LONE STAR ALLIANCE
A RISK RETENTION GROUP

the REPORTER

2-HOUR CME: INFECTIOUS DISEASE

Also in this issue:

- MPL Association Data Sharing Project: Sepsis-related claims
- Risk management services: Versatility in times of crisis

Q4
Quarter 4, 2020

CME - INFECTIOUS DISEASE: A REVIEW OF CLOSED CLAIM STUDIES AND LIABILITY ISSUES

OBJECTIVES

Upon conclusion of this course, the physician will be able to:

1. list allegations prevalent in lawsuits involving the treatment of infectious disease;
2. describe strategies to reduce diagnostic errors;
3. discuss issues associated with allegations of failure to follow up;
4. identify the types and causes of communication errors; and
5. explain how good documentation techniques can help prevent malpractice claims.

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DISCLOSURE

The authors have no commercial affiliations/interests to disclose related to this activity. TMLT staff, planners, and reviewers have no commercial affiliations/interests to disclose related to this activity.

TARGET AUDIENCE

This 2-hour activity is intended for physicians of all specialties who are interested in practical ways to reduce the potential for medical liability.

CME CREDIT STATEMENT

The Texas Medical Liability Trust is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Texas Medical Liability Trust designates this enduring material for a maximum of 2 *AMA PRA Category 1 Credit(s)™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

PRICING

A fee of $100 will be charged when accessing this CME course online at http://lonestara.inreachce.com.

ETHICS CREDIT STATEMENT

This course has been designated by TMLT for 1 credit in medical ethics and/or professional responsibility.

TEST

To receive CME credit, physicians should complete the test questions that follow the activity. A passing score of 70% or better earns the physician 2 CME credits.

INSTRUCTIONS

the Reporter CME test and evaluation forms must be completed online. After reading the article, go to https://lonestara.inreachce.com. Follow the online instructions to complete the forms and download your certificate.

Questions about the CME course? Please call TMLT Risk Management at 800-580-8658.

ESTIMATED TIME TO COMPLETE ACTIVITY

It should take approximately 2 hours to read this article and complete the questions and evaluation form.

RELEASE/REVIEW DATE

This activity is released on November 23, 2020 and will expire on November 23, 2023.

CME DISCOUNT

Lone Star Alliance policyholders who complete this program may earn a 2.5% discount that will be applied to their next eligible policy period.

DISCLAIMER

These closed claim studies are based on actual malpractice claims from Texas Medical Liability Trust. These cases illustrate how action or inaction on the part of the physicians led to allegations of professional liability, and how risk management techniques may have either prevented the outcome or increased the physician's defensibility. Studies have been modified to protect the privacy of the physicians and the patients.

INTRODUCTION AND HISTORY

Smallpox, plague, malaria, influenza, tuberculosis, HIV/AIDS, cholera, measles, typhus, pneumonia, rotavirus, Ebola, Marburg virus, MERS, dengue, yellow fever, hantavirus, MRSA, anthrax, pertussis, tetanus, meningitis, syphilis, SARS, Zika.

COVID-19.

Mysterious illnesses, epidemics, and pandemics have always played a role in our lives, in our societies, and in our stories. This human experience has been described in classical works — a plague among the Greek warriors in *the Illiad* — and in modern dystopian novels — the "super-flu" in *The Stand.*

In early works, epidemics were often considered divine punishments or portrayed as supernatural events. Often, the occurrence of an epidemic provided moral commentary on the characters in the story or on the society they lived in.

By the 19th century, scientists had discovered that epidemics were caused by microorganisms, and public health experts and physicians began suggesting more empirical ways to prevent or limit epidemics. The supernatural aspects disappeared from many stories, only to be replaced by more political and apocalyptic elements.

For physicians, these stories have a more profound meaning — they capture a tale of collective progress.

"The history of infectious disease is a saga of the exploits of the great clinicians and microbiologists of the past who have worked on bacterial toxins, parasite lifecycles, bacteria, fungi, rickettsia, *Chlamydia*, *Mycoplasma*, and protozoa. As a result, great advances have been made in public health, prevention, control measures, and chemotherapy for infectious diseases." [1]

This article tells individual stories of infectious disease, featured as closed claim studies. The issues in the cases selected for this CME include:

- failure to follow up on or report lab results;
- reporting incorrect lab results;
- failure to diagnose; and
- failure to appreciate the seriousness of a patient's symptoms.

These closed claim studies are provided to help you improve patient safety and reduce potential liability risks that may arise when treating patients.

CASE 1: FAILURE TO DIAGNOSE TUBERCULOSIS

Presentation

A two-year-old boy with a five-day history of intermittent fever and stomachache was brought to his pediatrician. The child was diagnosed with a viral syndrome and treated with simethicone drops, liquid electrolyte replacement, and ibuprofen.

Physician action

Six days later – on July 16 – the patient was taken to the Emergency Department (ED) at a local hospital with continued fever, vomiting, wheezing, and shallow respirations. A chest x-ray was taken and interpreted by Radiologist A as "diffuse moderate perihilar interstitial prominence. Focal consolidation lateral segment right middle lobe and follow-up for pneumonia."

The child was diagnosed with an upper respiratory infection, prescribed amoxicillin, and discharged. The mother was instructed to follow up with their pediatrician.

Over the next few days, the child had continued fever and poor appetite. A neurologic assessment showed a slight deviation of the child's right eye. Pediatrician A ordered a stat MRI that revealed "diffuse ring enhancing lesions in bilateral cerebral and cerebellar hemispheres."

The following day, Pediatrician B admitted the patient to the hospital for possible meningitis. Another chest x-ray was taken and compared with the film taken four days earlier. It showed persistent right middle lobe consolidation but slight improvement of the interstitial prominence. The patient was transferred to a children's hospital.

Pediatric Intensivist A treated the patient. The physical exam revealed the patient had altered mental status and a mild inward deviation of the left eye without any ocular lesions. An MRI revealed "multiple cerebral lesions with ring enhancements."

Pediatric Intensivist A's impression was the child had probable neurocysticercosis. The differential diagnosis listed multiple abscesses and lymphoma with a secondary diagnosis of hyponatremia due to an inability to secrete ADH.

The patient was prescribed decadron and albendazole. An infectious disease specialist and pediatric neurologist were consulted. Results of a lumbar puncture were negative, and the child was transferred to the pediatric ICU.

Pediatric Neurologist A assessed the patient the next day. His examination revealed mild nuchal rigidity. After reviewing the chest x-ray taken at the first hospital, Neurologist A questioned whether the film actually showed "perihilar adenopathy" — a finding generally consistent with tuberculosis in children. He ultimately concurred with the diagnosis of neurocysticercosis.

Radiologist B reviewed the previous chest x-rays, and his impression was "right upper and right middle lobe infiltrate/atelectasis, interval improvement from prior study."

The pediatric infectious disease physician's impression was also neurocysticercosis. He mentioned that the family traveled frequently to Mexico, but there was no family history of tuberculosis or contact with tuberculosis.

Radiologist C read x-rays taken the following day, July 19. His interpretation was "frontal and lateral views of the chest again show a right middle lobe area of atelectasis and infiltrate with associated atelectasis and/or infiltrate of the right upper lobe in its apical segment. The heart is normal. There is no pleural effusion or pneumothorax." His impression was no significant change.

Radiologist C also read the chest film taken from the prior hospitalization and mentioned that tuberculosis should be considered. However, he did not dictate his report until three days later and authenticated it 11 days later.

On July 24, the child became unresponsive. He developed fever and hyponatremia. EEG results suggested encephalopathy. A head CT noted brain edema in the right frontal lobe and left thalamus. A chest CT noted unusual vegetation at the junction of the superior vena cava and right atrium. The following morning, Pediatric Intensivist B reviewed the chest x-ray from July 24 that showed "hilar adenopathy and right middle lobe process." He questioned whether tuberculosis could play a role in the patient's condition.

