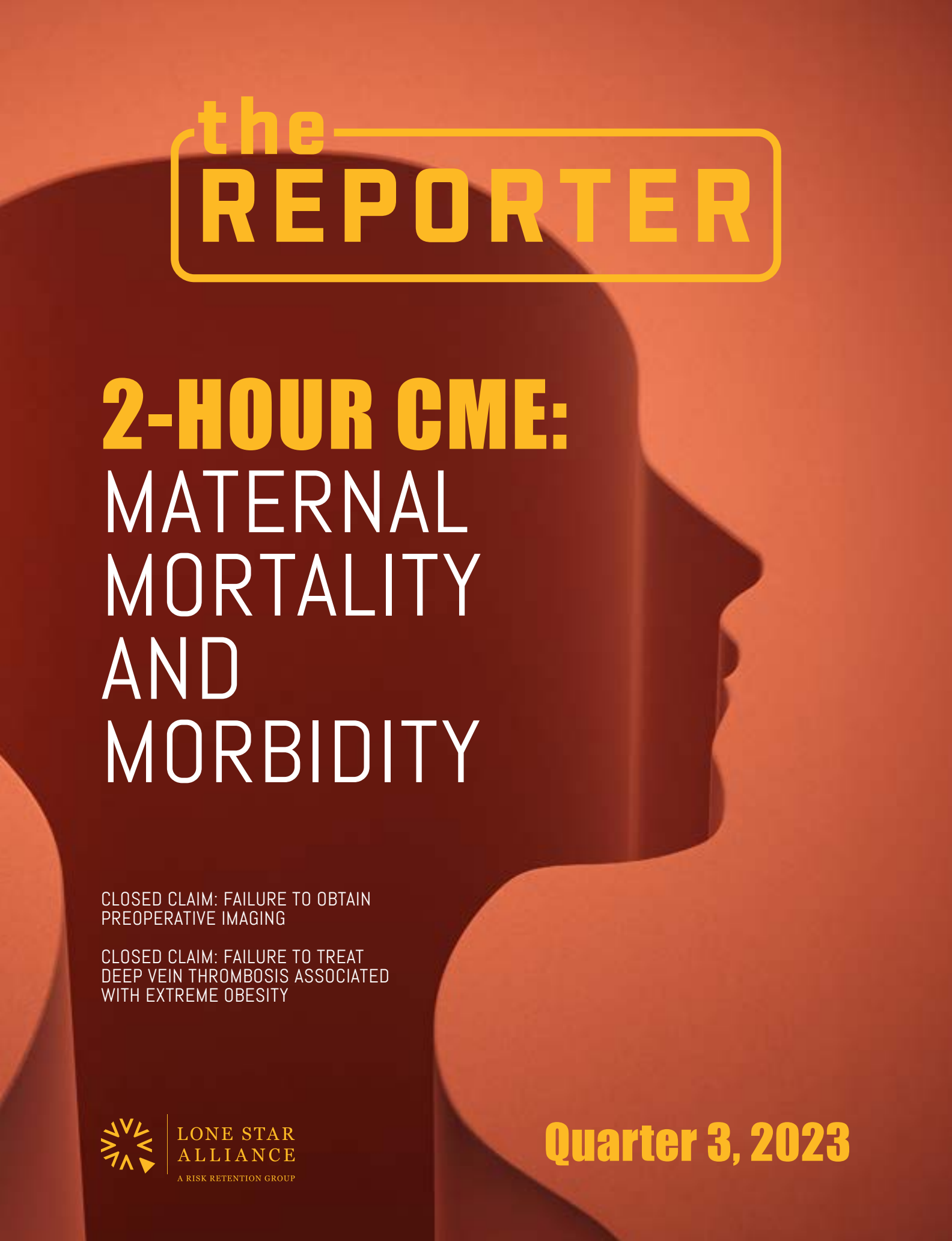

the REPORTER

2-HOUR CME: MATERNAL MORTALITY AND MORBIDITY

CLOSED CLAIM: FAILURE TO OBTAIN PREOPERATIVE IMAGING

CLOSED CLAIM: FAILURE TO TREAT DEEP VEIN THROMBOSIS ASSOCIATED WITH EXTREME OBESITY

LONE STAR ALLIANCE
A RISK RETENTION GROUP

Quarter 3, 2023

CONTINUING
MEDICAL
EDUCATION

2-HOUR CME: MATERNAL MORTALITY AND MORBIDITY

by Ariana Gutierrez, MSN, RN, Risk Management Representative
with Wayne Wenske, Senior Marketing Strategist

The closed claim study included in this article is based on an actual malpractice claim from Texas Medical Liability Trust. This case illustrates 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. This study has been modified to protect the privacy of the physicians and the patient.

OBJECTIVES

Upon completion of this educational activity, the physician will be able to:

1. describe current contributing risks of maternal mortality and morbidity;
2. list the immediate warning signs of complications that can result in maternal mortality;
3. summarize how implicit bias may affect maternal care for at-risk patient populations; and
4. identify ways to lower rates of maternal mortality and morbidity during the prenatal, perinatal, and postpartum periods.

COURSE AUTHORS

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DISCLOSURE

Ariana Gutierrez and Wayne Wenske have no relevant financial relationship(s) with ineligible companies to disclose. TMLT staff, planners, and reviewers have no relevant financial relationship(s) with ineligible companies to disclose.

TARGET AUDIENCE

This 2-hour activity is intended for physicians of all specialties who are interested in learning more about how to reduce the risk of maternal mortality and morbidity through identifying conditions and circumstances that can contribute to care complications and patient death.

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

The following fee will be charged when accessing this CME course online at https://lonestara.inreachce.com.

Policyholders: $25
Non-policyholders: $100

ETHICS CREDIT STATEMENT

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

TEST

To receive 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

CME test and evaluation forms must be completed online. After reading the article, go to http://lonestara.inreachce.com. Log in using your myPortal account information to take the course. Follow the online instructions to complete the forms and download your certificate.

RELEASE/REVIEW DATE

This activity is released on August 1, 2023 and will expire on August 1, 2026.

CME DISCOUNT

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

INTRODUCTION

Maternal morbidity can be defined as any unexpected health problem that occurs due to pregnancy or childbirth that has a negative impact on the patient's well-being or ability to function. Some examples of maternal morbidity include cardiovascular problems, diabetes, hypertension, infection, blood clots, anemia, nausea, vomiting, depression, and anxiety. Some of these complications may start during pregnancy and end after delivery. Unfortunately, some can develop into life-long illnesses that a patient may live with indefinitely.[1]

The Centers for Disease Control and Prevention (CDC) classifies severe maternal morbidity (SMM) as an unexpected outcome of labor and delivery

that results in "significant short- or long-term consequences to a woman's health." Examples of SMM include acute myocardial infarction, congestive heart failure, eclampsia, sepsis, shock, and acute renal failure. The most common indications of SMM are blood transfusions, hysterectomy, and ventilator-assisted breathing.[1]

Maternal mortality refers to the death of a woman from complications of pregnancy or childbirth that happen during or within six weeks of the delivery.[2]

THE STATISTICS: HOW IS THE U.S. DOING?

Rates of maternal deaths in the United States are higher than most other developed countries. Further, maternal deaths have continued to rise in the U.S. since the year 2000.[3] Many factors contribute to this rise but the most prominent are too few maternity care providers (obstetrician-gynecologists and midwives) and limited access to postpartum care and support.

