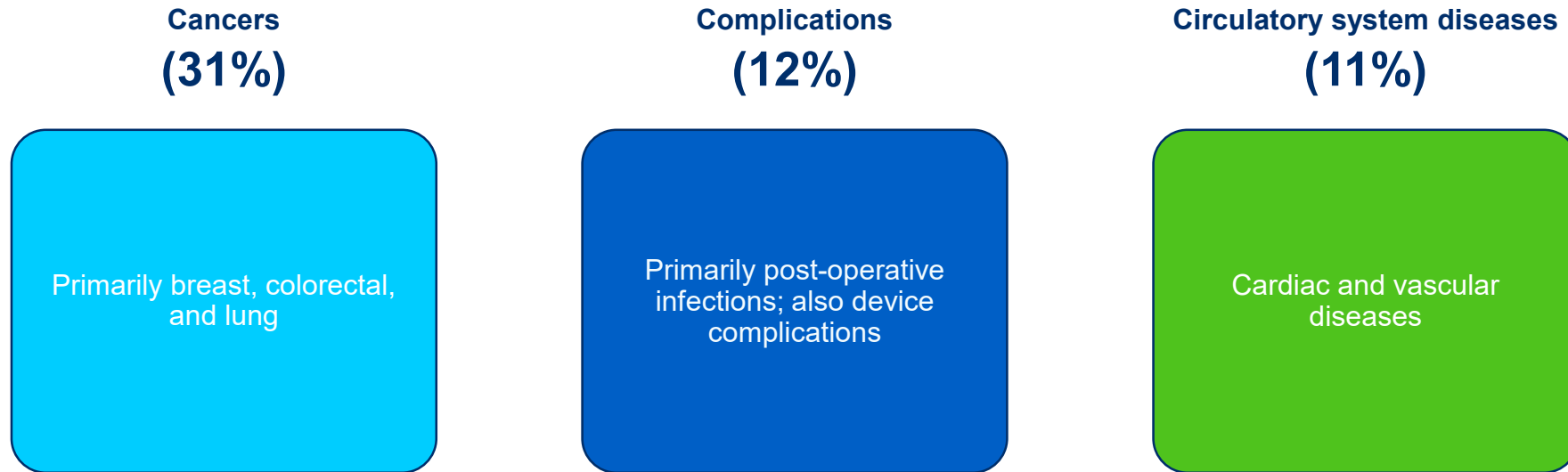


Cases involving the management of surgical patients, including pre-, intra-, and post-operatively, are often related to the surgeon's response to developing complications. While complications of procedures may have been the result of procedural error, the failure to timely recognize and/or monitor/manage the issue prevents the opportunity for early mitigation of the risk of serious adverse outcome.

Focus on Diagnosis-Related Allegations

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Diagnosis-related allegations encompass wrong diagnoses, failures/delays, and misdiagnoses. See below for the top diagnoses* noted in these cases.



Focus on Diagnosis-Related Allegations

Diagnosis-related allegations encompass wrong diagnoses, failures/delays, and misdiagnoses. Note the key opportunities to reduce diagnostic errors along the diagnostic process of care* below.

Phase 1

Initial diagnostic assessment 88% of cases	Patient notes problem & seeks care
	History & physical
	Patient assessed, symptoms evaluated
	Differential diagnosis established
	Diagnostic testing ordered

Phase 2

Testing and results processing 28% of cases	Performance of diagnostic tests
	Interpretation of diagnostic test results
	Test results transmitted to/received by ordering provider