Pediatric Neurologist A ordered a repeat MRI that showed findings consistent with multiple tuberculoma and tuberculous meningitis. Results of acid-fast stains of gastric aspirate confirmed mycobacterium tuberculosis. By the time the diagnosis was made, the patient had developed severe cognitive deficits that led to permanent disability.

Allegations
A lawsuit was filed against three pediatric neurologists, two pediatric intensivists, three radiologists, and the children's hospital. It was alleged that all three radiologists misread the chest x-rays and failed to consider tuberculosis as a possible diagnosis. The plaintiff's allegations focused on Radiologist C and included: failure to immediately notify the attending physician of the potential diagnosis of tuberculosis and failure to timely approve the report electronically.

Legal implications
Two defense reviewers stated that tuberculosis should have been high on the list of differential diagnoses based on the clinical presentation and geographical area. A blind radiology review confirmed that tuberculosis should have been listed as a differential diagnosis based on the x-rays on July 11 and July 19. However, because of the number of defense experts involved, there were some inconsistencies in their opinions.

The three-day delay in dictating the radiology reports on July 11 and July 19 created a significant weakness for the defense. Radiologist C failed to mention the possibility of tuberculosis due to the suspected lymphadenopathy on the July 11 report.

The plaintiff 's attorney retained well-credentialed experts, who stated that the clinical presentation of the patient, along with lymphadenopathy on the various chest x-rays, should have made all the physicians suspicious for tuberculosis.

Disposition
This case was settled on behalf of all defendants.

Risk management considerations
Radiologist C was working as a temporary employee and used the hospital's PACS system, which was similar to the system that he used in his practice. He mistakenly concluded that when he used voice dictation to produce his report, the report would automatically be available for others to view. Radiologist C was unsure what "authenticated" meant. In this system, the report needed to be finalized to generate a report that other physicians could view.

Whether reading x-rays at multiple sites as a *locum tenens*, thorough training on the facility's PACS system is crucial. Although there are similarities, some PACS systems use different methods to finalize and transmit reports.

Additionally, reports should be reviewed for accuracy. Radiologist C read the first chest x-ray as "right middle lobe area of atelectasis and infiltrate without associated atelectasis and/or infiltrate of the right upper lobe in its apical segment." Later he admitted that he was only aware that this patient had "right middle lobe infiltrate" and that this was a typo. It is important to review and dictate the patient history including all previous diagnostic studies, especially when the films represent a pattern of serious ongoing problems.

CASE 2: FAILURE TO TREAT WOUND INFECTION

Presentation
On January 4, a 42-year-old man came to an orthopedic surgeon with an injury to his right knee. The patient complained of aching and pain with buckling, decreased range of motion, stiffness, swelling, and tightness. The problem had been ongoing and was aggravated when the patient's knee "gave out" while he was on a ladder.

Physician action
An MRI of the right knee revealed a large tear of the posterior horn and mid-body of the medial meniscus. There was a small joint effusion and a small popliteal cyst.

The orthopedic surgeon recommended diagnostic arthroscopy and medial meniscectomy. He wrote orders at a local hospital for the patient to obtain a preoperative EKG; receive cefazolin prophylactically; and sign an informed consent form. The informed consent form included a discussion of the risks of infection, blood loss, nerve or blood vessel damage, footdrop, blood clots, and the need for further surgery.

On January 10, the orthopedic surgeon performed a right knee arthroscopy with partial medial and lateral meniscectomies and a chondroplasty of the patellofemoral joint. The patient was discharged to rehab.

The patient returned to the orthopedic surgeon on January 24. The patient reported that he had been doing well until the physical therapist cleaned the wound, and then he experienced increased pain, swelling, and fever.

The orthopedic surgeon documented that the patient had a wound infection. He took the patient to surgery that day and performed a right knee arthroscopy with synovectomy and debridement. He reported finding a cloudy, yellowish fluid upon entering the knee joint and purulent material in the suprapatellar pouch, medial joint space, and lateral joint space. Cultures were obtained and submitted to the lab.

The next day, January 25, the patient asked to be discharged from the hospital. The orthopedic surgeon ultimately agreed to the discharge and documented the following:

"The patient was afebrile and hemodynamically stable throughout his hospital stay. His clinical course revealed defervescence and improvement on antibiotics. This was discussed with the patient at bedside on postoperative day #1. He wished to be discharged home secondary to social concerns and need for child care and also the distance from the hospital to his loved ones. Discussed with the patient that ideally it would be nice to maintain him on IV antibiotics until final cultures are read. At his insistence I agreed with discharge to home. I am discharging him on broad-spectrum amoxicillin/clavulanic acid to cover him for staphylococcus. I have discussed with him that there may be a need for change of antibiotics, potentially IV antibiotics for six weeks for coverage. At the time of discharge, he appeared to understand the risks of potential recurrent infection necessitating further operation."

On January 27, two days after his discharge, the patient said he called the orthopedic surgeon to report continuing severe pain. The patient claimed the orthopedic surgeon told him to continue his pain medication and return to the clinic the following week.

Two more days passed, and the patient came to the ED. The ED physician found the results of the cultures obtained by the orthopedic surgeon five days earlier. The results showed multiple organisms including MRSA and Group B Strep. The patient was admitted to the hospital and started on IV vancomycin. He underwent extensive treatment and multiple procedures that eventually culminated in a total knee replacement.

Allegations

A lawsuit was filed against the orthopedic surgeon. The allegations included:

- failure to start vancomycin when the patient initially returned with signs of infection;
- inappropriately discharging the patient on oral amoxicillin/clavulanic acid after the first debridement procedure;
- failure to see the patient when he called after discharge; and
- failure to follow up on cultures obtained during the first debridement procedure.

The patient claimed these actions were the proximate cause of the progression of the infection that eventually led to the need for a total knee replacement.

Legal implications

Orthopedic surgeons who reviewed this case for the plaintiffs were critical of the defendant's decision to perform an arthroscopic debridement and washout. A more thorough irrigation and debridement could have been performed with an open procedure. They were also critical of the orthopedic surgeon's decision to discharge the patient on oral antibiotics, knowing the patient had

an infected knee. Finally, the plaintiff's experts faulted the defendant for failing to follow up with the hospital lab about the results of the cultures.

Defense experts testified that the orthopedic surgeon was within the standard of care when he evaluated and treated the patient. The defendant's decision to perform the first washout procedure arthroscopically was appropriate. The orthopedic surgeon ordered the appropriate lab analysis and was acting within the standard of care when relying on the lab staff to notify him of the culture results. The hospital and staff did not follow their own policies and procedures in failing to notify the orthopedic surgeon of the positive results.

An infectious disease physician testified that the defendant's decision to initially prescribe amoxicillin/clavulanic acid was appropriate. Further, the alleged delay in administering IV vancomycin did not change the course of treatment of the infection and did not cause the patient's knee replacement. The patient should not have left the hospital on January 25, and by doing so, he was responsible for any failure to treat the knee infection with IV antibiotics in an inpatient setting.

Regarding the patient's claim that the orthopedic surgeon "blew him off" when he called complaining of pain two days after discharge, the defendant said he never spoke to the patient and phone records show no calls were made from the patient to the orthopedic surgeon that day.

The defense of this case was compromised when it was discovered that the discharge summary documenting the orthopedic surgeon's decision to release the patient was not dictated until 11 months after the discharge. There was no evidence in the chart that would support the defendant's version of events. The nurses' notes were silent on the issue of the discharge, and there were no contemporaneous progress notes from the orthopedic surgeon.

Disposition
This case was settled on behalf of the orthopedic surgeon.

Risk management considerations
The defense experts testified that the defendant was acting within the standard of care when relying upon the hospital staff to report the results of the culture. However, it is good risk management for a physician to maintain a tracking system to determine if the results have been received. Taking a proactive approach to tracking test results can help prevent allegations of delay in diagnosing and treating.