About one-third of maternal mortality deaths occur during a patient's pregnancy. Roughly 17 percent occur during or on the day of delivery, and 52 percent occur postpartum. This 52 percent can be broken down further with 19 percent being within one-to-six days postpartum, 21 percent between one-to-six weeks postpartum, and 12 percent occurring in the remainder of the first-year postpartum.[3]

When comparing the U.S. to 10 other developed countries, a 2018 study found that the U.S. had roughly 17 maternal deaths for every 100,000 live births, while other countries in the group had less than three deaths. The countries compared in this study are Canada, France, the United Kingdom, Australia, Switzerland, Sweden, Germany, Netherlands, Norway, and New Zealand.[3] The U.S. maternal mortality rate has increased in recent years, as will be discussed further in this article.

While the U.S. had more maternal care workers than Canada at the time of the study (Canada had 12 workers for every 100,000 births and the U.S. had 15), Canada fared better in mortality with 8.6 deaths per 100,000 live births.[3]

THE STATISTICS: HOW DO INDIVIDUAL STATES FARE?

States that have been successful in reducing maternal mortality include California, Massachusetts, Nevada, Connecticut, and Colorado. These states each have a maternal mortality rate that is better than the national average. These lower rates may be in part due to actions by state committees that investigate the causes of maternal death and adopt action plans to address them.[4]

These committees, called Maternal Mortality Review Committees (MMRCs), are active in most states and receive funding support from the CDC. This funding directly supports the management and coordination of MMRCs to identify, review, and characterize pregnancy-related deaths and prevention opportunities. This work includes:

- facilitating a better understanding of the drivers of maternal mortality, complications of pregnancy, and associated disparities;
- determining what interventions at the patient, provider, facility, system, and community levels will be most effective; and
- implementing initiatives in the right locations for families and communities who need them most.[5]

Examples of MMRC efforts include the following.

- In California, preeclampsia and postpartum hemorrhage were found to be the top maternity complications, and action plans were created to increase awareness, recognition, and proper treatment of these conditions/complications. Hospitals that provided maternity care were required to fulfill these plans.
- In Colorado, postpartum self-harm, death by suicide, and overdose were found to be critical issues, and plans were put in place with physicians, midwives, and mental health providers to help patients gain access to appropriate care in the year following birth.
- Connecticut found that expanding the health care workforce with the use of midwives in the prenatal and postpartum period improved their mortality rates, so the state established new guidelines and promoted increased training for midwives providing care.[4]

Per CDC data (2018-2020), states with maternal mortality rates over 40 deaths per 100,000 live births include Alabama, Arkansas, Mississippi, and Tennessee. The maternal mortality rate in Texas

during this timeframe was 28 deaths per 100,000 live births.[4]

Many of the states with higher maternal mortality rates include areas where there is limited access to care. Many counties in these states do not have a hospital or a hospital that offers obstetric services. Birth outcomes are negatively affected when patients come in for delivery with little to no prenatal care.[4]

In the southern states specifically, the rate of maternal deaths for Black patients is higher than any other race. Many of these states' MMRCs have noted implicit bias to be a factor in their maternal death rates and are taking steps to identify and mitigate the problem.[4]

HOW DID COVID-19 AFFECT MATERNAL MORTALITY AND MORBIDITY?

The year 2021 was the worst year for maternal mortality in the U.S., with 1,205 total maternal deaths compared to 861 deaths in 2020 and 754 deaths in 2019. This rate equates to 32.9 deaths per 100,000 in 2021, compared to 23.8 deaths in 2020 and 20.1 deaths in 2019.[6]

While there may be several reasons for the sharp increase in 2021, there is no question that the COVID-19 pandemic made accessing health care increasingly difficult for most people in the world, including pregnant patients. Restrictions in offices and hospitals kept people from seeking care, and fear of coming to hospitals overrun with COVID-19 patients caused delays to treatment in urgent and emergent situations.

Patients who contracted COVID-19 during pregnancy were more likely to have greater morbidity and mortality before and after delivery. Many of these patients had more complicated deliveries and experienced long-term health complications following the postpartum period. COVID-19 contributed to 25 percent of maternal deaths in 2020 and 2021.[7]

The social and economic determinants of health for individuals became worse for many populations during the pandemic, especially pregnant patients. Increased stress, reduced access to care, limited child-care services, and decreased social services prevented pregnant patients from receiving necessary prenatal and postpartum care.[8]

CAUSES OF MATERNAL MORTALITY

According to the World Health Organization (WHO), approximately 800 pregnant people died every day worldwide in 2020 of preventable causes related to pregnancy and childbirth. This is roughly one person every two minutes. Before the COVID-19 pandemic, overall maternal deaths were down nearly 35 percent with advances in medicine in low and lower-middle income countries. Unfortunately, maternal deaths worldwide still occur mostly in these countries.[9]

Primary causes of maternal death are infection, hemorrhage, hypertension (eclampsia), complications of delivery, and unsafe abortion.[9] Infections during delivery can occur when bacteria enter the birth canal. If caught early, many bacterial infections can be treated before, during, and after delivery. However, if not caught in time, bacterial infections can lead to sepsis.

Postpartum hemorrhaging may occur when the uterus does not contract following delivery. In this situation, often referred to as uterine atony or boggy uterus, the patient experiences excessive blood loss. The patient must be closely monitored following delivery and immediate medical intervention is necessary to stop the bleeding. Many health care facilities have implemented protocols and invested in new medical equipment to reduce hemorrhage and combat the overall rates of mortality by hemorrhage.

Preeclampsia can occur in women with a history of normal blood pressure or in women who have chronic hypertension. Postpartum preeclampsia is also a risk, as it can happen in women who have no history of preeclampsia during pregnancy.[10]

According to the CDC, the leading causes of pregnancy-related deaths in the U.S. from 2017 to 2019 included:

- mental health conditions, including death by suicide and overdose related to substance abuse (23 percent);
- hemorrhage (14 percent);
- cardiac and coronary conditions, excluding cardiomyopathy and hypertensive disorders of pregnancy (13 percent);
- infection (9 percent);
- thrombotic embolism (9 percent);
- cardiomyopathy (9 percent);

- hypertensive disorders of pregnancy (7 percent);
- amniotic fluid embolism (4 percent);
- injury, including homicide (4 percent); and
- stroke (3 percent).[11, 12]

The CDC also reports that 22 percent of deaths occurred during pregnancy, 25 percent occurred on the day of delivery or within seven days after delivery, and 53 percent occurred between 7 days to one year after pregnancy.[12]

PATIENT EDUCATION

Maternal patients may be put at risk if they lack information about their condition and about life-threatening situations. To help educate patients, the American College of Obstetricians and Gynecologists' (ACOG's) Alliance for Innovation on Maternal Health created a list of potentially urgent warning signs for pregnant patients. These include:

- temperature of 100.4 degrees Fahrenheit or higher;
- sudden, extremely painful headache that will not go away or worsens;
- sudden belly pain that will not go away or worsens;
- dizziness or fainting that is ongoing or intermittent over several days;
- having thoughts about hurting yourself or your baby;
- vision changes including double vision, blurriness, flashes of light, blind spots, or bright spots;
- shortness of breath;
- feelings of chest pain, pressure, or tightness;
- throat tightness;
- fast heart rate or irregular heartbeat;
- severe nausea and vomiting, different from morning sickness;
- baby's movements stopping or slowing during pregnancy;
- vaginal bleeding or fluid leaking during or after pregnancy;
- leg swelling, redness, or pain;
- extreme swelling of hands or face; and
- overwhelming and sudden fatigue that keeps you from daily activities, including caring for the baby.[13]

This list is not comprehensive, and the presence of one or more of these signs does not necessarily predict or result in maternal mortality.

