Fourth Court of Appeals
San Antonio, Texas

MEMORANDUM OPINION

No. 04-14-00215-CV

METHODIST HEALTHCARE SYSTEM OF SAN ANTONIO, LTD., L.L.P.
d/b/a Methodist Children's Hospital of South Texas, Robert Gonzalez, Rodney Sheffield, Jatin N. Patel, D.O., and Pediatrix Medical Services, Inc.
Appellants

v.

Emily **BELDEN**,
Appellee

From the 288th Judicial District Court, Bexar County, Texas
Trial Court No. 2012-CI-18164
Honorable David A. Canales, Judge Presiding

Opinion by: Catherine Stone, Chief Justice

Sitting: Catherine Stone, Chief Justice
Marialyn Barnard, Justice
Patricia O. Alvarez, Justice

Delivered and Filed: October 29, 2014

AFFIRMED

Methodist Healthcare System of San Antonio, Ltd., L.L.P. d/b/a Methodist Children's Hospital of South Texas, Robert Gonzalez, Rodney Sheffield, Jatin N. Patel, D.O., and Pediatrix Medical Services, Inc. appeal the trial court's order denying their motions to dismiss which challenged the adequacy of the expert reports served in the underlying cause alleging health care liability claims. Methodist contends the claims against it and its employees, Robert Gonzalez and Rodney Sheffield, should be dismissed because the experts were not qualified and their opinions

were speculative or conclusory. Similarly, Pediatrix Medical Services, Inc. and its employee Jatin N. Patel, D.O. contend the expert reports against them were deficient because the experts were not qualified to testify regarding causation and their opinions on causation were conclusory. We overrule these contentions and affirm the trial court's order.

BACKGROUND

Emily Belden filed the underlying health care liability claims individually and on behalf of her son, W.B., who sustained severe brain damage as a result of a cardiac arrest he experienced while recovering from a surgical repair of a congenital heart defect. W.B. was four-months-old at the time of the surgery.

With regard to Dr. Patel and his employer Pediatrix, Belden's petition alleged that Dr. Patel "breached the standard of care by failing in the following duties, which prevented the appropriate medical intervention from taking place and contributed to [W.B.'s] injuries: (1) failing to cool the patient to slow the rate of JET; (2) using Esmolol and increasing the dose at an unsafe rate to an inappropriate dose, in a dangerous manner; and (3) acquiescing in and continuing the course of treatment being followed by Drs. Lopez and Tenner,[1] even though this was below the standard of care and represented a departure from his recommendations." With regard to Gonzalez and Sheffield, and their employer Methodist, Belden's petition alleged that they "breached the standard of care by failing in the following duties, which contributed to [W.B.'s] injuries: (1) failing to provide, within thirty minutes of being requested, an ECMO[2] team, causing a delay in [W.B.] being connected to the ECMO. This may, as the evidence will show, be a result of one or more of

[1] Although Drs. Lopez and Tenner, and their employer Children's Critical Care Specialists, PLLC, are also defendants in the underlying cause, they are not parties to this appeal.
[2] "ECMO" is an acronym for extracorporeal membrane oxygenation. An ECMO machine pulls the patient's blood and removes carbon dioxide and infuses oxygen before returning the blood to the patient.

the following: (a) failing to timely notify the ECMO team; and/or, (b) the ECMO team's failure to respond in a timely manner."

The trial court found Belden's initial expert reports to be deficient, but granted Belden thirty days to cure the deficiencies. After Belden filed new and supplemental reports, the trial court denied the subsequent motions to dismiss.

STANDARD OF REVIEW AND EXPERT REPORT REQUIREMENTS

We review the trial court's decision regarding the adequacy of an expert report under an abuse of discretion standard. *Bowie Mem'l Hosp. v. Wright*, 79 S.W.3d 48, 52 (Tex. 2002); *Stephanie M. Philipp, P.A. v. McCreedy*, 298 S.W.3d 682, 686 (Tex. App.—San Antonio 2009, no pet.). An abuse of discretion occurs when a trial court acts arbitrarily or unreasonably and without reference to any guiding rules or principles. *Bowie Mem'l Hosp.*, 79 S.W.3d at 52; *McCreedy*, 298 S.W.3d at 686.

