Circuit Court for Montgomery County
Case No. C-15-CV-21-000202

UNREPORTED*

IN THE APPELLATE COURT

OF MARYLAND

No. 478

September Term, 2023

JAMES ASOKERE, *et al.*

v.

DANIELLE R. WALDROP, M.D., *et al*.

Beachley,
Ripken,
Getty, Joseph M.
(Senior Judge, Specially Assigned),

JJ.

Opinion by Ripken, J.

Filed: April 17, 2024

* This is an unreported opinion. This opinion may not be cited as precedent within the rule of stare decisis. It may be cited for its persuasive value only if the citation conforms to Rule 1-104(a)(2)(B).

This appeal stems from a medical malpractice lawsuit brought by James Asokere and Karamotu Akinfenwa (collectively, "Appellants") in their capacity as next friends of their child, "G."[1] During pretrial litigation before the Circuit Court for Montgomery County, Appellants offered two experts, Doctor Daniel Adler ("Dr. Adler") and Doctor Richard Luciani ("Dr. Luciani"), who were to testify that G. suffered a permanent injury caused by the attending physician, Doctor Danielle Waldrop ("Dr. Waldrop"). Based on differences between the depositions provided by the offered experts and the testimony provided during a subsequent *Daubert* hearing, the court precluded Drs. Adler and Luciani from testifying at trial. Subsequently, the court entered summary judgment in favor of Dr. Waldrop and her employer, Moore OBGYN, LLC ("Appellees"). Appellants noted a timely appeal, and present the following question for our review: Whether the court abused its discretion in precluding experts from testifying pursuant to Maryland Rule 5-702, where the opinions of the experts changed between their depositions and their testimony during a subsequent *Daubert* hearing?[2]

For the following reasons, we shall affirm the judgment of the circuit court.

FACTUAL AND PROCEDURAL BACKGROUND

A. The Birth Injury

In April of 2017, Karamotu Akinfenwa ("Akinfenwa") arrived at Holy Cross

[1] To protect the identity of the child, we refer to the child by a randomly selected letter.

[2] Rephrased from: "Did the Circuit Court err in precluding the standard of care and causation testimony of Plaintiffs' experts, Daniel Adler, M.D., and Richard Luciani, M.D., that [G.]'s permanent neonatal brachial plexus injury was caused by Dr. Waldrop's use of excessive lateral traction in violation of the standard of care?"

Hospital 36 weeks pregnant and in labor. Dr. Waldrop was the attending physician at the birth, who documented that Akinfenwa "had difficulty pushing" and "felt pressure." During the process of delivering G., Dr. Waldrop encountered shoulder dystocia. Shoulder dystocia occurs when the passage of the fetal shoulder is obstructed by one of two bony structures in the maternal pelvis as the fetus travels down the birth canal. It is diagnosed when the fetal shoulders fail to deliver, despite the application of gentle downward traction on the fetal head. Shoulder dystocia is considered an obstetric emergency and requires specialized obstetric maneuvers to effect delivery. If an affected fetus is not delivered within approximately five minutes, neurological injuries or death can result, in addition to potential injuries to the mother.

Medical records indicate that upon encountering the shoulder dystocia, Dr. Waldrop utilized multiple commonly accepted methods to resolve the issue and effect delivery of the child. Approximately one minute after G.'s head delivered and the shoulder dystocia was identified, G.'s body was fully delivered.

Although the medical records do not reflect the application of excess traction to G. during the delivery, Appellants presented deposition testimony that Dr. Waldrop pulled on G.'s head as she was delivering the baby with enough force that Akinfenwa was sliding down on the delivery bed. Dr. Waldrop denied ever using traction in response to any incident of shoulder dystocia, and stated that a practitioner should "never have any reason to ever be pulling on a fetal head[.]" A nurse present at G.'s delivery testified that she had never seen forceful traction used to deliver a child, including G., and agreed that if she had observed the use of forceful traction, she would have documented that it had occurred.