The Texas Medical Board requires that "each licensed physician of the board shall maintain an adequate medical record for each patient that is complete, contemporaneous and legible." [2] The hospital discharge contained good details but failed the contemporaneous test. It was unusual that neither the nurses' notes nor the progress notes referred to the discharge. Timely, accurate dictation of the discharge summary assists in the defense of claims.

CASE 3: FAILURE TO ORDER PNEUMOCOCCAL VACCINE

Editor's note: The events in this closed claim study occurred before it became standard practice to administer the pneumococcal vaccine in the hospital to post-splenectomy patients.

Presentation
A 34-year-old man came to the ED following a motor vehicle accident. Tests revealed a ruptured spleen and several broken bones.

Physician action
A general surgeon performed an exploratory laparotomy and splenectomy on the patient. An orthopedic surgeon reduced the right ulna and left distal radius. Both surgeries went well, and the patient remained in the hospital for 16 days. The general surgeon continued to see him, but he was primarily under the care of the orthopedic surgeon.

The orthopedic surgeon wrote the discharge orders and indicated that the patient should follow up with the general surgeon. According to the general surgeon, before discharge he educated the patient about his susceptibility to infection and the need to obtain a pneumococcal vaccination from his primary care physician. This conversation was not documented in the hospital chart. However, it was the general surgeon's practice to have this conversation with all post-splenectomy patients. The patient did not follow up with the general surgeon.

Sixteen months after the splenectomy, the patient was seen in a local ED with flu-like symptoms. The ED record stated, "splenectomy status-post MVA? Immunization." A physician assistant (PA) diagnosed bronchitis and a viral syndrome. The PA gave orders for the patient to follow up with his primary care physician in three days or return to the ED if his symptoms worsened. The PA later testified that he discussed the importance of receiving a pneumococcal vaccination with the patient. This conversation was not documented in the chart.

Three months after this ED visit, the patient was seen by his family physician for cold symptoms and severe neck pain. The family physician sent him to the ED. The patient was seen by an emergency medicine physician who performed a lumbar puncture. The results were normal. The patient was given prescriptions for metaxalone, hydrocodone, and azithromycin. The ED physician later testified that he told the patient about the need to obtain

a pneumococcal vaccination. This discussion was not documented in the ED record.

Another three months passed, and the patient again became ill with flu-like symptoms. He was taken to a local ED and then transferred to another hospital. The patient was diagnosed with overwhelming post-splenectomy sepsis (OPSS). He developed disseminated intravascular coagulation, embolization of his extremities, and gangrene with necrosis of his digits. He required amputation of his fingers and toes and received extensive rehabilitation.

Allegations
A lawsuit was filed against the general surgeon, alleging negligence in failing to provide the patient with a pneumococcal vaccination following spleen removal. The hospital, the orthopedic surgeon, and several of the patient's subsequent physicians were also named in the suit.

Legal implications
The plaintiff's surgery expert was critical of the defendant for not ordering the pneumococcal vaccine in the hospital. He testified that the defendant fell below the standard of care because he only informed the patient of the need for the vaccine and did not make efforts to get him vaccinated. According to this expert, the vaccine is routinely given in the hospital to all post-splenectomy patients before discharge.

The issue of whether the patient should have been given the vaccine before discharge was hotly debated among the defense experts who reviewed this case. The defendant general surgeon testified that he did not routinely order the pneumococcal vaccination in the hospital for fear of eliciting a febrile response that might be mistaken for a postoperative infection.

One defense expert testified that he was taught during his residency not to give the pneumococcal vaccine in the hospital, but to advise patients to obtain it later from their primary care physician. Though the vaccine is now routinely given in the hospital before discharge, at the time of the patient's splenectomy (the early 2000s) this was not common practice. However, the overall consensus of the reviewers was that the defendant fell below the standard of care in not ordering the vaccine.

Another issue for the defense was patient accountability. Though the patient was told at discharge to follow up with the general surgeon, he failed to do so. The patient also failed to follow advice given by two other health care professionals to obtain the vaccine. Unfortunately, neither the general surgeon nor the subsequent health care professionals documented this advice in the medical record.

Regarding causation, an infectious disease specialist who reviewed this case stated that it is unknown what type of pneumococcal strain infected the patient. It was possible that the patient may have had the same outcome even if he had been given the vaccine. However, the expert stated that the greater likelihood is that had the patient been vaccinated, he would not have contracted OPSS.

Disposition
This case was settled on behalf of the general surgeon. The outcome of the case against the hospital and subsequent providers is unknown.

Risk management considerations
All directives should be included in the medical record. A discharge order written by the defendant after his final progress note could have included the recommendation for the pneumococcal vaccine. Physicians who are called for inpatient consults may have no office record on these patients until they present for a postoperative appointment. Consequently, when a patient is not compliant after discharge and does not schedule a postoperative appointment as directed, there is very likely no information regarding that patient in the physician's office.

The absence of a written reference to the conversation about the vaccine allows the plaintiff to state that it never happened. It is unfortunate when a noncompliant patient experiences a bad outcome, because the scales are not balanced when determining fault, especially if there is a lack of documentation. Consequently, the medical record is expected to include an accurate chronology of physician orders, patient education, and compliance.

CASE 4: FAILURE TO TREAT GROUP B STREP

Presentation
A 28-year-old woman came to her ob-gyn and advised the physician that she wanted to become pregnant. She reported a history of a miscarriage five years earlier. Three months passed and the patient returned in late September. The patient tested positive for pregnancy. It was determined that she was five weeks pregnant and her estimated date of delivery (EDD) was late May.

Physician action
The ob-gyn provided routine prenatal care, and the patient's progress was noted to be normal. During weeks 35-37 of gestation, the physician ordered lab studies including a test for Group B streptococcus. Two days later, the results returned positive. However, the patient's Group B strep status was entered as negative on the patient's lab flow sheet. The lab flow sheet and prenatal flow sheet were faxed to the hospital four weeks before the patient's EDD. The flow sheet indicated (incorrectly) that the patient was negative for Group B strep.

The patient came to the hospital on April 22 and April 26 with complaints of elevated blood pressure. She was discharged after serial blood pressure testing. On May 2, the patient was admitted for pregnancy-induced hypertension. During the second day of hospitalization and labor, the ob-gyn performed a cesarean delivery. A 7-pound, 2-ounce boy was delivered. His Apgar scores were 8 and 9.

Shortly after birth, the newborn began exhibiting signs of respiratory distress. He was transferred to a neonatal facility. He underwent extensive testing, including a culture that confirmed he was positive for Group B strep. The newborn's condition deteriorated, and he did not respond to extracorporeal membrane oxygenation (ECMO). He died eight days after birth.

Allegations
A lawsuit was filed against the ob-gyn. The allegations included failure to send correct lab results to the hospital and failure to properly administer prophylactic antibiotics to the mother when she arrived at the hospital.

Legal implications
Physicians who reviewed this case for the defense were unable to support the misread of the lab results and the subsequent erroneous entry on the lab flow sheet by the ob-gyn's staff. Additionally, if the defendant testified, he would have had to admit that he had reviewed the results and made a "sticky note" in his electronic records that the Group B test was positive, but that the flow sheet was not updated. His employee faxed information to the hospital indicating that the patient did not have Group B strep.

Disposition
The case was settled on behalf of the ob-gyn.

Risk management considerations
Attention to detail and accuracy in reporting test results are the most obvious issues in this case. Systems can be implemented to serve as a check for reviewing and reporting test results. For example, one staff member could add each patient's Group B strep status to each month's delivery schedule. Another staff member could also be responsible for confirming the original entry.

It is also recommended that patients be told about their Group B strep status and the indication for antibiotics. This patient education could be a check off item on the prenatal form.