A plaintiff asserting a health care liability claim is required to file an expert report containing "a fair summary of the expert's opinions as of the date of the report regarding applicable standards of care, the manner in which the care rendered by the physician or health care provider failed to meet the standards, and the causal relationship between that failure and the injury, harm, or damages claimed." TEX. CIV. PRAC. & REM. CODE ANN. § 74.351(r)(6) (West Supp. 2014). To comply with the statutory requirements, the report need only provide enough information to fulfill two purposes: (1) it must inform the defendant of the specific conduct the plaintiff has called into question; and (2) it must provide a basis for the trial court to conclude that the claims have merit. *Am. Transitional Care Ctrs. of Tex., Inc. v. Palacios*, 46 S.W.3d 873, 879 (Tex. 2001). The expert report is required to be adequate with regard to only one liability theory within a cause of action in order for the claimant to proceed with the entire cause of action against the defendant. *Certified EMS, Inc. v. Potts*, 392 S.W.3d 625, 631 (Tex. 2013); *cf. Pedroza v. Toscano*, 293 S.W.3d 665,

669 (Tex. App.—San Antonio 2009, no pet.) (testifying expert not limited to acts or theories of negligence mentioned in 74.351 report).

METHODIST: STANDARD OF CARE AND BREACH

Methodist, Gonzalez, and Sheffield (collectively "Methodist") contend four experts, a nurse and three doctors, were not qualified to opine on: (1) the standards of care applicable to ECMO personnel; and (2) the failure to meet those standards. With regard to a fifth expert, Dr. Cory M. Alwardt, PhD, CCP, Methodist contends his opinions regarding the alleged breach of the standard of care are conclusory and speculative.

A. Qualifications on Standard of Care and Breach

An expert is qualified to testify if the expert has the knowledge, skill, experience, training, or education "regarding the specific issue before the court which would qualify the expert to give an opinion on that particular subject." *Broders v. Heise*, 924 S.W.2d 148, 153 (Tex. 1996). In this case, the specific issue before the court with regard to Methodist was the alleged failure of the ECMO team to respond in a timely manner. Thus, to be qualified to testify regarding the applicable standard of care on this issue, the expert reports would need to show within their four corners that the expert is qualified to render an opinion on the response time required of an ordinarily prudent hospital. *See Tenet Hospitals Ltd. v. Love*, 347 S.W.3d 743, 750-51 (Tex. App.—El Paso 2011, no pet.) (noting working in a hospital setting and serving on hospital committees does not demonstrate expert is qualified to render opinion on policies and procedures established by hospital in the absence of information that the expert had been involved in determining type of hospital policies and procedures in question); *Hendrick Med. Ctr. v. Conger*, 298 S.W.3d 784, 788 (Tex. App.—Eastland 2009, no pet.) (noting expert report as to hospital must show expert's knowledge, training, or experience concerning the applicable standard of care involving the formulation of

hospital policies and procedures and what ordinarily prudent hospital would do under same or similar circumstances).

With regard to the standard of care involving an ECMO team's response time, Belden argues that Dr. Alwardt and the nurse, Loyne Jacobs McCullough, MS, RN, CNOR, were qualified to testify regarding the standard of care. Methodist does not challenge Dr. Alwardt's qualifications;[3] therefore, we turn our attention to Nurse McCullough's qualifications.