ACOG recommends that in addition to these symptoms patients should inform their provider if they feel like "something isn't right." Patients should also be instructed and encouraged to go to the emergency department if they cannot reach their provider.[13]

RISKS, SYMPTOMS, AND COMPLICATIONS

Hypertension[10] can lead to the following complications:

- **for the mother**: preeclampsia, eclampsia, stroke, the need for labor induction, and placental abruption; and
- **for the baby**: preterm delivery (birth before 37 weeks of pregnancy) and low birth weight (under 5 pounds, 8 ounces).

Preeclampsia occurs when a patient with normal blood pressure develops hypertension and proteinuria after 20 weeks of pregnancy. Symptoms include:

- headache that will not go away;
- pain in the upper stomach;
- vision changes including blurriness or bright spots;
- trouble breathing;
- nausea and vomiting; and
- swelling of the hands or face.

Preeclampsia can also be asymptomatic. Patients at a higher risk for preeclampsia include those who:

- are 40 years of age or older;
- are in their first pregnancy;
- are pregnant with multiple fetuses;
- have a family history of preeclampsia;
- have chronic hypertension, kidney disease, or both;
- have a history of thrombophilia;
- have type 1 or type 2 diabetes;
- are obese; or
- have lupus.

Postpartum preeclampsia can also occur and is typically diagnosed between 48 hours and 6 weeks after delivery. Postpartum preeclampsia is considered a serious medical condition.

Patients with preeclampsia may experience seizures

and develop **eclampsia**. Eclampsia is a medical emergency.[10]

Diabetes can put maternal patients at increased risk of birth defects, stillbirth, and preterm birth. Diabetes throughout pregnancy can also increase the risk of preeclampsia, cesarean delivery, and macrosomia.[14]

Depression during and after pregnancy is common. The CDC reports that approximately 1 in 8 women experience symptoms of postpartum depression, while rates of depression at delivery are increasing. Research shows that reported depression among pregnant patients was seven times higher in 2015 than in 2000.[14]

Symptoms of depression vary by patient and may include:

- feelings of hopelessness, guilt, worthlessness, or pessimism;
- irritability or restlessness;
- lack of energy;
- inability to concentrate, remember details, or make decisions;
- sleeping too much or not being able to sleep;
- over-eating or lack of appetite;
- having a lasting sad, anxious, or "empty" mood; and
- suicidal ideation or attempts.

Postpartum depression is often more intense and lasts longer than depression or the normal worry, sadness, or fatigue that many women experience after childbirth. Symptoms of postpartum depression include:

- withdrawing from family and friends;
- feeling distant from the baby;
- feelings of intense anger or sadness;
- thoughts of hurting yourself or your newborn baby; and
- doubting your ability to care for the baby.

Postpartum depression is associated with delayed or decreased maternal and infant bonding, breastfeeding initiation, and infant development. Depression is treatable with a combination of medication, counseling, and referrals. Additional information on postpartum depression is discussed later in this article.[14, 15]

Research also shows that between 2008 and 2017 approximately 10 percent of pregnancy-related deaths were due in part or in whole to mental health conditions. These conditions, such as anxiety, depression, and birth-related PTSD, are often underlying factors in injury or death due to overdose or suicide.[16]

Unhealthy weight gain is associated with many of the conditions and risks discussed, including hypertension, heart disease, type 2 diabetes, stroke, and depression or other mental illness. According to the Surgeon General, there was an eight percent increase in pre-pregnancy obesity from 2011 to 2015. Obesity "can increase the risk of pregnancy-related conditions, including gestational diabetes and preeclampsia. Pregnant women with obesity are also at increased risk of cesarean delivery and adverse infant outcomes, including preterm birth, stillbirth, macrosomia, and birth defects."[16]

Maternal age can also affect maternal mortality. CDC research shows that women aged 40 and older have a substantially higher rate of maternal mortality, with 139 deaths per 100,000 live births for this age group. This is compared to 20 deaths per 100,000 live births for women under age 25, and 31 deaths per 100,000 live births for women aged 25 to 39.[6]

NON-COMPLIANCE

During the COVID-19 pandemic, many people became fearful, hesitant, and resistant to health care recommendations because there were so many unknowns at the beginning of the crisis. Access to misinformation grew and some patients questioned health care providers and the validity of available treatments. As a result, health care professionals may now manage pregnant patients who refuse best-practice prenatal care.[17]

Some patients may refuse help from health care professionals in favor of alternative care therapies, such as acupuncture, homeopathy, Ayurveda, or naturopathy. This is not to say those therapies cannot be effective, but those treating patients with these types of therapies may not be equipped for maternal emergencies that may arise.

Maternal care providers can help combat misinformation by spending adequate time

MATERNAL MORTALITY AND MORBIDITY:
INTIMATE PARTNER VIOLENCE

More than one in three U.S. women report experiencing domestic violence during their lifetime. Domestic violence, also referred to as intimate partner violence (IPV), is physical, sexual, or psychological abuse of a person by their partner or spouse. Each year, an estimated 324,000 pregnant women in the U.S. are battered by their intimate partners. (An intimate partner is defined as any current or former spouse or dating/romantic partner.) IPV often begins or escalates during pregnancy and postpartum periods, and is associated with increased rates of homicide, death by suicide, depression, low birth weight, and preterm birth. [47, 48]

ACOG and the U.S. Department of Health and Human Services (HHS) recommend IPV screenings as part of women's preventive health visits and at multiple visits during the obstetric care period. [49, 50, 51]

At screenings, physicians and other health care professionals should look for signs of physical violence, such as bruises, cuts, scrapes, or broken bones. However, some less obvious signs could be weight gain or loss, anemia, infection, pelvic fracture, placental abruption, and preterm delivery.

Behavioral signs to be aware of are frequently missing or needing to reschedule appointments, depression, suicidal ideation, suicide attempts, substance abuse, poor reproductive history, inconsistent descriptions of injuries, and delay in seeking care.

Providers should also be aware of signs of intimidation; this could be an overbearing partner at prenatal visits or in the hospital. It is important to recognize aggressive behavior by a patient's partner towards staff and providers as possible indications that the partner or spouse is unsafe. [51]

Training and education are essential for physicians and other obstetric providers and their staff on how to recognize signs of abuse, speak to victimized patients, and approach and care for these patients. Asking open-ended questions and non-threatening language can help patients to be more comfortable when disclosing concerns. Consider adopting guidelines in your practice policies and procedures for treating, counseling, and helping these patients.

While suspicion of family violence does not require Texas physicians to report, Texas Family Code §91.003 requires medical professionals who suspect a patient is a victim of family violence to provide the patient with information about the nearest shelter, document reasons for the suspicion in the patient file, and give the patient written notice that domestic violence is a crime that the victim can report to law enforcement.

Texas Family Code §91.003 can be found at http://www.statutes.legis.state.tx.us/Docs/FA/htm/FA.91.htm and provides the written notice elements that are to be provided to the patient and documentation guidelines.