As illustrated in this case, some electronic health record (EHR) software does not translate into the printed form of the medical record. One example of this is the use of "sticky notes" as reminders. It is recommended that physicians ensure they are documenting test results consistently, and in a way that can be accurately extracted from their system. Ideally, the EHR would not simply record important information, but extract it and run internal audits looking for contradictions in a patient's chart.

CASE 5: FAILURE TO DIAGNOSE PNEUMONIA

Presentation
A five-year-old girl was brought by her parents to a clinic and seen by a pediatrician as a new patient. The patient had a one-day history of fever recorded as 104.5 degrees, along with vomiting, mild diarrhea, nasal congestion, myalgia, dry cough, paleness, and decreased appetite.

A physical exam revealed that her lungs were slightly coarse bilaterally without rhonchi or rales. No pulse oximetry was recorded. The patient tested positive for Influenza A, and the pediatrician diagnosed influenza with fever. The pediatrician prescribed oseltamivir and advised the patient's parents to give the patient acetaminophen and ibuprofen as needed for fever and pain.

Physician action
The next day, the patient's mother called the clinic to report that her daughter could not lift her right arm, had severe pain under her right armpit and in her back, and required assistance to sit up. During the night, the patient had labored breathing and became very pale with blue lips, the latter of which had resolved. The pediatrician recommended the patient be brought back in to check her oxygenation and status.

The patient was seen that afternoon, and her oxygen saturation was noted at 97 percent on room air. No pallor was noted, and her fever had resolved. The patient was also drinking and urinating well, but she was still complaining of right arm pain and a poor appetite. Her lungs were slightly coarse bilaterally with some splinting, without localized abnormal sounds. The child resisted the pediatrician's examination of her right arm.

The pediatrician's diagnosis was again influenza with fever. The pediatrician also noted that the patient's joint pain was possibly due to toxic synovitis from viral illness versus myalgia from influenza.

The following morning, day three, the patient's mother called again with concerns that she heard rattling in the patient's chest and intensified coughing. She described the patient's nail beds as white to violet and her face as "bluish." The mother reported that the patient did not have a fever. She was advised to monitor the patient at home.

Later that same day, the mother took the patient to another pediatrician. The patient reported shortness of breath, fever, and cough for three days. The physician noted her oxygen saturation at 80 percent and decreased

breath sounds on her right side. He had her emergently transported to a local ED.

The patient's admitting blood cultures were positive for *Streptococcus pneumonia.* A chest x-ray showed bilateral infiltrates compatible with pneumonitis and possible right parapneumonic effusion. The patient was placed on antibiotic therapy, admitted to their PICU, and intubated due to severe respiratory distress.

A CT of the thorax indicated loculated right pleural fluid with air with significantly necrotic right upper lobe pneumonia. The patient's disease progressed to bilateral pneumonia with empyema requiring two thoracoscopic decortication surgeries to drain the fluid from her lungs.

After 19 days in the hospital, the patient's respiratory symptoms resolved and she was eating a regular diet. She was discharged to home on IV levofloxacin and prescribed physical therapy to treat her deconditioning. The patient's pulmonary function fully recovered.

Allegations
A lawsuit was filed against the first pediatrician and the clinic. The allegations included failure to perform a chest x-ray, administer antibiotics, and order appropriate lab work.

Legal implications
The plaintiff's expert stated that the pediatrician could have prevented the progression of the patient's pneumonia, the need for surgery, and the resulting hospitalization.

TMLT had two independent consultants review the case and both were critical of the pediatrician's care. Each consultant felt that a chest x-ray and labs were warranted when considering the patient's presentation of cyanosis, labored breathing, and severe pain.

Ultimately, a defense pediatric expert and infectious disease expert were found to support the pediatrician's actions. The infectious disease expert focused on the serotype of pneumococcus responsible for the patient's infection, serotype 19A. This is an aggressive bacteria known to cause a more complicated type of pneumonia. Given the nature of this serotype, this specialist felt a causation argument could be made that even if the pneumonia had been treated 24 hours earlier, the patient still would have needed surgery.

The defense of the pediatrician's care hinged on explaining why a chest x-ray was not ordered to rule out pneumonia, especially when the patient's mother reported worsening symptoms for three days. Due to the patient's fever and signs of hypoxia, it was felt many pediatricians would have ordered a chest x-ray and laboratory testing. The patient's pneumonia was susceptible to amoxicillin and its earlier administration may have shortened her hospitalization and the severity of her illness.

Disposition
The case was settled on behalf of the pediatrician.

Risk management considerations
This case demonstrates the challenges of making a correct diagnosis of an influenza-only illness without ordering additional diagnostic testing. If a patient (or parent in this case) calls to report recurring or worsening symptoms, it may be time to pursue additional testing or a referral. Ordering a chest x-ray and laboratory testing might have resulted in an earlier diagnosis or made the case more defensible.

CASE 6: FAILURE TO DIAGNOSE AND TREAT NEUROCYSTICERCOSIS

Presentation
On January 10, a 35-year-old man was taken by ambulance to a hospital's ED reporting headache and dizziness. The patient had a history of hypertension and hypothyroidism.

Physician action
Family Physician A, the on-call physician, admitted the patient and documented the following: status migrainosus versus complicated migraine; hydrocephalus and ventriculomegaly; nausea and vomiting; and headache. Family Physician A requested consults from neurosurgery and neurology.

Neurologist A saw the patient and ordered a brain MRI. The MRI was completed on January 11 and showed a stable cystic dilation of the patient's fourth ventricle. The radiologist's impression was arachnoid cyst; Neurologist A thought it might be neurocysticercosis. Neurologist A consulted Infectious Disease Physician A, who then ordered serology testing. Family Physician A deferred patient management to neurosurgery, neurology, and Internal Medicine Physician A.

On January 12, a lumbar puncture ordered by Neurosurgeon A indicated the patient had meningitis, though the patient did not have a headache and did not report nausea or vomiting. Infectious Disease Physician A prescribed antibiotics for meningitis.

On January 13, the patient's diagnosis was uncertain and results that would confirm neurocysticercosis were pending. Family Physician A knew of the pending serologies and planned to discharge the patient the next day if he was fever free.

Neurologist B — who did think the patient had meningitis

— had his CSF re-tested. No organisms were seen. Neurologist B discontinued the patient's antibiotics, and Infectious Disease Physician A documented that the patient could be discharged with instructions to follow up with Internal Medicine Physician A.

On January 14, Neurosurgeon A's PA examined the patient and noted that his headache had recurred. The PA planned for Neurosurgeon A to discuss this with Infectious Disease Physician A. The patient was discharged and instructed to follow up in two weeks with Internal Medicine Physician A while waiting for serology results.

On January 15, the patient went to a different hospital ED with a headache. After a CT scan, he was referred to neurosurgery and infectious disease for outpatient treatment.

The patient saw Family Physician B on January 17. He concluded the patient had possible 4th ventricle neurocysticercosis and mild hydrocephalus. The patient was told to follow up with neurosurgery and infectious disease.

In Family Physician A's discharge summary dictated on February 6, he noted that the results of the CSF serologies found positive IgG cysticercosis. He documented that the patient probably had the infection during initial testing, but IgM was not tested. Therefore, it was not possible to determine if the infection was acute.

The discharge summary stated: "However, more than likely, the patient's radiological findings on MRI of the cyst, which was suspicious for neurocysticercosis. It is likely that the patient was infected in the past with *taenia solium,* and this is the reason for positive IgG titers."

Because the patient was not discharged on any anthelminthic medications, Family Physician A planned to ask if Infectious Disease Physician A was told of the positive IgG results. But Family Physician A did not follow up.

In August, the patient came to the ED reporting syncope, dizziness, vertigo, and nausea. After neurosurgery was consulted, the patient underwent ventriculostomy and craniotomy due to the fourth ventricle brain cystic mass. A ventriculoperitoneal shunt was placed due to hydrocephalus. The pathology report confirmed neurocysticercosis.