In her report, Nurse McCullough states, "I have managed staffing issues at Brackenridge Hospital, dealing with on-call issues and St. David's Hospital surgery center. As noted in my resume, I have experience with policy/procedures not only in the perioperative setting but with establishing Rules and Regulations for the (Texas Department of Health) Texas Health and Human Services." Nurse McCullough's CV shows: (1) from 2002 to the present, she has contracted with surgery centers "doing audits rewrite/write policies and procedures;" (2) from 1990 to 1999, Nurse McCullough was the nurse manager at St. David Medical Center where she was responsible for "coordinating all aspects of the surgery center" and for the "policy/procedure committee;" and (3) from 1981 to 1990, Nurse McCullough was the inservice coordinator at Bailey Square Surgical Center where she "[o]riented all new employees, providing all teaching, wrote and enforced policies."

Methodist contends that Nurse McCullough was required to show experience directly with ECMO teams; however, Nurse McCullough states "the standard of care is that any hospital staff – RN, OR Tech, Perfusion Tech, whatever the title-, when they are on call for the hospital/facility that the person called be at the hospital within thirty (30) minutes from the time they are called."

[3] Dr. Alwardt's report states that he has been "an ECMO coordinator for the previous 2 years, and the prior 3 years I was the supervisor to the ECMO coordinator. In these roles, I have been responsible for maintaining policies and procedures of staffing for ECMO and have dealt with on-call issues."

Because the standard of care is applicable to all on-call personnel, and Nurse McCullough has experience in managing hospital staffing issues, dealing with on-call issues, and the writing and teaching of policies and procedures for hospitals, the report is sufficient to show that Nurse McCullough was qualified to testify regarding the applicable standard of care and its breach.

Accordingly, we hold that the trial court did not abuse its discretion in determining Dr. Alwardt and Nurse McCullough were qualified to testify regarding the standard of care applicable to Methodist and the manner in which the care rendered by Methodist failed to meet that standard.

B. Speculative or Conclusory Opinions on Breach

Methodist does not challenge the standard of care set forth in the expert reports. The standard of care requires that on-call staff arrive at the patient's bedside within thirty minutes from the time they are called. Methodist contends that the experts' opinions regarding the breach of the applicable standard of care are speculative or conclusory because they state Gonzalez and Sheffield were not at W.B.'s bedside within thirty minutes; however, they provide no factual support for this conclusion or the factual support that is provided is speculative.

"[L]iability in a medical malpractice suit cannot be made to turn upon speculation or conjecture." *Hutchinson v. Montemayor*, 144 S.W.3d 614, 618 (Tex. App.—San Antonio 2004, no pet.). An opinion is speculative if an expert's opinion is not supported by the established facts but only by an assumption regarding the underlying facts. *See Cooper v. Arizpe*, No. 04-07-00734-CV, 2008 WL 940490, at *3 (Tex. App.—San Antonio Apr. 9, 2008, pet. denied) (mem. op.) (citing *Murphy v. Mendoza*, 234 S.W.3d 23, 28 (Tex. App.—El Paso 2007, no pet.)). Moreover, an expert must explain the basis of his statements and link his conclusions to the facts in order for his opinions not to be conclusory. *Jelinek v. Casas*, 328 S.W.3d 526, 539 (Tex. 2010).

Methodist contends the expert reports either conclusively state that Gonzalez and Sheffield did not arrive at W.B.'s bedside within thirty minutes or rely on speculation regarding the time

Gonzalez and Sheffield were paged by the hospital. Nurse McCullough's report states that the code was initiated at 18:38, and the surgeon was called thirty minutes into the code which would be 19:08. Her report further states:

> There is no documentation that specifically states that the OR staff, including the perfusionists, were also called at this time, but from experience there would be no point in having the surgeon come if there were no OR staff to assist him should he need to do surgery of any sort.
> The cardiovascular surgeon, Dr. Kupferschmid arrived at the bedside at 19:25, which took him 20 to 25 minutes. An OR staff person went to the bedside scrubbed in to assist the surgeon prepare for ECMO (extracorporeal membrane oxygenation). The surgeon waited 28 minutes for the OR perfusionists to arrive to assist the surgeon in placing the patient on ECMO.