G. was discharged from the hospital three days after the birth. Prior to being discharged, G. was diagnosed with a right brachial plexus injury, and healthcare providers noted "no movement on extension of the right arm and a weak grasp." The brachial plexus is a group of nerves which emanate from the spine and extend into the shoulder and upper arm to support motor and sensory functionality. A neonatal brachial plexus injury presents as a weak or paralyzed upper extremity, where the child's passive range of motion exceeds the active range of motion; medical literature also refers to this injury as "neonatal brachial plexus palsy" ("NBPP"). A brachial plexus injury can be characterized as either temporary or persistent, the latter defined as neurologic dysfunction which continues to be present in a child more than a year after birth.

In November of 2021, following G's persistent brachial plexus injury, Appellants filed an action in the Circuit Court for Montgomery County alleging that Dr. Waldrop had breached the standard of care during G.'s delivery, resulting in a permanent brachial plexus injury,[3] and seeking damages from Dr. Waldrop and her employer, Moore OBGYN, LLC.[4]

B. The Expert Deposition Testimony

During discovery, as required by Maryland Rule 2-402(g)(1), Appellants identified several expert witnesses who they planned to present at trial. Among them were Dr. Adler and Dr. Luciani, both of whom were deposed by Appellees.[5]

[3] The parties do not dispute that G.'s injury is permanent.

[4] Appellants initially named Holy Cross Hospital as an additional defendant, but voluntarily dismissed the claims against it prior to the entry of summary judgment.

[5] Appellants planned to offer two other expert witnesses at trial, Doctor Scott Kozin ("Dr.

1. Dr. Adler's deposition testimony

Dr. Adler, serving as Appellants' causation and damages expert, was deposed in April of 2021. During the deposition, Dr. Adler stated that to determine the cause of G.'s injury, he employed a differential diagnosis approach, which is a process by which a physician determines all potential causes of the symptoms or injury, and eliminates alternative causes based on physical examinations, clinical tests, or examination of the individual case history. *See CSX Transp., Inc. v. Miller*, 159 Md. App. 123, 207–08 (2004). Dr. Adler opined that:

> [I]n the situation where a newborn has evidence of a brachial plexus injury at the time of delivery, there is a differential diagnosis. . . . [T]o be sure, there are other causes of brachial plexus injury apart from trauma. I think one is obligated to exclude those [other causes] both as a treating doctor and as an expert.

Dr. Adler continued: "[T]he degree of trauma seen is - - in my opinion, proves that the injury could not have occurred or confirms that the injury could not have occurred at any other time except after the head delivered . . . I would testify that the head being removed by Dr. Waldrop . . . caused the injury."

Dr. Adler also explained his opinion regarding how a child can suffer a brachial plexus injury: "[S]houlder dystocia as an event, in my opinion, doesn't cause permanent brachial plexus [injury], except perhaps if the fetus is abnormal, which in this case is not true." He agreed that maternal forces of labor, without application of force by a physician,

Kozin") and Doctor Martin Gubernick ("Dr. Gubernick"), the latter of whom was voluntarily withdrawn by Appellants. As Appellants challenge only the circuit court's exclusion of Drs. Adler and Luciani, we need not discuss the testimony of Drs. Kozin and Gubernick in detail.

could cause a brachial plexus injury, but again, "only if the fetus is abnormal." Dr. Adler later reiterated this point, saying that in cases of a physiologically normal infant, "It is my opinion that [maternal forces of labor] cannot cause a permanent brachial plexus injury. It is further my opinion that there is no literature that says that it has ever caused a permanent brachial plexus injury." However, Dr. Adler was not able to point to any academic literature that directly specified such but averred that "people have inferred it[.]" Ultimately, Dr. Adler concluded that Dr. Waldrop "moved the head. And as a result of moving the head, the injury occurred." In Dr. Adler's view, this was because "The imaging suggests an avulsion. And that type of traumatic nerve injury only occurs after the head delivers. It only occurs when the doctor moves the head when the fetus is normal."

2. Dr. Luciani's deposition testimony

In March of 2021, another of Appellants' experts, Dr. Luciani, was deposed. Dr. Luciani stated that in his opinion, G.'s injury was "caused by excessive traction that was utilized by Dr. Waldrop during the birthing process." Dr. Luciani continued:

> That really is the only opinion I have in this case. I don't have any problem with the prenatal care. I don't really have any problem with the labor of the patient. It is all based on the delivery itself. And that is substantiated by the nature of the injury, how the only way that [G.'s] injury could occur under the circumstances, eyewitness testimony of Mr. Asokere who was very clear of the pulling and twisting that was utilized after the head was delivered.