It is important to keep appropriate community resources and referrals on hand to provide to patients in need. [52]

- The Texas Health and Human Services Family Violence Program
  https://www.hhs.texas.gov/services/safety/family-violence-program

- The National Domestic Violence Hotline
  (800) 799-7233 (SAFE) or
  Text START to 88788
  https://www.thehotline.org/

- National Resource Center on Domestic Violence
  (800) 537-2238
  https://www.nrcdv.org/ or https://vawnet.org/

- National Center on Domestic Violence, Trauma, & Mental Health
  (312) 726-7020 ext. 2011
  http://www.nationalcenterdvtraumamh.org/

- Futures Without Violence: The National Health Resource Center on Domestic Violence
  (888) 792-2873
  www.futureswithoutviolence.org

Human trafficking

Health care professionals working in outpatient clinics, community health centers, urgent care centers, emergency departments, and family planning clinics are uniquely positioned to identify and assist human trafficking victims. Often, these victims present for urgent and emergent care and will have not have a primary care provider. [53]

The following recommendations from ACOG are designed to increase awareness for physicians and other providers on how to respond if they suspect a patient is a victim of human trafficking.

- "Recognize indicators of human trafficking, such as patients with signs of abuse or neglect or those accompanied by an individual who does not let the patient speak for themselves, refuses to allow for privacy, or insists on interpreting for them in place of a professional.
- Become well-informed about common health care issues faced by victims of human trafficking, including sexually transmitted infections, substance use disorders, mental health problems, and physical trauma.
- Evaluate a patient's medical and nonmedical needs while recognizing the importance of providing a safe and comfortable environment for the patient, using appropriate methods of communication, and acknowledging the dynamics involved in evaluating a patient who is subject to human trafficking.
- Be aware of the laws in your jurisdiction regarding reporting obligations for suspected human trafficking, with specific attention to mandatory reporting requirements for child abuse.
- Provide resources for survivors of human trafficking, including brochures, pamphlets, and pocket cards displayed in examination rooms, waiting rooms, or, more discretely, in bathrooms in addition to contact information for organizations and resources that can support survivors." [53]

Contact the National Human Trafficking Hotline at 1-888-373-7888 or go online to https://humantraffickinghotline.org to find resources, partners, and services in your community for combatting human trafficking.

explaining to patients why certain treatments and procedures are done. Greater explanation about why a particular treatment is important and even how certain best practices were developed can be helpful when talking to skeptical patients.

Encouraging patients to ask questions about the prenatal, delivery, and postpartum periods is important for gaining trust and combatting misinformation. But asking patients where they received false information can strain the physician-patient relationship, as patients may feel their provider is not listening or is judging their decision-making skills.

Patients who feel like they are not in control of their care may be more likely to refuse care to regain some power. In these cases, documenting the patient's informed refusal regarding recommended tests or treatments is a necessity.

In more urgent and emergent situations, these patients can feel as though things are being done *to them* and not *for them*. As a provider, taking the extra time to fully explain what is going on and what is going to happen next can ease anxiety and allow patients to feel included in their care.[17, 18]

ABORTION CARE

Since the Supreme Court decision in *Dobbs v. Jackson Women's Health Organization*, there have been rapid changes to the laws regulating abortion in many states. Due to confusion over new laws, physicians may not be confident about how to legally treat patients.

In Texas, as in many states, there has been uncertainty regarding interpretation of the new laws. Chapter 170A of the Texas Health and Safety Code prohibits abortion unless the life of the mother is at risk or if the pregnancy poses a "serious risk of substantial impairment of a major bodily function." This law went into effect on August 25, 2022.[19]

To help clarify treatment for several life-threatening conditions, the Texas legislature passed H.B. 3058 in the 2023 session. This law establishes an affirmative defense in an action against a physician or health care provider arising from two pregnancy complications: ectopic pregnancy and a previable

premature rupture of membranes if "exercising reasonable medical judgement." [20] An affirmative defense is a defense in which evidence is introduced that, if found to be credible, will negate liability.

IMPLICIT BIAS IN MEDICINE

Implicit bias has been identified as a contributing factor to maternal mortality and morbidity. Historically, Black Americans have had poorer outcomes in medical care. This is due, in part, to institutional bias and stereotypes.[21]

Regarding maternal health care, historically, Black patients are three to four times more likely to die during or after childbirth compared to white patients. Many of the preventable and manageable medical complications associated with pregnancy, labor, and the postpartum period are not treated as effectively or as quickly for this population when compared to other races and ethnic groups.[21]

In Texas, the most recent 2022 report from the state's Maternal Mortality and Morbidity Review Committee (MMMRC) emphasizes the problems faced by Black women. "Data collected by MMMRC over time shows that Black women are disproportionately affected by maternal death and illness. The exact reasons Black women face higher rates of maternal death and illness remain unclear and are being studied by MMMRC's Subcommittee on Maternal Health Disparities. The 2019 numbers also show that non-Hispanic Black women die at twice the rate of non-Hispanic white women and over four times the rate of Hispanic women. That trend has persisted since at least 2013, the earliest year with data available." [22]

Health care disparities are still significant for this population. Areas with higher populations of Black Americans have fewer family medicine and maternal care providers and hospitals, making access to care more difficult.

Implicit bias, or negative attitudes and beliefs towards a person's race or ethnicity, disability, or sexual orientation, may be found in individual interactions between patients and providers or between patients and systemic obstacles.[23]

This may, in some instances, foster mistrust of health care providers and lead Black women to seek maternal care only when their condition is emergent, causing greater morbidity and mortality.

In states with the highest maternal morbidity and mortality rates, decision-makers have called for implicit bias training for physicians, nurses, and other providers. Such training may improve care to these communities.[24]

Personal introspection is emphasized during implicit bias training, with participants encouraged to explore, acknowledge, and recognize their own

biases, and then actively seek out methods to combat these feelings. Health care providers can also question where the information that fuels biases comes from. These kinds of personal actions also improve the ability to care for all patients.

Recognizing and acknowledging a patient's distrust and fear can be an excellent opening for maternal medicine providers to understand their patients better. Active listening lets patients know that their concerns are understood. Poor communication between patient and provider can leave patients feeling left out of the decision-making process and forced into choices they may not have wanted to make.[25]

The CDC offers the following tips for maternal care providers, hospitals, and states to reduce bias in reproductive medicine and better care for underserved populations.[26]

Individual health care providers can:

- ask questions to better understand their patient and any circumstances affecting their lives and ability to seek care;
- help patients, and those accompanying them, understand the urgent maternal warning signs and when to seek immediate medical attention;
- help patients manage chronic conditions or conditions that may arise during pregnancy like hypertension, diabetes, or depression;
- recognize and work to eliminate unconscious bias in themselves and in their practice on an ongoing basis;
- respond to patient concerns; and
- provide all patients with respectful quality care.

Hospitals and health care systems can:

- identify and address unconscious bias in health care;
- standardize coordination of care and response to emergencies;
- improve delivery of quality prenatal and postpartum care; and
- train non-obstetric care providers to ask about pregnancy history in the preceding year.

States and communities can:

- assess and coordinate delivery hospitals for risk-appropriate care;
- support review of the causes and opportunities for prevention behind every pregnancy-related death; and
- identify and address social factors influencing maternal health such as unstable housing, transportation access, food insecurity, substance use, violence, and racial and economic inequality.

COMBATTING IMPLICIT BIAS

The American Academy of Family Physicians (AAFP) provides eight tactics to help identify and reduce implicit bias.