Nurse McCullough further refers, however, to the surgeon's note which stated that he was called at "7PM" and that "the ECMO team was called prior to his being called." Nurse McCullough notes that Gonzalez and Sheffield did not arrive at the bedside until 19:53 or 7:53.

We conclude Nurse McCullough's report is neither speculative nor conclusory regarding Methodist's breach of the standard of care. Nurse McCullough links her conclusion that Gonzalez and Sheffield failed to arrive at W.B.'s bedside within thirty minutes to the factual timeline provided in her report. Moreover, the surgeon's note provides the factual basis to support Nurse McCullough's understanding that Gonzalez and Sheffield were called at substantially the same time as the surgeon, or at least by 19:22 or 7:22, which would be more than thirty minutes before they arrived at W.B.'s bedside at 19:53 or 7:53. Although Methodist contends the surgeon's note regarding the time the ECMO team was called is his "own speculation," nothing in the record supports Methodist's assumption that the surgeon's note is speculation. As the Texas Supreme Court recently noted, "an expert report does not require litigation-ready evidence" and "the information in the report does not have to meet the same requirements as the evidence offered in a summary-judgment proceeding or at trial." *Potts*, 392 S.W.3d at 630-31. In this case, the statement in the surgeon's note is a statement of fact that provided sufficient factual support for

Nurse McCullough's opinion, and her reliance on the note did not make her opinion as to Methodist's breach conclusory or speculative.

Dr. Alwardt similarly refers to Dr. Kupferschmid's note that the ECMO team was called prior to 19:00, and the CPR flowsheet indicating Gonzalez and Sheffield arrived at 19:53, to opine that Gonzalez and Sheffield failed to arrive at W.B.'s bedside within the requisite thirty minute period. Accordingly, his opinion also is neither speculative nor conclusory for the same reasons stated with regard to Nurse McCullough.

Therefore, we hold that the trial court did not abuse its discretion in determining that Dr. Alwardt and Nurse McCullough's opinions regarding Methodist's breach were not conclusory or speculative.

QUALIFICATIONS ON CAUSATION

Methodist and Pediatrix both complain that the experts were not qualified to opine on causation because they were not qualified to opine on the causes of neurological or brain injuries.

As previously noted, an expert is qualified to testify if the expert has the knowledge, skill, experience, training, or education "regarding the specific issue before the court which would qualify the expert to give an opinion on that particular subject." *Broders*, 924 S.W.2d at 153. A medical expert from one specialty may be qualified to testify about another specialty if the expert has practical knowledge about what medical experts in the other specialty traditionally do under circumstances similar to those at issue in the case. *Pediatrix Med. Servs. Inc. v. De La O*, 368 S.W.3d 34, 40 (Tex. App.—El Paso 2012, no pet.). The expert's qualifications must, however, be evident from the four corners of the expert report and curriculum vitae. *Id*. The question presented is whether Dr. Stern and Dr. Chang have established from the four corners of their expert reports and CVs that they have knowledge, skill, experience, training, or education regarding the cause of neurological or brain injuries.

A. Dr. Stern

Dr. Stern's report reflects that he is board certified in pediatric cardiology and is employed as an interventional cardiologist. Dr. Stern states his areas of interest are in therapeutic cardiac catherization, congestive heart failure, pulmonary hypertension, and care of the post-operative patient. Dr. Stern states that he has twenty-three years of experience as a pediatric cardiologist, including the care of post-operative pediatric patients.

With regard to causation, Dr. Stern states in his second supplemental report:

> Inadequate cardiac function during cardiac arrest is associated with severe acidosis and hypoxemia and leads to end organ dysfunction including hypoxic ischemic brain injury if not corrected promptly. Decreased perfusion to the brain deprives it of oxygen and glucose resulting in the development of a hypoxic-ischemic state that causes neuronal death and irreversible brain injury. Cerebral ischemia during cardiac arrest results in global injury to the brain or encephalopathy, a condition in which the entire brain does not receive enough oxygen.
>
> Due to prolonged cardiac arrest, severe prolonged acidosis (pH less than 6.82 for at least 31 minutes), severe hypoxemia and delay in getting [W.B.] on ECMO, [W.B.] developed severe hypoxic-ischemic encephalopathy that caused significant irreversible brain damage.