In reaching the conclusion that the sole possible cause of G.'s injury was excessive traction applied by Dr. Waldrop, Dr. Luciani noted that "there are other things that can cause a brachial plexus injury, like tumor formation, infection in the brachial plexus, things of that nature." Dr. Luciani testified, however, that he did not observe any evidence of alternative

etiologies "indicative of an injury that happened earlier in the prenatal period."

When Dr. Luciani was asked if the maternal forces of labor could cause a permanent brachial plexus injury, he responded: "I do not believe that[.]" Dr. Luciani subsequently explained that, in his view, all of the pediatric neurological and surgical reports he had read "point to the fact that the only way that you can get a permanent injury is through traction in an anatomically normal infant." However, Dr. Luciani was unable to identify any obstetrical organization which explicitly accepted or espoused his theory, nor was he able to identify a particular individual or publication which asserted the categorical opinion that maternal forces of labor cannot cause a permanent brachial plexus injury in an otherwise healthy infant. Dr. Luciani did aver that he was "not alone in [his] feelings" and stated that "I'm sure there are many, many others that totally agree with me."

C. The *Daubert-Rochkind* Hearings

1. The motion to preclude

In December of 2022, Appellees filed a motion pursuant to Maryland Rule 5-702 to preclude the standard of care and causation opinions of Appellants' experts. That motion characterized Appellants' theory of the case as "a *res ipsa loquitor* theory of liability[,]" and alleged that Appellants' experts concluded that Dr. Waldrop violated the standard of care merely because G. had suffered a brachial plexus injury during the course of delivery. Appellees asserted that this opinion was "flatly contradict[ed by] the established consensus of the relevant medical community," which recognizes that in addition to resulting from

physician error, a brachial plexus injury can be caused solely by maternal forces of labor.[6] Accordingly, the motion requested that the court preclude Appellants' experts from testifying pursuant to Maryland's *Daubert-Rochkind* standard of evaluating the admissibility of expert testimony, and consequently issue summary judgment. *See Rochkind v. Stevenson*, 471 Md. 1 (2020) (adopting *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) for the purposes of applying Md. Rule 5-702).

2. Previous preclusion of expert testimony

In their *Daubert-Rochkind* motion, Appellees argued that the shared opinion of Drs. Adler and Luciani was not accepted in the relevant medical community. In support of this contention, Appellees included several peer-reviewed publications which they asserted contradicted the opinions of Drs. Adler and Luciani. Of note, one of the publications was a comprehensive report generated by the American College of Obstetricians and Gynecologists ("ACOG"). ACOG, a national organization of over 60,000 practitioners, produced a comprehensive report summarizing the peer-reviewed research concerning neonatal brachial plexus palsy ("the ACOG monograph"). The ACOG monograph was published in 2014 and reaffirmed without changes in 2019.[7]

Specifically, the ACOG monograph notes that "no intervention has been identified

[6] Maternal forces of labor, also called endogenous forces, refer to uterine contractions and maternal pushing efforts during labor, which result in pressure being applied to a fetus. By contrast, exogenous or external forces refer to traction applied by a birth attendant.

[7] The ACOG Monograph has been endorsed by the American Academy of Pediatrics, the American Gynecological and Obstetrical Society, the American College of Nurse-Midwives, as well as by organizations representing obstetricians and gynecologists in Japan, Australia, Canada, and the United Kingdom.

that will prevent all or even most cases of NBPP[.]" The report also states that "[r]ecent multidisciplinary research now stresses that the existence of NBPP following birth does not *a priori* indicate that exogenous forces are the sole cause of this injury." This finding is repeated elsewhere in the monograph, which states: "Maternal forces alone are an accepted cause of at least transient NBPP by most investigators" and that "neurologic literature now stress that the existence of NBPP following birth does not *a priori* indicate that exogenous forces are the cause of this injury." The monograph notes that "[w]hat is known at this time with reasonable medical certainty is that NBPP occurs infrequently and can be caused by maternal (endogenous) forces or clinician-applied (exogenous) forces or a combination of both." Additionally, the monograph states that:

> No published clinical or experimental data exist to support the contention that the presence of persistent (as opposed to transient) NBPP implies the application of excessive force by the birth attendant. A single case report describes a case of persistent NBPP in a delivery in which no traction was applied by the delivering physician and no delay occurred in delivering the shoulders. Therefore, there is insufficient scientific evidence to support a clear division between the causative factors of transient NBPP versus persistent NBPP.