"**Introspection**: Explore and identify your own prejudices by taking implicit association tests or through other means of self-analysis.
Mindfulness: Since you're more likely to give in to your biases when you're under pressure, practice ways to reduce stress and increase mindfulness, such as focused breathing.
Perspective-taking: Consider experiences from the point of view of the person being stereotyped. You can do this by reading or watching content that discusses those experiences or directly interacting with people from those groups.
Learn to slow down: Before interacting with people from certain groups, pause and reflect to reduce reflexive actions. Consider positive examples of people from that stereotyped group, such as public figures or personal friends.
Individuation: Evaluate people based on their personal characteristics rather than those affiliated with their group. This could include connecting over shared interests.
Check your messaging: As opposed to saying things like 'we don't see color,' use statements that welcome and embrace multiculturalism or other differences.
Institutionalize fairness: Support a culture of diversity and inclusion at the organizational level. This could include using an equity assessment tool to identify your group's blind spots or reviewing the images in your office to see if they further or undercut stereotypes.
Take two: Resisting implicit bias is lifelong work. You must constantly restart the process and look for new ways to improve." [27]

Once a provider has identified their implicit or personal biases, they can take steps toward greater

inclusivity by analyzing aspects of their own life that may be less inclusive and seeking more inclusive alternatives. These steps may include:

- seeking out education from professionals in your field that may be different from yourself;
- using resources and data collected on populations different than those that you see; or
- spending time with and asking questions of people who are different from yourself.

If you begin to recognize patterns of injustice and inequality, get involved and advocate for groups that may not be receiving adequate care because of their differences. Physicians can offer training on implicit bias for their staff or encourage and advocate for hospitals to seek out better training on biases in their facilities.[28]

ACCESS AND HEALTH LITERACY

Prenatal care

Limited health literacy has been tied to patients making unhealthy choices during pregnancy. When they are more informed and actively participate in their care, patients can help improve outcomes through increased diligence and awareness of what to look for if something is wrong.[29]

Pregnancy care providers are vital to engaging and assessing a patient's health literacy as they may be the primary educators for this population. Encourage stronger health literacy with pregnant patients to help them make informed decisions that may influence their health and the health of their infant. Educate patients on what are safe and unsafe behaviors during pregnancy and what behaviors you recommend they follow as their health care provider.

Avoid using technical medical terminology as it may limit patient understanding. Patients may feel intimidated by language they do not understand and avoid asking follow-up questions. Printed handouts can be helpful because they allow the patient to review what was discussed at home and return with more questions.

However, simply handing a patient a pamphlet of information is not always helpful for those who may struggle with reading comprehension. Consider using plain language without medical jargon to engage in conversation with patients.

Advising patients to do their own research may not be helpful, as not all maternal care websites use evidence-based research and may include opinion pieces posted by unreliable sources. Guide patients to reliable websites vetted by your practice. Specialty societies, such as ACOG, often offer patient resources — both online and printable — that will assist in your education processes.

Each patient visit is an opportunity to discuss and educate the patient on care needs in the moment, as well as concerns for the future. As the patient progresses through pregnancy, anxiety can be relieved by setting expectations and educating the patient on what comes next.[30, 31]

Preventative medicine

Access to safe contraception may significantly reduce maternal morbidity and mortality. If a person does not want to become pregnant or cannot safely carry a pregnancy to term, the use of contraception can save lives.

Access to contraception has rapidly reduced maternal deaths worldwide, with the decline in death ranging from 7 percent to 61 percent in some countries. The U.S. has invested a great deal of financial support to researching safe family planning and reproductive health, as this research continues to save lives of many people of childbearing age in this country and around the world.

Educating patients early about options and resources for family planning can reduce teenage and unwanted pregnancy. It also allows families to space their pregnancies safely and effectively. "It is widely recognized that family planning contributes to reducing maternal mortality by reducing the number of births and, thus, the number of times a woman is exposed to the risk of mortality." [32]

Maternal health care in rural areas

Many people who live in rural areas do not have access to health care, especially pregnant patients. These patients often must drive many miles to reach a health care provider and even further for obstetric services. Half of all rural counties in the U.S. have no maternal care providers, putting patients at greater risk for complications and death.[33, 34]

Rural women have a 9 percent greater risk of

maternal morbidity and mortality. Rural hospitals also report greater rates of postpartum hemorrhage and need for blood transfusions. The extensive time it takes to travel during an obstetric emergency also leads to higher infant mortality rates in rural areas.[33]

Rural counties are also more likely to have closed their health care facilities due to lack of resources, especially obstetric departments. These closures predominantly affect Black and African American communities, who are already at increased risk during pregnancy in urban areas. In addition, American Indian and Alaskan Native patients are two to three times more likely to die from pregnancy-related causes because many reservations and native lands do not have obstetric providers.[33, 34]

In 2016, the Centers for Medicare and Medicaid Services (CMS) established the Rural Health Council to help improve access to care for Americans living in rural areas; support the economics of providing health care in rural America; and ensure that the health care innovation agenda fits rural health care markets.[35]

To this end, physicians and other providers working in rural communities are encouraged to use and recommend best practices for quality improvements before, during, and after pregnancy. This includes assisting rural patients with accessing such resources as the Affordable Care Act and American Rescue Plan Act. These acts can assist rural patients with gaining internet access and telehealth services.[35]

Maternal care in border areas

U.S. border towns face the unique challenge of caring for patients coming from a different country, including pregnant patients. Some common barriers are lack of prenatal care before arriving at the hospital for delivery, lack of financial means, and lack of information relating to postpartum care.[33]

These patients may be very young, speak little or no English, and lack health literacy. Often, they may not be capable of advocating for their maternity care preferences or decisions.[33]

Hispanic patients along the border are also more likely to have little or no prenatal care, more complicated labors, and higher rates for cesarean delivery compared to Hispanic women living elsewhere in the U.S.[33]

When caring for patients in border towns, cultural competence and access to interpreter services serve as beneficial ways to provide for the community.

Increased cultural awareness by providers and staff can help families who are unaccustomed to the U.S. health care system. Health care advocates and navigators can help ensure these patients have access to care during the labor and delivery process and set them up for a safer postpartum period [33, 34]

POSTPARTUM CARE

Mental health

The postpartum period — from one day to one year after the completion of a pregnancy — is a critical period for a birth mother. There are many physical, mental, and emotional changes happening rapidly. Postpartum depression and postpartum anxiety can occur during and up to one year after giving birth and may be caused or exacerbated by sudden changes in hormones combined with the stress that comes with a new child.

Giving birth can also be an experience that causes increased physical and mental stress. The CDC reported that suicide accounted for 9 percent of the maternal mortality rate in 2022. Postpartum depression and PTSD are the most common complications of pregnancy and childbirth, with one in five patients claiming to have been affected. Many of these patients do not seek treatment.[36]

Obstetric care providers should discuss mental health with their patients during prenatal visits and through delivery and postpartum. Offering resources early and emphasizing the importance of patients speaking up can save lives. Eliminating the stigma surrounding postpartum depression and postpartum anxiety can give patients relief when seeking care. Providers should also encourage the birthing partners to speak up if they notice their partner is not doing well mentally or emotionally.

Physicians, midwives, nurses, and social workers should be encouraged to screen patients multiple times for mental health issues before they leave the hospital or birthing facility, as well as at all

CLOSED CLAIM STUDY: FAILURE TO RECOGNIZE SEPSIS

Presentation
On November 3, a 30-year-old woman came to a hospital emergency department (ED) in labor. She was admitted and estimated to be 36 weeks pregnant.

She had been scheduled for a cesarean delivery on November 19, but that date was changed due to low amniotic fluid on a recent sonogram. This was the patient's second pregnancy. Her first child had been born by cesarean delivery.

Physician action
Ob-gyn A performed a low transverse cesarean delivery, noted as uneventful. On November 6, the patient had a temperature of 99 degrees and an elevated pulse rate.