Allegations

The patient filed a lawsuit against Family Physician A and Internal Medicine Physician A. The allegations included failure to properly diagnose and treat the patient and failure to inform the patient of lab results after he was discharged.

Legal implications
Consultants who reviewed this case had mixed opinions. Two consultants believed both physicians met the standard of care. Family Physician A and Internal Medicine Physician A were noted for making appropriate referrals to neurosurgery, infectious disease, and neurology.

Others who reviewed the case agreed that Family Physician A should have followed up with Infectious Disease Physician A after the serology results were finalized, because the patient could have been directed to a neurosurgeon.

It was also noted that the patient was noncompliant, as he did not follow up with neurosurgery and infectious disease. This led to a discussion among the consultants about causation. If the patient had been notified of the lab results in a timely manner, the outcome might have been the same, because the patient's ED visit at another hospital did not result in the prescription of an anthelmintic.

The plaintiff's experts criticized the defendants for discharging the patient too soon. They claimed that delaying the patient's discharge by 48 hours would have allowed lab results to arrive and treatment to begin during the patient's first hospitalization. Defense consultants stated that it was appropriate to discharge the patient, because his condition was stable.

Disposition
This case was settled on behalf of Family Physician A and Internal Medicine Physician A.

Risk management considerations
Failure to follow up and failure to communicate were significant issues in this case. It was the responsibility of Family Physician A to ensure lab results were reviewed and followed. However, the patient was discharged before all the laboratory test results were received. The patient's cysticercosis was probably still active when the patient was discharged, as it was diagnosed and treated later at another hospital.

In addition, the infectious disease physician did not order a cysticercosis IgM antibody on the LP (spinal tap) fluid, which may have shown the infection was acute and needed antiparasitic treatment. This lack of action may have led to the delay in diagnosis and treatment.

Family Physician A dictated on his discharge summary that he would contact Infectious Disease Physician A about the test results, but it is not clear if he did. In addition, Family Physician A did not notify the patient of his lab results.

When a patient is discharged, it is the physician's responsibility to ensure outstanding labs, tests, referrals, etc. are followed up on. By implementing a standard follow-up system for tests, labs, and referrals, physicians can ensure nothing "slips through the cracks" and treatment is initiated in a timely manner.

If lab results are not reported in a timely manner and a definitive diagnosis cannot be established, it is recommended to hold off discharging a patient until the results can be obtained and evaluated.

If Family Physician A had waited to discharge the patient until after the lab results were obtained, there may not have been a delay in diagnosis and treatment could have begun during the first hospitalization.

This case was further complicated by multiple care providers and a non-compliant patient. For optimal patient outcomes, it is important to carefully and comprehensively communicate, evaluate, monitor, and follow up on a patient's condition.

CASE 7: FAILURE TO DIAGNOSE LEGIONELLA PNEUMONIA

Presentation
On June 14, a 65-year-old woman came to an urgent care clinic with fever, body aches, chills, and an abrasion on her leg. Her medical history included high cholesterol, obesity, sleep apnea, hypertension, GERD, and sinusitis.

The patient had also been treated for an upper respiratory infection with cough and fever for three weeks in March.

Physician action
The urgent care physician's assessment was negative for cough, dyspnea, fatigue, nasal congestion, wheezing, sinus pressure, nasal drainage, and sinus pain. The patient tested negative for influenza. The physician diagnosed her with flu syndrome and prescribed 75 mg oseltamivir and silver sulfadiazine topical cream (for the leg abrasion). The patient was instructed to keep her appointment with her primary care provider (PCP) scheduled for the following day.

The patient came to her PCP's group practice on June 15 and was seen by a PA. The patient continued to report fever, body aches, and chills. Her temperature was 99.3 degrees and her O2 saturations were 98 percent. The PA noted that the patient's lungs were clear to auscultation bilaterally, with no wheezes, no rales, and good air movement. The patient again tested negative for influenza. A chest x-ray was not performed.

The PA diagnosed the patient with influenza. She was started on cephalexin and instructed to fill her oseltamivir prescription and follow up in 10 days.

On June 17, the patient called the office and told the

receptionist she still had fever and did not feel any better. The receptionist spoke to a medical assistant, who spoke to the PA, who advised the patient to give the medicine more time to take effect. (Recollections of these conversations are not entirely clear, and this telephone encounter note was not documented until three weeks later.)

On June 18, the patient went to a hospital ED, where she was found to be severely hypoxic. She was intubated and transferred to the ICU for management of her advancing respiratory failure. She was diagnosed with legionella pneumonia.

The patient's treatment was complicated by acute respiratory distress syndrome, septic shock, and multisystem organ failure. Despite ventilator support, the patient's oxygenation could not be maintained. She died from cardiopulmonary arrest on June 24.

Allegations

A lawsuit was filed against the PA and the internal medicine physician who supervised him. The allegations were:

- failure to diagnose and treat a patient with symptoms consistent with legionella pneumonia;
- failure to perform diagnostic testing, including x-rays;
- failure to rule out legionella pneumonia;
- diagnosing the patient with the flu despite contrary indicators;
- negligent supervision of the staff nurses and PAs (internal medicine physician); and
- vicarious liability (internal medicine physician).

Legal implications

Physicians who reviewed this case stated that legionella pneumonia is an extremely rare condition. Symptoms include high fever, cough, shortness of breath, muscle aches, and headaches. According to these experts, the patient did not have these symptoms when she was seen by the PA, and she did not have symptoms that would have warranted a chest x-ray or any suspicion of pneumonia. "Any reasonably prudent health care provider would not have been expected to have Legionnaire's within the differential."

However, these experts were critical of the flu diagnosis. The patient should not have been diagnosed with the flu when the diagnosis was "uncertain." The chance of a patient having the flu in the summer with no upper respiratory symptoms and two negative flu tests is extremely low. Further, operating on the assumption that the patient had the flu led to staff giving inappropriate phone advice to the patient when she called to report that she did not feel better.

The issue of the phone call was further complicated by a late entry in the patient's medical record on July 10, three weeks after the patient's death. The entry documented that the patient was instructed to go the ED over the weekend if she did not feel better.

Disposition

This case was settled on behalf of the internal medicine physician.

Risk management considerations

Pneumonia caused by *Legionella* is similar to other forms of pneumonia. It is fatal in 10 percent of cases overall, and in 25 percent of health care associated cases. According to the U.S. Centers for Disease Control and Prevention (CDC), health departments reported nearly 10,000 cases of legionella pneumonia in the United States in 2018. However, because Legionnaires' disease is likely underdiagnosed, this number may underestimate the true incidence.[3]

Predominant symptoms include fever, cough, and shortness of breath. Symptoms typically begin two to 10 days after exposure to contaminated water or soil. Fever and fatigue often occur before the cough or shortness of breath. Rales may also be present on physical examination.[4]

"The index of suspicion for *Legionella* infection should be particularly high during known outbreaks, which are often associated with contamination of water supplies in large facilities such as hospitals, hotels, or apartment buildings. Other epidemiologic factors that should heighten suspicion for *Legionella* infection include known or potential exposure to a contaminated water source (e.g., hot tubs, birthing pools, fountains) and exposure to soil or potting mix in areas where the incidence of *L. longbeachae* is high."[4]

Risk factors for legionella pneumonia include older age (50 years or older), smoking, chronic respiratory disease, diabetes mellitus, and other immunocompromising conditions.[3]

In this case, when the patient was seen in the office, she did not exhibit symptoms that would have alerted the PA to the need for further testing. Yet, as the experts reviewing the case stated, the diagnosis of influenza was "uncertain."

The patient called two days later to report that she was not improving. This persistence of symptoms along with the two negative flu tests in a 65-year-old patient was concerning. Further investigation — including a chest x-ray, urinalysis, and CBC — may have been warranted. Recommending prompt follow up when the patient called the office may have led to a different outcome.