In Appellees' *Daubert-Rochkind* motion, they note that Drs. Adler and Luciani had previously been precluded from testifying in two other courts due to their shared categorical opinion that the maternal forces of labor cannot cause a permanent brachial plexus injury.

Dr. Adler had previously presented testimony in *M.D.R. v. Temple Univ. Hosp.*, No. 22-621, 2022 WL 15173903 (E.D. Pa. Oct. 26, 2022), a case which also involved a permanent brachial plexus injury which arose during a child's birth. *Id.* at *2. In that case,

Dr. Adler opined that "the maternal forces of labor have never been proven to be the cause of a permanent brachial plexus injury where there is no exaggerated risk for nerve stretch such as cancer or infection," and that "clinician-applied traction must be the cause" of the injury. *Id.* at *13 (internal quotation marks omitted). Applying *Daubert* and Federal Rule of Evidence ("FRE") 702,[8] the *M.D.R.* court found that Dr. Adler's "categorical opinions [were] not supported by the facts or the science," and that his opinions were unreliable. *Id.* at *14. Specifically, the *M.D.R.* court stated that "Dr. Adler may not categorically exclude maternal forces of labor in the face of medical literature, particularly the 2014 ACOG report, stating otherwise." *Id.* at *13. Thus, the federal district court precluded Dr. Adler's testimony. *Id.* at *13.

In *U.G. v. United States*, No. 21-CV-2615 (VEC), 2022 WL 7426212 (S.D.N.Y. Oct. 13, 2022), both Dr. Adler and Dr. Luciani served as experts in another case involving a permanent brachial plexus injury.[9] *Id.* at *1–2. In *U.G.*, mirroring his deposition testimony in the instant case, Dr. Adler opined that "[m]aternal forces of labor have never been proven to be the cause of a permanent brachial plexus injury" in the absence of underlying medical conditions, and as the child in question did not have relevant underlying conditions, "[t]he injury is proof of what happened." *Id.* at *2-3 (internal quotation marks omitted). Also serving as an expert in *U.G.*, Dr. Luciani echoed the

[8] FRE 702, like Maryland Rule 5-702, governs the admissibility of expert testimony.

[9] We note that the decisions in *M.D.R.* and *U.G.* were part of the record and presented to the circuit court as an exhibit attached to Appellees' *Daubert-Rochkind* motion. We describe them here only in relation to the facts of the instant case.

opinion, and stated that in the absence of underlying medical causes, a permanent brachial plexus injury can only be caused by excessive traction applied by a physician. *Id.* at *2. The court also examined the ACOG monograph and concluded that it "reliably establish[ed] that permanent brachial plexus injury may be caused by the forces of labor alone." *Id.* at *5. Thus, applying *Daubert* and FRE 702, the *U.G.* court excluded the experts' shared categorical opinion that in the absence of certain pre-existing conditions, the maternal forces of labor cannot cause a permanent brachial plexus injury, and the sole possible cause of a permanent brachial plexus injury is traction applied by the birth attendant. *See id.* at *6.

3. The first Daubert *hearing*

In March of 2023, less than a week before trial, the circuit court conducted an evidentiary hearing on Appellees' *Daubert-Rochkind* motion ("the *Daubert* hearing"), wherein both Dr. Adler and Dr. Luciani testified. At the outset of the hearing, Appellants' counsel noted that the experts "do not state that the permanent neonatal brachial plexus injuries can only be caused by clinician applied traction, or that maternal uterine forces cannot cause permanent brachial plexus injury; that is not the basis of their opinions in this case." This statement would prove to accurately reflect the *Daubert* testimony of both experts.