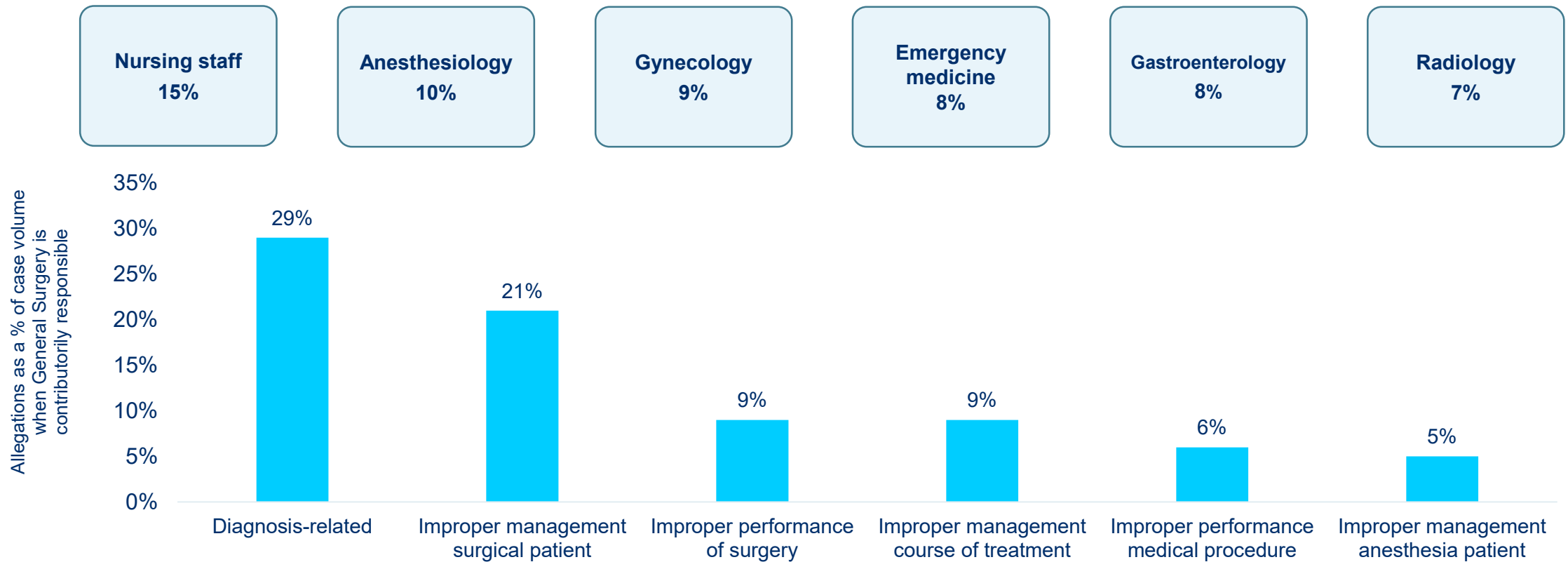
Phase 3

Follow-up and coordination 62% of cases	Physician follows-up with patient
	Referrals/Consults
	Patient information communicated among care team
	Patient compliance with follow-up plan

MedPro Group + MLMIC cases opened 2012-2021, General Surgery as responsible service (N=1198); *each step reflects a combination of contributing factors; diagnostic process of care algorithm courtesy of Candello, a division of CRICO Strategies

Contributorily Responsible

Although this analysis is focused on cases reflecting General Surgery as the primarily responsible service, another 537 cases identify General Surgery as contributorily responsible. The primary services in these cases are varied, reflecting the myriad of providers who care for patients along the healthcare continuum. The most common primary services, and a comparison of top allegation categories, are shown below.





The following stories are reflective of the allegations and contributing risk factors which drive cases brought against General Surgeons.

We're relaying these true stories as lessons to build understanding of the challenges that you face in day-to-day practice. Learning from these events, we trust that you will take the necessary steps to either reinforce or implement best practices, as outlined in the section focused on risk mitigation strategies.

Case Examples

INTRODUCTION | KEY POINTS | GENERAL DATA ANALYSIS | CONTRIBUTING FACTORS | FOCUSED DATA ANALYSIS | **CASE EXAMPLES** | RISK MITIGATION

SETTLED

\$950,000

CONTRIBUTING FACTORS

Clinical judgment

Inadequate patient assessment
– premature discharge

Choice of practice setting

Failure to appreciate/reconcile
relevant signs/symptoms/test
results

Communication

Suboptimal communication
among providers and with the
patient/family regarding patient
condition

Documentation

Delay in documenting

Technical skill

Poor recognition/management
of known complication

IMPROPER PERFORMANCE OF LAPAROSCOPIC CHOLECYSTECTOMY IN PATIENT WITH A HISTORY OF GASTRIC BYPASS RESULTING IN DEATH

A female patient in her early 60s, with a history of gastric bypass, developed acute cholecystitis. After evaluation by a General Surgeon (surgeon), she opted to undergo a laparoscopic cholecystectomy. **During surgery, a bowel perforation occurred, which was timely recognized and repaired by the surgeon.** A drain was also placed and the patient was discharged the same day.