Three other risk management issues in this closed claim study are worth noting.

Late entries

The patient's phone call and the PA's instructions were not documented in the medical record contemporaneously. Rather, an entry about instructing the patient to visit the ED was added after the patient's death. This entry was perceived as an alteration to the medical record.

It is appropriate to make a late entry or addendum in the medical record, but only with proper identification and the reason for the delayed entry. The entry should be clearly labeled as "late entry" or "addendum" and include the date of the addendum and the date to which it relates.

"Correcting" the medical record without clearly indicating that you are doing so is considered altering the medical record. While there may be no breach of the standard of care, record alterations are difficult to defend and can damage a defendant's credibility.

Telephone triage

It is a good risk management practice to have well-defined telephone triage protocols in place and to make sure they are followed by staff. Physicians and staff should document actions that demonstrate when protocols are followed. This includes documenting the content of patient phone calls.

In addition, phone call protocols should be developed and included in the policy and procedure manual. Make sure that staff members are aware of all policies and procedures and have them sign and date their acknowledgement and understanding of these policies.

Supervision of the PA

Though the internal medicine physician did not see the patient, as the supervisor of the PA, she was responsible for the care the PA provided. Ensuring that everyone understands their roles and responsibilities, maintaining open lines of communication, and addressing challenges together are essential to the successful collaboration of physicians and advanced practice providers (APPs).

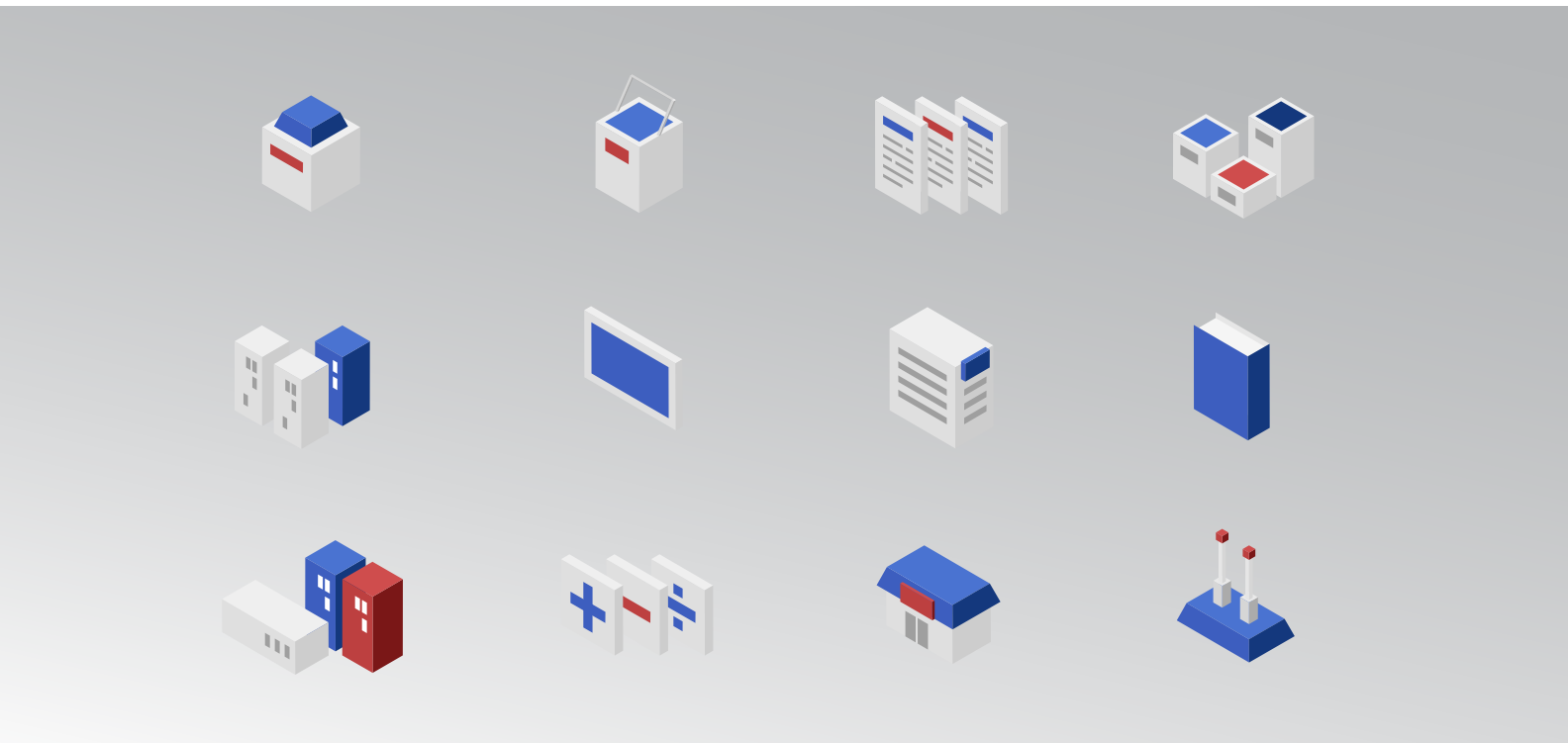
One way to enhance this collaboration is to establish written protocols. These protocols should define the role of the APP in detail and describe the main types of cases the APP will see. These protocols can further provide general clinical parameters, such as limiting the number of times a patient can see the APP without seeing the physician or specifying the types of injuries or symptoms that must be examined by a physician within 24 hours.

Knowledge of and adherence to these protocols builds a good foundation for collaboration and ensures that patients receive quality care.

Risk management considerations

Please consider the following recommendations related to the treatment of infectious diseases.

When applicable, **follow clinical practice guidelines** for the diagnosis and treatment of infectious disease, as well as infection control. These guidelines summarize the current medical knowledge; weigh the benefits and risks of diagnostic procedures and treatments; and give specific recommendations based on this information.



They also provide scientific evidence supporting those recommendations. Clinical practice guidelines "are not fixed protocols that must be followed, but are intended for health care professionals and providers to consider." [5]

Prescribing errors can include failing to check the chart when prescribing medication; prescribing improper dosages; failing to consider and advise patients of side effects or interactions; and prescribing drugs outside of the physician's specialty. To help avoid these types of errors, consider the following guidelines.

- Be familiar with the drug prescribed. Refer the patient to a specialist if he or she requires a drug that is outside of your scope of practice.
- When prescribing drugs off-label or in dosages exceeding those recommended, document your rationale. Also document your discussion of the risks and benefits of the treatment with the patient.
- When a patient reports unusual symptoms, the prescribing physician should be alerted.
- If a pharmacy calls to question a prescription, check the original order.

Consider transferring patients to a higher level of care, either to a facility better equipped to test or treat the patient or to a specialist with experience in and knowledge of the patient's condition.

When necessary, **see the patient in person.** "If your differential diagnosis includes a potentially serious condition and your ability to rule out that condition might be influenced by physical findings, arrange to see the patient in person. If the situation does not allow for a face-to-face appointment, instruct the patient to seek medical care through an emergency department or another provider." [6]

Employ a tracking system to ensure that patients have obtained recommended tests. A tracking system can minimize exposure to allegations of failure to diagnose and treat and can lead to better patient care. Develop a written procedure for handling test results when they are received, and for following up on results that have not been received. This procedure should specify that test results should be thoroughly reviewed before they are filed or scanned into a patient's chart.

The most powerful communication and risk management tool is **proper medical record documentation. Maintaining a high standard of documentation** increases the quality of care and facilitates greater continuity of care between health care professionals. Medical records should be clear, complete, accurate, and current.

Documenting patient noncompliance is also crucial, including noncompliance with medications and recommended treatment plans. Also, document when a patient refuses diagnostic testing, laboratory testing, or a procedure.

Wash your hands. Educate staff in your practice about appropriate hand hygiene and have written protocols. Follow your facility's written infection control protocols, including those for surgical site infection.