Although in his deposition testimony, Dr. Adler stated it was his opinion that in the absence of certain pre-existing conditions, a brachial plexus injury could *never* occur solely resulting from maternal forces of labor, and that the injury "only occurs when the doctor moves the head when the fetus is normal[,]" he did not reassert these contentions using the

same language in the *Daubert* hearing. To the contrary, Dr. Adler repeatedly disavowed any such categorical opinion. Rather, Dr. Adler testified that "maternal forces of labor can cause transient injury for sure, and in certain cases where the fact pattern is appropriate, permanent brachial plexus injuries." He also expressed that he did not "have the opinion that the compulsive forces of labor never caused permanent brachial plexus injury." Rather, Dr. Adler stated that his opinion was "case specific" and the result of a differential diagnosis. Dr. Adler repeatedly emphasized that his opinion was limited to G.'s injury specifically, and that because G. was anatomically normal, Dr. Adler had excluded various causes of a permanent brachial plexus injury that occurred during labor as opposed to during delivery. Dr. Adler noted that "intrauterine causes [of injury] are caused by abnormalities of fetal anatomies and other unusual issues. All of which were excluded in this case."

Additionally, Dr. Adler noted for the first time in his *Daubert* hearing testimony that in arriving at his opinion, he considered the testimony of Asokere, who had averred that during the delivery Dr. Waldrop had pulled and twisted G.'s head. Dr. Adler also asserted that he was relying on specific neurology textbooks, which had previously not been disclosed to the defense. Over objection, Dr. Adler was permitted to testify based on the materials, but the court noted that the literature should have been disclosed and was "a late supplement" that resulted in "not a level playing field."

Similarly, Dr. Luciani opined that after conducting a case-specific differential diagnosis, he determined that G.'s injury was a result of excessive traction applied by Dr. Waldrop. When asked by Appellants' counsel if he determined "that permanent brachial

plexus injury cannot be caused by the maternal forces of labor[,]" Dr. Luciani stated that: "the answer to that question is no, and I am never going to rule out that something like that could happen under specific circumstances. But that becomes a very-case-specific evaluation[.]" Dr. Luciani indicated that while he ruled out the maternal forces of labor in G.'s specific case, he was not adopting a categorical opinion that the maternal forces of labor can never cause a brachial plexus injury. When specifically asked if it was possible for an otherwise healthy child to sustain a permanent brachial plexus injury due to the maternal forces of labor, Dr. Luciani responded that "anything in the world is possible[.]" Similar to Dr. Adler, Dr. Luciani cited specific academic literature that he asserted supported his opinion in the case, again over Appellees' objection, although he had not done so at any previous point including his deposition.

4. The circuit court's initial ruling

After considering the testimony and parties' arguments, the court ruled on Appellees' *Daubert-Rochkind* motion. The court referenced the factors enumerated in *Daubert* and *Rochkind*, and correctly noted that the Supreme Court of Maryland has instructed trial courts to "focus solely on principles and methodology, not on the conclusions they generate[,]" and that "a [c]ourt may conclude that there is simply too great an analytical gap between the data and the opinions offered." The court noted that it had reviewed testimony, the briefing materials, the medical literature, and the out-of-state opinions in which the experts' opinions had been excluded, and found that:

> There is clearly a difference between the experts' deposition testimony and somewhat their testimony here in court for the *Daubert* hearing. It's clear to the [c]ourt that based on their testimony, Drs. Adler and Luciani have also

> read those opinions in other jurisdictions and have incorporated some of that very specific language into their opinion or testimony during this *Daubert* hearing.
>
> Their trial court testimony was a bit more nuanced in terms of their opinion and the basis of their opinions and what they considered and what they did not consider. Their deposition testimony seemed to be in line with their previous testimony in other cases in which their opinions had been excluded.

The court found that the testimony of Drs. Adler and Luciani "obviously was geared toward the purpose of the *Daubert* hearing and to satisfy the requirements of *Daubert* and to bolster the basis for their opinions in this case." Specifically, the court found that both experts explicitly disavowed the opinion that physician-applied traction is the only cause of a brachial plexus injury. The court noted that this was "a difference" from Dr. Luciani's deposition testimony, and that in his prior testimony, Dr. Adler was "quite clear that he felt . . . that these injuries do not occur absent excessive traction by the physician." The court also noted that in his *Daubert* testimony, Dr. Adler considered the testimony of the parents, which was "not a consideration at the time of his deposition testimony." Ultimately, because of their "case-specific and fact specific" opinions, "the doctors were able to fill in the analytical gap that was present in their deposition testimony." Therefore, the court denied Appellees' motion to preclude the testimony of Drs. Adler and Luciani.