In the early morning on November 7, she vomited undigested food and was seen by Ob-Gyn B. He noted that the patient was feeling better later that morning. By lunchtime, she had retained her lunch, moved with ease, and showed no signs of distress. The patient and her newborn were discharged at 5 p.m.

On November 8 at 7:48 p.m., the patient came to the ED of a different hospital with nausea and vomiting. She reported having a small bowel movement, but no diarrhea or constipation. The patient's blood pressure was 128/79 mm Hg; pulse was 124; respiratory rate was 20; and temperature was 99 degrees. She rated her pain at 6 out of 10.

The emergency medicine (EM) physician noted the patient's abdomen was soft, with normal bowel sounds and no distention or tenderness. The physician's differential diagnoses included anemia, infection, dehydration, and electrolyte imbalance. The EM physician believed the patient's symptoms were consistent with viral gastroenteritis.

The patient's white blood cell count was normal with a bandemia of 65 percent. A CBC showed mild anemia with hemoglobin of 104. The patient's complete metabolic panel showed "sodium 136, chloride 96, bicarbonate 19, BUN 51, creatinine 1.37, normal glucose, and normal LFTs and lipase."

The patient was given two liters of normal saline, and the EM physician re-examined the patient at 11:57 p.m. After consuming a rehydration drink, the patient reported no further vomiting.

The patient was discharged at 1:12 a.m. with a prescription for hydrocodone and ondansetron. She was instructed to continue drinking fluids and to follow up with Ob-gyn A. The patient's vital signs at discharge showed her blood pressure at 102/58 mm Hg; her pulse at 78; respirations at 18; and a 98 percent oxygen saturation.

The patient continued to experience nausea and abdominal pain. On November 11, she experienced stomach swelling. According to the patient's father, she did not want to call her doctor or go to the ED. She wanted time for her medications to work.

On November 12, the patient's family called for an ambulance twice. When the first ambulance arrived, the family reported that the EMT told the patient that she would be fine, and that a trip to the hospital was not necessary. The first ambulance was sent away without examining the patient. However, a second ambulance was called, because the patient's temperature exceeded 100 degrees, and she looked very pale. This ambulance transported her to the hospital on November 13 with significant abdominal pain.

Upon arrival in the ED, the patient's blood pressure was 66/38 mm Hg, with a 130-pulse rate and respirations of 30. Her oxygen saturations were 90 percent on oxygen. She received fluid resuscitation. Examination revealed abdominal tenderness with rebound, guarding, and distention. It was believed the patient was bleeding intra-abdominally.

An ultrasound showed free air in her abdomen, and a massive blood transfusion protocol was initiated. After developing acute respiratory failure, the patient was intubated and taken to the operating room for an exploratory laparotomy.

The patient was "found to have a perforation primarily of the right colon and cecum, but marked peritonitis with diffuse enteric contents throughout the peritoneal cavity, which resulted in an additional perforation of the small bowel." Her small and large bowel were also gangrenous. Excised areas of the bowel were sent to pathology.

After surgery, the patient was transferred to the ICU. She arrested on November 14, but returned to spontaneous circulation. She required pressor drips to support her vital signs and dialysis due to renal failure. She developed disseminated intravascular coagulation (DIC), and went into severe metabolic acidosis on November 16. The results of a brain stem exam revealed no cerebral activity.

The patient's family withdrew medical care that day, and the patient died at 6 p.m. Her death certificate listed the cause of death as "intestinal perforation with onset of 4-5 days, peritonitis, septic shock and brain death." No autopsy was performed.

Allegations

A lawsuit was filed against the EM physician and the hospital. It was alleged that she failed to recognize symptoms of sepsis, and that she should have admitted the patient on November 8. The allegations included gross negligence.

Legal implications

The EM physician testified that when she saw the patient on November 8, her symptoms were consistent with viral gastroenteritis, not an infection. She attributed the patient's elevated BUN and creatinine levels to dehydration, and the patient's bandemia to physical stress from the recent cesarean delivery and repetitive vomiting. She did not believe the patient's lab results and symptoms indicated sepsis.

Defense consultants offered mixed opinions about this case. One consultant stated that the EM physician ordered appropriate labs, while another consultant believed a CT scan should have been ordered, and that a bedside ultrasound would have shown fluid in the patient's abdomen. Both consultants thought that the patient was septic.

Both the surgeon who treated the patient and the pathologist who examined the bowel specimens thought that she developed Ogilvie's syndrome, causing the perforation in her small intestine. However, the pathologist did not believe Ogilvie's syndrome could be diagnosed based on her one episode of vomiting and nausea.

The surgeon stated that the patient's symptoms and vital signs did not warrant further testing. But if imaging had been performed, it would have likely shown Ogilvie's or an ileus. The surgeon thought that the EM physician was prudent in recommending that the patient see her ob-gyn in 24 hours if symptoms continued.

The plaintiff's expert criticized the EM physician for not addressing the patient's "very abnormal" electrolytes and complete blood count results, as well as the "grossly abnormal" white blood cell count. This expert also criticized the defendant for not ordering further testing to identify the bacterial infection and for not admitting the patient to the hospital for observation.

An expert for the defense stated that the EM physician correctly diagnosed the patient given her symptoms. This expert believed that the clinical presentation of the patient was the most important mechanism for determining sepsis. This expert also believed that the documentation did not support the patient having a bowel perforation.

Disposition

This case was settled on behalf of the EM physician and the hospital.

Risk management considerations

Communication and documentation issues are frequently a focus of medical malpractice suits. In this case, a communication breakdown occurred between the patient and hospital staff during discharge. The patient and her father did not inform the hospital staff that she was still experiencing nausea and abdominal pain at discharge. It was crucial for the hospital staff to be aware of her ongoing issues, which may have prevented her discharge from the hospital.

Following up with a patient after a major event such as an ED visit or surgery may improve not only patient safety, but also patient satisfaction. Some follow-up call protocols are designed to contact specific patient populations, such as those at high-risk, those with certain diagnoses, or those discharged on multiple new medications. The Patient Safety Network of the federal Agency for Healthcare Research and Quality recommends following up with patients within the first 72 hours after discharge. [54]

Having clinically trained staff with a pre-determined triage check list can help you identify complications before they become serious. Instructing a patient only to follow up with their general practitioner or specialist may delay care. A phone call to assess the patient and recommend follow up, such as returning to the ED if necessary, may identify critical symptoms as they occur. [54]

It is important to clearly explain discharge instructions to patients, including to call or return to the ED if symptoms continue or worsen, and to document these conversations.

postpartum visits. Screenings can help prevent maternal mortality by opening a dialogue about mental health.[37]

Texas law requires hospitals, birthing centers, physicians, nurse-midwives, and midwives who provide prenatal care to pregnant women during gestation or at delivery, to provide a resource pamphlet that includes information on postpartum depression to the woman; father of the infant; or other adult caregivers for the infant. This information must be documented in the patient's record. The state recommends that the information be given twice — at the first prenatal visit and again after delivery.[38]

The resource pamphlet can be obtained at https://www.dshs.texas.gov/maternal-child-health/healthy-texas-mothers-babies/moms-to-be/maternal-child-health-mch. Details about the law may be found in the Texas Health and Safety Code Section 161.501.[39]

To further encourage screening for postpartum depression, Texas Medicaid provides screening as a benefit. Mothers who take newborns for Texas Health Steps checkups through Medicaid or the Children's Health Insurance Program (CHIP) will be eligible to receive testing and counseling for postpartum depression. "The policy allows physicians who choose to provide the screening to be paid for one exam per eligible child over a 12-month period. It applies to infants enrolled in both Medicaid managed care and fee-for-service." [40]

Using tools such as the Perinatal Anxiety Screening Scale (PASS) for perinatal (beginning at 20 to 28 weeks of gestation and ending at one to four weeks after delivery) and postnatal (first six weeks after delivery) appointments can be a good way to engage patients in a discussion of any pregnancy or postpartum worries. If patients show signs of anxiety in the perinatal period, physicians may be able to start addressing the concerns early and avoid greater anxiety after delivery.