Prior to discharge, arrangements were not made for home health care to assist with the drain. The patient called the surgeon's office on post-operative day one, **expressing concerns regarding the functionality of the drain, but did not receive a return call.** On post-op day two, she called again, complaining of significant pain, but **was reassured by staff after they spoke with the surgeon that post-operative pain was normal.** On day three, **the patient was taken by ambulance to hospital and was rushed into emergency surgery.**

The drain was found to have been placed into the abdominal wall muscle rather than the abdominal cavity. The patient's entire small intestine appeared ischemic. A partial resection was performed, but she required a **second surgery the following day due to her worsening condition**; total ischemia and necrosis was discovered. She was transferred to another hospital where surgeons removed her small intestine and half of her colon. **The patient died six days after the cholecystectomy.**

Documentation in the **medical record revealed that there had been two post-operative telephone calls suggesting a benign post-operative course, but these were written after the patient's death.**

Case Examples

INTRODUCTION | KEY POINTS | GENERAL DATA ANALYSIS | CONTRIBUTING FACTORS | FOCUSED DATA ANALYSIS | **CASE EXAMPLES** | RISK MITIGATION

SETTLED

\$3.3M

CONTRIBUTING FACTORS

Clinical environment

Weekend/holiday

Clinical judgment

Selection/management of most appropriate surgical procedure

Communication

Patient not informed of adverse event

Technical skill

Poor recognition/management of known complication

Poor technique

IMPROPER PERFORMANCE OF HERNIA REPAIR RESULTING IN PROLONGED HOSPITALIZATION FOR SEPSIS AND NEUROLOGICAL COMPLICATIONS

A female in her mid-40s presented for surgical repair of recurrent abdominal hernia with mesh. Her history was significant for multiple incisional and ventral hernias/repairs (and post-operative complications including abdominal abscesses). During surgery, the **General Surgeon (surgeon) identified an intra-operative bowel injury to the transverse colon**. The surgeon repaired the injury, with what was **later determined to be poor surgical technique** (the repair resulted in too much tension/strain on the anastomosis). The patient complained of pain post-operatively, and was febrile on Saturday, post-operative day one. A CT scan was consistent with post-op changes. The **patient not informed of the intra-operative injury until the surgeon returned to the hospital for Monday morning rounds**.

Due to persistent fever and an elevated white blood cell count, a chest x-ray was done on post-operative day four which revealed an **intraperitoneal air consistent with perforated intra-abdominal viscus**. The patient was taken back to surgery. The **surgeon found the anastomotic leak, and documented tension, but rather than create a diverting ileostomy, he created a new anastomosis in the contaminated surgical field**. (Expert reviews later were highly critical of this decision.) Post-operatively, the patient suffered multiple complications including abdominal abscess requiring drainage, respiratory failure and neurological changes which required transfer to a different hospital.

Posterior reversible encephalopathy syndrome (PRES) was diagnosed and treated, and the patient returned to the initial hospital. **She remained hospitalized for six months, with multiple returns to surgery for treatment of wound infections and abscess drainage**. Her family requested transfer to a third hospital, from which she was subsequently discharged. One year later, she was re-hospitalized (at a fourth hospital out of state) for extensive abdominal reconstructive surgery, including colostomy take-down, fistula closure, and recreation of the abdominal wall. Patient suffers permanent abdominal disfigurement and debilitation.

Risk Mitigation Strategies

- **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.
 - Maintain a consistent post-procedure assessment process.
 - Update and review medical and family history at every visit to ensure the best decision-making.
 - Maintain problem lists.
- **Communicate with each other.**
 - Focus on care coordination if other specialties are involved, including next steps and determining who is responsible for the patient.
 - Elicit a comprehensive patient history and conduct a thorough informed consent with the patient.
 - Give thorough and clear patient instructions.
- **Engage patients as active participants in their care.**
 - Consider the patient's health literacy and other comprehension barriers.
 - Recognize that patient satisfaction with treatment outcomes can be influenced by a thorough informed consent and education process.
- **Document.**
 - The operative 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.

MedPro Group & MLMIC Data

MedPro and MLMIC are partnered with Candello, a national medical malpractice data collaborative and division of CRICO, the medical malpractice insurer for the Harvard-affiliated medical institutions.

Derived from the essence of the word candela, a unit of luminous intensity that emits a clear direction, Candello's best-in-class taxonomy, data, and tools provide unique insights into the clinical and financial risks that lead to harm and loss.

Using Candello's sophisticated coding taxonomy to code claims data, MedPro and MLMIC are better able to highlight the critical intersection between quality and patient safety and provide insights into minimizing losses and improving outcomes.

Leveraging our extensive claims data, we help our insureds stay aware of risk trends by specialty and across a variety of practice settings. Data analyses examine allegations and contributing factors, including human factors and healthcare system flaws that result in patient harm. Insight gained from claims data analyses also allows us to develop targeted programs and tools to help our insureds minimize risk.



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