As a board certified pediatric cardiologist with twenty-three years of experience, we conclude Dr. Stern is qualified to testify about the complications of cardiac arrest, including neurological injuries that result when a cardiac arrest leads to acidosis, hypoxemia, and the deprivation of oxygen to the brain. *See Livingston v. Montgomery*, 279 S.W.3d 868, 877 (Tex. App.—Dallas 2009, no pet.) (holding board certified OB/GYN's expertise in managing labor and delivery qualified him to opine "on the causal relationship between labor and delivery and the complications that stem from labor and delivery, including a newborn's neurological injuries"); *Comstock v. Clark*, 09-07-300-CV, 2007 WL 3101992, at *4 (Tex. App.—Beaumont Oct. 25, 2007, pet. denied) (mem. op.) (holding anesthesiologist qualified "to express general opinion that a significant deprivation of oxygen causes brain injury"); *Sloman-Moll v. Chavez*, No. 04-06-

00589-CV, 2007 WL 595134, at *4 (Tex. App.—San Antonio Feb. 28, 2007, pet. denied) (mem. op.) (holding physician trained as surgeon also trained to manage surgical complications); *but see Tenet Hospitals Ltd. v. De La Riva*, 351 S.W.3d 398, 407 (Tex. App.—El Paso 2011, no pet.) (holding OB/GYN not qualified to opine "on the standard of care and causation as to infant hypoxia, neonatal resuscitation, and ischemic insult").

B. Dr. Chang

Dr. Chang is a pediatric cardiologist with a sub-board certification in pediatric cardiology. He has been "actively involved in the care of over 10,000 pediatric patients with different types of congenital heart disease before and after heart surgery as an attending in the cardiac intensive care unit and as an attending pediatric cardiologist with clinical interest in postoperative cardiac patients for over 20 years." Dr. Chang has served as the organizing chair of numerous national and international meetings in cardiac intensive care and heart failure, "both areas with a myriad of discussions on post-operative care diagnosis and management." Finally, Dr. Chang has published manuscripts in the area of perioperative care since 1990 and has served as the editor for the journal *Pediatric Critical Care Medicine*.

With regard to causation, Dr. Chang concludes that the breaches of the postoperative standard of care "were the proximate causes that [led to W.B.'s] cardiac arrest and subsequent anoxic brain and severe neurological injury (as a result of low perfusion from the cardiac arrest)." Dr. Chang further states:

> …. These breaches in standard of care were the proximate cause of [W.B.'s] cardiac arrest, which is the cessation of spontaneous heart beat and contraction that result in no forward motion of the blood in the circulation.
>
> This lack of circulation, even if accompanied by adequate cardiopulmonary resuscitation, will lead to a lower perfusion state than normal and therefore a decreased blood flow to the brain and other organs. This decrease in flow to the organs can only be adequately ameliorated with the institution of extracorporeal

> membrane oxygenation, which was not instituted until about 90 minutes into the cardiac arrest.
>
> The decreased blood flow to the brain and therefore oxygen to the brain eventually resulted in the unfavorable sequelae of anoxic brain injury. This injury is a direct result of lack of adequate blood flow and sufficient oxygen to the brain tissue and brain cells. The injury then leads to severe neurological damage as the cells in the brain die as a direct result of lack of blood flow and oxygen.

Similar to Dr. Stern, we conclude Dr. Chang also was qualified to render this causation opinion because his expertise as a pediatric cardiologist qualified him to testify about the complications of cardiac arrest, including neurological injuries that result when a cardiac arrest leads to the deprivation of oxygen to the brain. *See Livingston*, 279 S.W.3d at 877; *Comstock*, 2007 WL 3101992, at *4; *Sloman-Moll*, 2007 WL 595134, at *4.