Educate patients about the possibility of surgical or procedural site infections. Describe the symptoms, tell them what to look for, and discuss ways to prevent infection.

"**Discharge instructions** should address all areas of potential concern, including pain, wound care, and signs of infection. The instructions should also include information regarding whom to contact if questions arise and should instruct the patient to return if she experiences a change in condition." [6]

COVID-19 CONSIDERATIONS

In addition to the risk management considerations described above, please consider the following recommendations when treating patients during the COVID-19 crisis.

- Review and implement the minimum standards for safe practice during COVID-19 as required by the Texas Medical Board (TMB), or your state medical board.[7]
- Weigh the risks and benefits of scheduling patients for routine visits, elective procedures, and non-urgent medical issues. Consider the potential risks of contracting COVID-19 for patients with specific health conditions. Continue to consider telemedicine when appropriate.
- Continue to encourage social distancing as much as possible. Avoid crowds in waiting rooms and employee areas. Consider having patients wait in their cars until an exam room becomes available.
- Screen patients before scheduling appointments using CDC or your state medical association tools. [8,9]
- Inform patients about potential risks before scheduling, and ask that they follow TMB minimum standards [7] and infection control protocols when arriving at the practice or facility. Educate patients up front about what will be required. When outside of Texas, refer to your state medical board for guidance.

- Supply providers and employees with appropriate personal protective equipment (PPE). Texas physicians having difficulties obtaining supplies are encouraged to contact the Texas Medical Association (TMA) for resources designed to assist practices.[10]

- Follow infection control guidelines supplied by the CDC, the Texas Department of State Health Services (DSHS), the American Medical Association (AMA), and the TMA. Develop protocols and educate staff on how to implement these guidelines.[9, 11, 8, 12]

- Review the DSHS' *Minimum Recommended Health Protocols for COVID-19* and *Information for Hospitals and Healthcare Professionals* at the websites cited below.[13, 11]

- Include the risks of contracting COVID-19 in the consent discussion for procedures and surgical care, and document this discussion in the medical record.

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ACCESS YOUR CME THROUGH MYPORTAL

Once you are logged onto Lone Star Alliance's member site, myPortal, the **Quick Links** menu features two CME options: **CME History** and **Online CME Courses**. CME History provides you with a transcript of all the TMLT courses you have taken. Before purchasing and taking a CME, it's recommended to review your transcript so you do not duplicate a course. When you are ready to take a course, click Online CME Courses, which will take you to our online CME portal, InReach.

MPL ASSOCIATION DATA SHARING PROJECT: SEPSIS-RELATED CLAIMS

The Medical Professional Liability Association (MPL Association) is a trade association of liability insurance companies that compiles medical malpractice claim data to help identify areas of practice most vulnerable to medical liability claims.

Since 1985, the MPL Association has collected this information through its Data Sharing Project (DSP), the largest independent collaborative database of medical professional liability claims. The DSP provides participating member companies with the necessary statistical information needed to enhance risk management in medicine and to track claim costs.

TMLT is a participant of the DSP. All data provided to DSP is codified, and the names of physicians are not reported.

This year, the MPL Association published a report on sepsis cases based on DSP findings. Before the COVID-19 crisis, there had been a significant focus on the number of sepsis cases leading to severely compromised health. Sepsis is a serious medical condition, a leading cause of death in hospitals, and a primary reason for readmissions.

The following is not an in-depth analysis of sepsis-related claims, but a short review of data on national risk trends associated with sepsis and potential connections between sepsis and COVID-19.

DSP CLAIM DATA

Overall, there were 64,384 closed claims reported to the DSP between 2009 and 2018. The average cost to defend these claims was $50,491. Approximately 26 percent (16,490) of the closed claims paid an average indemnity payment of $376,938.[1]

In the DSP, sepsis can be reported as either a presenting medical condition or an outcome condition. Table 1 below summarizes claim data where sepsis was reported either as a presenting medical condition or an outcome condition. For the purpose of this study, the DSP focused on sepsis as the outcome condition (1,087 closed claims).

SEPSIS-RELATED CLAIMS

PRESENTING MEDICAL CONDITION		OUTCOME CONDITION
343	Closed Claims	1,087
66	Paid Claims	252
$334K	Avg. Indemnity	$305k
$65K	Avg. ALAE	$53k

Table 1

The top three primary allegations for sepsis claims were *diagnostic* (36 percent), *procedural* (35 percent), and *administrative* (14 percent) (See Table 2). The remaining 15 percent of allegations included hospital acquired conditions, patient accidents, and medication/IV fluids.

Among the three primary allegations, *procedural* accounted for the highest average allocated loss adjustment expenses (ALAE) ($56,141), total number of paid claims (109), and average indemnity paid ($336,586).[1] Approximately 58 percent of closed claims (222) cited death as the severity of injury and 23 percent (86) cited major temporary injury. For the claims that cited death, the average ALAE was $51,493 and more than 25 percent of these claims resulted in an average indemnity payment of $246,544.

Nearly three quarters (73 percent) of the closed claims involving a *diagnostic* allegation reported death as the severity of injury and cost an average of $51,100 to defend. Of these death claims, 63 paid an average indemnity of $320,521.

Lastly, 78 percent (124) of closed claims named *administrative* allegations with death as the severity of injury and 14 percent (20) with major temporary injury. Among the administrative allegation claims involving death, the average ALAE was $54,872 and 19 percent (30) of the closed claims paid an average indemnity of $146,550.

NEW GUIDELINES AND RISK MANAGEMENT CONSIDERATIONS

Part of the complexity of addressing sepsis is the lack of consensus between states, as guides vary in different jurisdictions. In January 2013, New York became the first state to issue state-wide regulations for sepsis. These protocols, known as "Rory's Regulations," require all New York state hospitals to:

- employ protocols that address the screening and recognition of sepsis, severe sepsis, and septic shock;
- identify and document appropriate treatment for septic patients; and
- use guidelines for treatment, including early antibiotics.[2]

In addition, hospitals in New York are required to report adherence and clinical outcomes to the state government. The effectiveness of these new regulations was measured using a retrospective cohort study of adult patients in a hospital with sepsis in the state and four other "control" states. After adjusting for patient and hospital characteristics, post-implementation mortality for New York decreased significantly relative to control states.[2]

RECOMMENDATIONS FOR MANAGING SEPSIS

In risk management efforts, a high emphasis is placed on the importance of early recognition of sepsis. The American

TOP 3 PRIMARY ALLEGATIONS FOR SEPSIS-RELATED CLAIMS

PROCEDURAL	DIAGNOSTIC	ADMINISTRATIVE
381 Closed Claims	388 Closed Claims	157 Closed Claims
109 Paid Claims	83 Paid Claims	42 Paid Claims
$337K Avg. Indemnity	$319K Avg. Indemnity	$213K Avg. Indemnity
$56K Avg. ALAE	$51K Avg. ALAE	$55K Avg. ALAE

Table 2

College of Emergency Physicians (ACEP) provides a DART (Detect, Act, Reassess, Titrate) guide for sepsis detection and management on its website: https://www.acep.org/DART/.

Additionally, other considerations include the following.

- Considering sepsis in the differential diagnosis of patients with infections and abnormal vital signs especially those vulnerable to infections, such as post-surgical patients.
- Providing patients with appropriate follow-up and clear instructions, including symptoms and signs that should alert them to seek immediate medical attention.
- Re-evaluating the diagnostic assumptions and revisiting the diagnosis if a patient is readmitted for the same or worsening symptoms.

EMERGING: COVID-19 PANDEMIC

As of November 18, 2020, there have been 55,064,128 confirmed cases of COVID-19 globally with a reported global mortality of 1,328,015.[3]

The pathophysiology of this novel virus is still being unraveled, but it is currently believed to be a respiratory virus that enters the body through the nose, mouth, or eyes that replicates and spreads throughout the body. The infected cells cause inflammation in the airways—making breathing difficult—and causing fluid to leak into a patient's lung tissue, making oxygen transfer to the blood difficult.[4] Secondary infections, such as pneumonia, may also occur. In addition, literature has found some links to sepsis as a complication.