PASS is made up of 31 questions related to how often symptoms are experienced. The questions are designed to assess four categories of anxiety:

1. acute anxiety and adjustment;
2. general worry and specific fears;
3. perfectionism, control, and trauma; and
4. social anxiety.[41]

The Edinburgh Postnatal Depression Screening (EPDS) tool is a 10-item questionnaire that can be used on the first day after delivery and at all subsequent visits to assess whether a patient is developing postpartum depression. The EPDS can be used by ob-gyns and pediatricians, as parents often see a pediatrician before returning to their ob-gyn.

The EPDS is found online at the Stanford University website at https://med.stanford.edu/content/dam/sm/ppc/documents/DBP/EDPS_text_added.pdf.

The EPDS-3 is an abbreviated three question subset of the EPDS that focuses on the anxiety component of postpartum depression. These three items are:

1. "I have blamed myself unnecessarily when things went wrong
2. I have been anxious or worried for no good reason
3. I have felt scared or panicky for no very good reason" [42]

The EPDS-3 questionnaire is found online at https://divisionsbc.ca/sites/default/files/inline-files/EPDS-3-for%20print_FNL_FNL_FNL.pdf.

Physical health

Many new mothers are so overwhelmed with the amount of information they receive about their infant that they may neglect their own physical health. Before leaving the hospital, educate the patient and her family and caregivers on any concerning conditions, such as chest pain, dizziness, swelling in the arms and legs, increased bleeding, fever, redness or oozing at incisions, or unbearable pain. Instruct them to contact their physician or go to the emergency department if these symptoms occur.

While in the hospital, nursing staff will be looking for signs and symptoms of complications, but continuous education to the birthing patient and their partners or family will reinforce the importance of being diligent in personal care.[43]

Dangerous postpartum conditions to educate patients about include:

- cardiomyopathy, which can lead to heart failure in otherwise young and healthy patients;

- hypertension before and after delivery can cause severe morbidity and mortality if not treated quickly;
- blood clots in the postpartum period are often screened for before, during, and after the delivery; and
- hemorrhage is a condition patients are often aware of, but knowing what symptoms may indicate if or when they have lost too much blood can help get the patient to a hospital faster.

Pain in the postpartum period

Vaginal and cesarean deliveries both put a great deal of stress on the body. For some patients, postpartum pain may only last a few days, but for some it can last many weeks.

Immediately addressing pain can help reduce the risk of mismanagement and abuse of pain medication. Pain is an individual experience; not all people will be affected or able to tolerate it in the same way. Inadequate pain management has been found to interfere with a mother and infant's ability to bond and feed. It can also limit mobility, putting patients at risk for further complications.

Instead of using pre-defined medication durations, take a shared decision-making approach with patients. When creating a plan to reduce postpartum pain, educate patients on all pain-management options, their side effects, and potential effects on the infant.

Individual patient needs and circumstances will guide decisions on which medications to prescribe and for how long.[44]

ACOG suggests opioids be prescribed for the shortest reasonable course, while encouraging non-pharmacologic and non-opioid treatments. Patients who are not well managed for pain may seek relief from unsafe sources, leading to increased risk to the patient and infants.[45, 46]

CONCLUSION: HOW CAN PHYSICIANS HELP LOWER MATERNAL MORTALITY AND MORBIDITY RATES?

Physicians and other maternal care providers can help lower rates of mortality in several ways. They can continue to educate themselves about new diagnostic and treatment options. They can also seek out the latest research and recommendations from their specialty societies, licensing boards, and state and federal health agencies. Providers can also lead campaigns that advocate for best practices in their facilities and practices and for legislative changes in their cities and state.

It is also important to educate and raise awareness among patients, their partners, and caregivers on how and when to listen, speak out, and act when complications may occur. Encourage patients and their families to take an active role in their care. Active and engaged patients are more likely to come in early if they experience complications, leading to better outcomes for themselves and their infants.

Physicians can take steps to improve patient outcomes by ensuring they treat patients with equity and empathy. Pregnant patients are especially vulnerable to complications; it is important to listen to and recognize the needs of each patient. Equity and empathy may be especially important for patients at increased risk of maternal mortality, such as Black/African American and Indigenous patients.

Offering attention, education, and reassurance for pregnant patients' concerns can help them understand they are supported by their care team. This, in turn, may lead to open communication between the patient and their physician and lessen patient hesitation to reach out if experiencing complications.

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CLOSED
CLAIM
STUDY

FAILURE TO OBTAIN PREOPERATIVE IMAGING

by Wayne Wenske, Senior Marketing Strategist

This closed claim study is based on an actual malpractice claim from Texas Medical Liability Trust. This case illustrates 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. This study has been modified to protect the privacy of the physicians and the patient.

PRESENTATION

On May 21, a 76-year-old man came to a dermatologist for examination of a one-inch mass behind his right ear. The patient's history included kidney cancer, hypertension, hypothyroidism, hypercholesterolemia, incontinence, and a significant hematoma of the posterior scalp after a fall. His medications included low-dose daily aspirin (81 mg).

The dermatologist attempted to incise and drain the mass but stopped the procedure due to excessive bleeding. He determined that the patient either had a lipoma or a vascular tumor and referred the patient to General Surgeon A.

The dermatologist documented his discovery of a "pulsatile mass" and recommended that either an MRI or CT scan be obtained before further treatment.

PHYSICIAN ACTION

On July 12, the patient came to General Surgeon A. He examined the patient and scheduled an excisional biopsy. The surgeon's differential diagnosis included lipoma, cyst, and aneurysm. He noted a pulse at the base of the mass that he described as "the regularly occurring artery of the scalp." General Surgeon A did not order any imaging.

On August 24, the patient came to a surgical center for removal of the mass behind his right ear. During the procedure, General Surgeon A encountered an open skull fracture and significant bleeding. The patient lost approximately one liter of blood and required an emergency transfusion with two units of packed red blood cells.

General Surgeon A, with assistance from General Surgeon B, cauterized and packed the wound. The patient was transported by helicopter to a nearby hospital where he was stabilized in the Neurological Intensive Care Unit.

The next day, the patient was taken to surgery for embolization of the blood vessels supplying the tumor to stop the bleeding and to prepare him for surgery on the mass.

On August 27, a neurosurgeon, an otolaryngologist, and a plastic surgeon removed the tumor, performed a mastoidectomy, and repaired the patient's skull with a mesh titanium plate and skin graft. During the complex, 10-hour surgery, the patient experienced elevated ST segments. His troponin levels indicated heart damage.

Following the surgery, the patient's skull developed ischemic pressure necrosis that resulted in full-thickness loss of the soft tissues. The patient underwent multiple subsequent procedures for debridement of the infected tissue, additional local rearrangements, rotational advancement flaps, and placement of tissue growth templates.

The patient died of metastatic recurrent kidney cancer on December 26.