C. Conclusion

Based on the foregoing, we hold that the trial court did not abuse its discretion in determining that both Dr. Stern and Dr. Chang were qualified to render opinions regarding the complications resulting from cardiac arrest, including the deprivation of oxygen to the brain and resulting neurological complications.

CONCLUSORY OPINIONS ON CAUSATION

Methodist and Pediatrix also both complain that the experts' opinions on causation were conclusory. As previously noted, a report is not conclusory if the expert explains the basis of his statements and links the conclusions to the facts. *Jelinek*, 328 S.W.3d at 539.

A. Methodist

Methodist contends the experts' opinions regarding causation are conclusory because the experts simply state that the delay in the arrival of the ECMO team "exacerbated" the injuries W.B. would still otherwise have suffered. Methodist contends the experts fail to explain how the delay caused the injuries to be worse than what would have occurred in the absence of a delay.

Based on this court's request, the attorneys for Methodist and Belden spent a considerable amount of time during oral argument discussing this court's holding in *Jones v. King*, 255 S.W.3d 156 (Tex. App.—San Antonio 2008, pet. denied). In *Jones*, the plaintiff suffered complications after a surgical implant, including meningitis, and the experts opined that the failure to detect the meningitis and the delay in treating the meningitis for forty-eight hours caused it to become worse and result in numerous additional complications. 255 S.W.3d at 158-59. This court held the opinion was conclusory, asserting that the expert failed "to link any delay in diagnosis to any additional pain and suffering or exacerbation of the meningitis than what would have occurred in the face of an earlier diagnosis." *Id*. at 159-60. This court further asserted, "while it may be facially appealing to infer additional pain and suffering resulted from the alleged delay in diagnosis, the trial court is not permitted to rely on such speculation in determining the adequacy of the report." *Id*. at 160. This court finally noted that the expert failed to provide any baseline or explain how "earlier treatment would have been effective in shortening the duration of the meningitis, precluding additional pain and suffering, or preventing other alleged injuries and damages." *Id*.[4]

In this case, Dr. Stern's second supplemental report contains W.B.'s blood gas values from the medical records showing W.B.'s status at 19:20, around the time the surgeon arrived at the bedside, and at 19:51, immediately before Gonzalez and Sheffield arrived. The blood gas values show the pH level decreased from 6.81 at 19:20 to 6.70 at 19:51. Dr. Stern explains acidosis is severe at a pH level of 6.82, and that W.B.'s blood values demonstrated "a worsening in pH due to severe, worsening metabolic acidosis." Finally, Dr. Stern explains that "severe, prolonged

[4] The Fort Worth court has criticized the decision in *Jones* in the context of a misdiagnosis, stating an expert report is sufficient on causation "when the report sufficiently links a misdiagnosis to pain that is prolonged until a correct diagnosis is made and the correct treatment is given." *Foster v. Richardson*, 303 S.W.3d 833, 841 (Tex. App.—Fort Worth 2009, no pet.).

acidosis (pH less than 6.82 for at least 31 minutes)" "leads to end organ dysfunction including hypoxic ischemic brain injury." By showing that W.B.'s acidosis worsened during the period of delay before Gonzalez and Sheffield arrived, Dr. Stern provided a factual basis for his conclusion that the delay exacerbated or was a contributing factor to the extent of the acidosis W.B. experienced and his subsequent injuries.

Dr. Chang's supplemental report also concludes Gonzalez's and Sheffield's delay in arriving at the hospital "caused a delay in transfer from mechanical support to ECMO and caused an exacerbation of [W.B.'s] anoxia, acidosis, and subsequent anoxic brain injury." In addition, Dr. Chang explains how earlier treatment would have been effective in shortening the duration of the acidosis. Dr. Chang explains that blood flow to the organs after a cardiac arrest will be experienced even with adequate cardiopulmonary resuscitation, and "[t]his decrease in flow to the organs only can be adequately ameliorated with the institution of extracorporeal membrane oxygenation", i.e., ECMO. Therefore, in the absence of the ECMO team, the surgeon was unable to take the only action that could ameliorate the continued decrease in flow of oxygen to the organs. Dr. Chang then explains "the cells in the brain die as a direct result of lack of blood flow and oxygen." Thus, Dr. Chang explains that the earlier institution of ECMO was the only action that would have ameliorated the decrease in the flow of blood and oxygen to the brain, thereby preventing additional cells in the brain from dying.