According to recent studies, the progression of COVID-19 may lead to sepsis based on clinical findings within populations in Wuhan, China. According to authors in *JAMA* on February 24, 2020, 5 percent (more than 2,000 patients) of their 44,672 confirmed COVID-19 cases were critical enough to require intensive care and use of ventilation.[5] These critical patients had respiratory failure, septic shock, and/or multiple organ dysfunction or failure. In a subsequent article published in *JAMA* on March 11, 2020, a review of critical care COVID-19 patients noted a significant number of patients developing septic shock and organ dysfunction, such as kidney failure.[6] These patients were at highest risk of dying from the virus.

The Lancet published a study on March 11, 2020 that found patients with the poorest outcomes from COVID-19 were older in age and showed signs of sepsis, and/or had blood clotting disorders.[7] In the study, more than half of the patients developed sepsis. The authors of the study stated, "Sepsis was a common complication, which might be directly caused by SARS-CoV-2 infection, but further research is needed to investigate the pathogenesis of sepsis in COVID-19 illness."[7]

In a study published by StatPearls on March 20, 2020, the basics of COVID-19 infection and the SARS-CoV-2 virus were reviewed. Authors mentioned the connection between COVID-19 and sepsis and septic shock, stating, "The COVID-19 may present with mild, moderate, or severe illness. Among the severe clinical manifestations, there are severe pneumonia, ARDS, sepsis, and septic shock. The clinical course of the disease seems to predict a favorable trend in most patients. As a reference, the criteria of the severity of respiratory insufficiency and the diagnostic criteria of sepsis and septic shock can be used."[4] The study further defines the sepsis definition it used as the International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3).

At this time, the World Health Organization, Centers for Disease Control and Prevention, and the Surviving Sepsis Campaign have all released comprehensive guidelines for the inpatient management of patients with COVID-19, including those who are critically ill. In addition, on April 1, 2020, a new COVID-19 ICD-10 code was included for further tracking in health databases. Review of this complex condition and its impact on MPL will be part of the broader discussion for years to come.

MORTALITY RATES BEFORE AND AFTER ENACTING "RORY'S REGULATIONS"

	BEFORE	AFTER
NEW YORK STATE (NYS)	26.3%	22%
CONTROL STATE	22%	19.1%

Table 3

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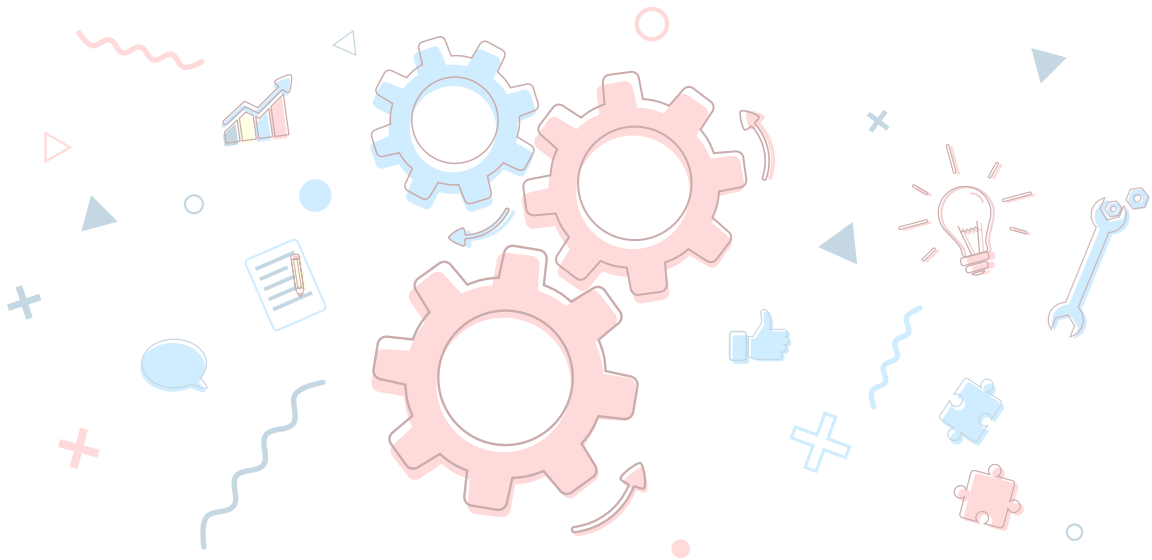
RISK MANAGEMENT SERVICES: VERSATILITY IN TIMES OF CRISIS

by Lesley Viner, MS, Assistant Vice President, Risk Management Department



2020 has been an extraordinary year in health care, with the COVID-19 pandemic affecting physicians and their teams, patients and their families, health care facilities and systems, and communities on a global level. Our risk management team has responded to the crisis in the following ways.

- We quickly transitioned our continuing medical education (CME) activities to virtual platforms and developed new programs on topics such as telemedicine; legal considerations of COVID-19; strategies for enhancing communication and documentation during a pandemic; and opioids prescribing.

- We expanded our remote practice review service, which includes electronic questionnaire completion; remote access and review of the electronic health record (EHR); a virtual tour of the practice; a follow-up discussion to address risks via a web platform or phone call; and pertinent, specialty-specific resources provided electronically. Our risk managers worked to make the conversion from in-person to virtual practice reviews seamless for practices and groups.

- Throughout the crisis, we assisted physicians and their staff members with their inquiries and concerns related to matters such as:
  - practice closures;
  - shortages of personal protective equipment (PPE);
  - loosening restrictions within telehealth;
  - scope of practice issues;
  - standards for reopening practices; and
  - physicians and/or staff members being exposed or testing positive to COVID-19.

  We also closely monitored COVID-19 consultation topics to identify trends and meet the immediate needs of our groups and practices.

- We worked closely with the Marketing Department to develop content and useful guidance for our Resource Hub webpage dedicated to COVID-19 at https://hub.tmlt.org/coronavirus.

  These resources address a variety of meaningful topics, such as best practices to communicate with patients and families during COVID-19; infection control measures in your practice; and frequently asked questions surrounding COVID-19. Information and updates from the Centers for Disease Control and Prevention (CDC), American Medical Association (AMA), and Texas Medical Association (TMA) were also shared regularly via the Resource Hub.

  Throughout the crisis, we researched "hot" and emerging topics for our large groups and practices, such as COVID-related liability issues, specialty-specific claims trends, remote patient monitoring, and physician supervision concerns.

- At no cost to policyholders, we offered the online CME program "Combating physician stress and burnout," on LSA's CME website at https://lonestara.inreachce.com/. The course offers practical strategies for reducing stress and enhancing well-being during difficult times.

- We produced a podcast on stress and burnout related to COVID-19 with Dr. Brian Sayers, founding chair of the physician wellness program at the Travis County Medical Society (TCMS). The podcast, "Stress and burnout: The silent health care epidemic," is on the podcasts page of the Resource Hub at https://hub.tmlt.org/podcasts.

  In collaboration with our marketing team, we also offered the podcast "From bedside to webside: setting up your virtual workspace" to provide physicians with strategies to improve virtual office visits with patients, such as encouraging dialogue and optimal placement of audio and video equipment.

It is our sincere privilege to serve our physicians and their medical teams who continue to risk their own health and safety to safeguard that of others. We are committed to providing customized, high-quality programs for our physician policyholders, with the goals of enhancing patient safety and reducing medical liability risk.

Physicians, nurses, and all health care professionals, we thank and honor you for your selfless dedication to patients, their families, and their communities during these trying times. We are in this together.

Please contact the Risk Management Department at 800-580-8658 for assistance with practice concerns or to schedule services.

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the REPORTER

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