ALLEGATIONS

A lawsuit was filed against General Surgeon A and General Surgeon B. The allegations were failure to:

- obtain preoperative laboratory tests, imaging, and further diagnostic testing of the mass before attempting to remove it;
- consider a possible relationship between the mass and metastatic kidney cancer;
- instruct the patient to stop aspirin therapy before surgery;
- maintain current documentation, as charting was not completed until two weeks after the patient's August 24 surgery.

LEGAL IMPLICATIONS

Physicians who reviewed this case were critical of General Surgeon A for not obtaining preoperative imaging (CT or MRI) of the mass. Imaging at the hospital after the attempted excision revealed a very large lesion eroding the skull and growing into the brain. Reviewers further stated that if imaging had been obtained before the excision, General Surgeon A would not have attempted the procedure and would have referred the patient to a neurosurgeon.

Another consultant stated that General Surgeon A should have referred the patient to a neurosurgeon based on his history of kidney cancer and the significant bleeding encountered by the dermatologist.

Consultants for the plaintiff claimed that the actions of General Surgeon A shortened the life expectancy of the patient. Criticisms against General Surgeon B were less strenuous because he was brought

in to treat the patient after complications were encountered during surgery.

DISPOSITION

The case was settled on behalf of General Surgeon A and General Surgeon B.

RISK MANAGEMENT CONSIDERATIONS

This case was complicated by a lack of coordination and communication among the physicians. The dermatologist documented his discovery of a mass and his recommendation for an MRI and/or CT imaging. Yet, there is no indication in the record that this information was provided to or received and reviewed by General Surgeon A, or that the two physicians communicated before General Surgeon A attempted to remove the mass.

Keeping accurate, contemporaneous documentation can greatly benefit a physician defending a claim. General Surgeon A did not order the recommended MRI or CT scans. Had he documented his rationale for not ordering the tests, his actions may have been easier to understand and explain.

There was also no documentation that the patient was told about the dermatologist's findings and recommended treatment. It is a good practice to engage patients in their own treatment by educating them about needed follow-up lab work and testing. It is important to document these conversations and any education the patient receives. If the patient had been better informed of his condition, he may have been able to advocate for further diagnostic testing with General Surgeon A.

The patient also had a history of kidney cancer, making him more vulnerable to complications and requiring increased coordination and communication among his providers. While the patient verbally reported his dermatology visit to General Surgeon A, the surgeon did not obtain the prior records.

Making an accurate diagnosis requires asking the right questions, conducting a thorough physical exam, and gathering clinical data. When caring for a patient with a complex history or condition, it is recommended to foster and maintain open communication with all the patient's providers, including consulting physicians, labs, and specialists to ensure comprehensive, systematic, and quality patient care.

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FAILURE TO TREAT DEEP VEIN THROMBOSIS ASSOCIATED WITH EXTREME OBESITY

by Wayne Wenske, Senior Marketing Strategist

This closed claim study is based on an actual malpractice claim from Texas Medical Liability Trust. This case illustrates 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. This study has been modified to protect the privacy of the physicians and the patient.

PRESENTATION

On September 1, a 49-year-old man came to a medical center with pain in his right foot after stepping off a ladder at work. Ten years earlier, the patient had a left Achilles tendon tear and surgery. At that time, he received chemical deep venous thrombosis (DVT) prophylaxis (enoxaparin sodium) for five days after surgery.

The patient's history also included left ventricular hypertrophy, type 2 diabetes, hypertension, obstructive sleep apnea, gastroesophageal reflux disease, and Class III obesity. His BMI was 63.

An MRI was performed at the medical center and revealed an avulsion fracture of the right calcaneus (heel bone). It also showed a new rupture of his left Achilles tendon. The patient was referred to Orthopedic Surgeon A.

PHYSICIAN ACTION

On November 7, the patient came to Orthopedic Surgeon A. After examining the patient, the surgeon scheduled him for surgery. The surgeon documented an informed consent discussion with the patient.

On December 5, Orthopedic Surgeon A performed a left open flexor hallucis longus (FHL) tendon transfer and Achilles tendon repair. The patient was placed in a short cast. No complications were noted.

The patient was discharged the same day with instructions for non-weight-bearing and early ambulation. The operative report stated that early ambulation was to be used for DVT prophylaxis. He was instructed to return for follow-up in 10-to-14 days.

On December 8, the patient was transported to a local emergency department (ED) in respiratory distress. Before seeing the ED physician, the patient became apneic and died.

The autopsy report listed the cause of death as bilateral pulmonary thromboembolism secondary to extreme obesity. His weight was noted as 488 pounds.

ALLEGATIONS

A lawsuit was filed against Orthopedic Surgeon A. Allegations included failure to use mechanical and/or chemical venous thromboembolism prophylaxis to prevent DVT and death from pulmonary embolism.

LEGAL IMPLICATIONS

Physician consultants who reviewed the case were mixed in their opinions of Orthopedic Surgeon A's care. Consultants who were supportive of Orthopedic Surgeon A argued that chemical prophylaxis is not recommended for patients undergoing foot and ankle surgery. In addition, the patient had no known history of DVT, pulmonary embolism, or blood clotting disorders.

However, the patient's risk factors were obesity, hypertension, and limited mobility postoperatively. Combined, these conditions put the patient into a high-risk category. According to the orthopedic surgeons reviewing this case, chemical prophylaxis is recommended in such high-risk cases.

One orthopedic consultant stated that the patient was at heightened risk of DVTs due to his extreme obesity, and he should have been placed on a combination of sequential compression devices (SCDs) and anticoagulation medication. This consultant's assessment was based on recommendations from the Caprini Risk Assessment Model (RAM) for venous thromboembolism.

A research project of DePaul University, the Caprini RAM is a tool for indicating risk of DVT. According to the scale, patients who rate a five-to-eight RAM score are considered "high" risk. The RAM score for this patient was nine ("very high" risk).[1]

DISPOSITION

The case was settled on behalf of Orthopedic Surgeon A.

RISK MANAGEMENT CONSIDERATIONS

Approximately 70 percent of U.S. adults are either overweight or obese. These individuals are at greater risk for several health conditions and diseases, particularly cardiovascular disease, hypertension, gallbladder disease, stroke, sleep apnea, and certain cancers. Mortality is substantially increased due to the number of comorbidities associated with obesity and severe obesity.

Part of treating these patients is assessing the level of an individual's obesity and what specific health risks they may have. For example, patients with obesity or severe obesity are at a heightened risk of diabetes. Studies have shown that the risk of diabetes

for patients with a BMI greater than 35 is eight to 30 times greater than patients with a "normal" BMI.[2]

In this case, Orthopedic Surgeon A did not seem to consider the patient's extreme obesity when assessing how to address post-surgical DVT prophylaxis. One consequence of the patient's obesity was his inactivity and limited ability to ambulate. Instructing the patient to use early ambulation to avoid blood clotting may not have been realistic. The surgeon's plan was more applicable to a patient of a "normal" weight.

Additionally, this patient's history of chemical DVT prophylaxis from a previous procedure could have been taken into account when deciding on DVT prophylaxis.

When treating obese patients, consider looking at the whole health of a patient, including the patient's biological makeup (current condition and family history); behaviors (diet, sleep, activity, stress levels); social interactions (family, friends, community); and environment (where and how they live and work). Does the patient get enough sleep? Exercise? Have an emotional support system? Work in a safe and/or clean environment? A holistic understanding of a patient's health conditions can help physicians gain insight and provide more effective, personalized health care.[3]

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