Therefore, unlike the conclusory statements in *Jones*, both Dr. Stern and Dr. Chang explain how the deterioration in the objective blood gas values or measurements during the period of delay caused the exacerbation or worsening of W.B.'s injuries and how earlier implementation of the ECMO would have prevented the acidosis from worsening and shortened the period in which W.B. suffered from severe acidosis.

B. Pediatrix and Dr. Patel

Pediatrix and Dr. Patel contend the expert reports are conclusory because they fail to adequately link Dr. Patel's alleged negligence to any causal effects. Asserting that the expert reports globally discuss causation, Pediatrix and Dr. Patel argue that the reports do not link specific alleged acts of negligence to specific causal effects. An expert report is not conclusory, however, if it "describes what each appellant should have done and what happened because he or she failed to do it." *Children's Med. Ctr. of Dallas v. Durham*, 402 S.W.3d 391, 403 (Tex. App.—Dallas 2013, no pet.).

Dr. Stern's report states that the standard of care for W.B. was to: (1) cool his body temperature to 35-36 degrees Celsius, "which itself may suffice to drop the rate of the abnormal rhythm to provide better cardiac output;" (2) use Amiodarone "as a bolus and continuous infusion" because it "has a better safety profile than Esmolol." Dr. Stern states that Dr. Patel initially ordered this appropriate treatment in his postoperative note which also directed that W.B. continue to receive Milrinone. Despite Dr. Patel's instructions, Dr. Tenner ordered an infusion of Esmolol, which Dr. Lopez subsequently increased. Dr. Lopez also discontinued the Milrinone. Although Dr. Patel initially stated the correct treatment plan, he subsequently acquiesced in the altered treatment plan, and ordered W.B. to be kept off Milrinone and to increase the Esmolol. Dr. Stern opines that Dr. Patel breached the standard of care by ordering W.B. to remain off Milrinone and to increase the Esmolol. Dr. Stern then states that these breaches "were directly responsible for [W.B.'s] cardio-respiratory arrest and subsequent anoxic brain injury."

We disagree that Dr. Stern's opinion is conclusory. He states that the use of Esmolol was a breach because Amiodarone has a better safety profile. He further states that Milrinone needed to be continued because it is "an inotropic agent that increases the force of contraction." These are factual statements that provide the basis for Dr. Stern to conclude that Dr. Patel's acquiescence

in the use of Esmolol and the discontinuation of Milrinone caused W.B.'s cardiac arrest and subsequent brain injuries.

Dr. Chang also provides the basis for his conclusion that the breaches in the standard of care by Dr. Patel, Dr. Tenner, and Dr. Lopez caused W.B.'s cardiac arrest, stating:

> The unfavorable combination of instituting a beta blocker such as esmolol (a negative inotrope) coupled with cessation of intravenous milrinone (a positive inotrope) left the infant unsupported by any pharmacological means (without any positive inotropy or contractility) for the heart, leading to an inevitable cardiac arrest within a few hours.

Dr. Chang later explains in his report how the cardiac arrest resulted in "no forward motion of the blood in the circulation" and how the lack of circulation would lead to decreased blood flow to the brain and eventually to "anoxic brain injury."

Based on the foregoing, we hold that the trial court did not abuse its discretion in determining that Dr. Stern and Dr. Chang's opinions regarding causation were not conclusory as to Pediatrix and Dr. Patel.

CONCLUSION

The order of the trial court is affirmed.

Catherine Stone, Chief Justice