The court subsequently entered an order whereby it denied the motion to preclude Appellant's experts in part and declined to enter summary judgment or preclude the opinions of Drs. Adler and Luciani, but granted the motion in part, and precluded Dr. Kozin from offering the specific opinion that maternal forces of labor cannot cause permanent

injury.[10]

5. The motion for reconsideration and second hearing

Following the entry of the court's order on the *Daubert-Rochkind* motion, Appellees moved for reconsideration, asserting that Appellants' experts should not have been permitted to "fill in the gaps" in their deposition testimony during the *Daubert* hearing. In the motion, Appellees argued that "new medical literature and opinions" from Appellants' experts, introduced after the close of discovery, unfairly prejudiced their case, and highlighted the unreliability of the experts' opinions as originally rendered. At a hearing on the day trial was scheduled to begin, both parties agreed to a postponement to allow Appellants to fully brief the matter. The trial was postponed pending an additional motions hearing.

The court conducted a hearing on the motion for reconsideration in April of 2023. In that hearing, after considering the parties' arguments, the court recounted that leading up to the original *Daubert* hearing, after having reviewed filings, supporting exhibits, and expert deposition testimony, it was "leaning toward granting the [*Daubert-Rochkind*] motion" because the court found the expert testimony in the depositions "very . . . *ipse dixit* like" with regards to the categorical opinion that the type of injury G. suffered could not occur without a physician's intervention. However, the court noted that the experts' testimony in the *Daubert* hearing "was very specific to [G.,]" in contrast to the

[10] The court did grant the motion with respect to the testimony of Dr. Kozin, who was deposed, but did not testify at the *Daubert* hearing. The court precluded Dr. Kozin's testimony because he did not consider other possible causes for the injury aside from movement of G.'s head by Dr. Waldrop.

"general[ized]" testimony from their depositions. The court reiterated that "[i]t was clear that [Drs. Adler and Luciani] had read those opinions in which their testimony had been previously excluded." The court found that Dr. Luciani, in his *Daubert* testimony, had "actually said he would not rule out the maternal forces of nature" which was "not completely consistent with his deposition testimony." However, the court stated that due to Dr. Luciani's updated testimony and references to support his opinions, "I did find that he had filled in any gaps between his deposition testimony and his *Daubert* testimony."

The court further explained that, prior to the *Daubert* hearing, it "was inclined to grant the motion to preclude [Dr. Adler's] opinions." However, when Dr. Adler testified, "he discuss[ed] his differential diagnosis" in detail, and "did say, uterine forces of labor were considered as part of [the] differential diagnosis" but ruled out because "nothing was documented in the records to suggest undue or severe [maternal] force."[11] The court observed that Dr. Adler specifically stated multiple times that "his opinion was not based on [the premise that] the maternal forces of nature, cannot cause a brachial plexus injury." The court also noted that in the *Daubert* hearing, Dr. Adler was "very reluctant to admit that he does not believe that the maternal forces of nature could cause a permanent brachial plexus injury such as the one suffered by [G.]" Similar to the court's opinion about Dr. Luciani's testimony, the court determined that "there was an analytical gap . . . between [Dr. Adler's] opinion and his deposition testimony in support of his opinions," but "based upon their testimony at the hearing, I found that . . . that gap had been filled."

[11] The court also noted that by the same token, nothing was documented in the medical records to suggest that Dr. Waldrop applied undue traction or moved G.'s head.

However, turning to the motion for reconsideration, the court explained that if "counsel cannot take the deposition of an expert with the full expectation that they are determining . . . what opinions [the expert] will render at trial, and the basis for the opinions at trial" then "we're turning the purpose of discovery on its head." The court observed that a situation where an expert's *Daubert* hearing testimony was different than their representations during discovery, was distinct from when "discovery's supplemented or something's done to give the other side notice that something's maybe changing[.]" The court clarified that it didn't "have a problem necessarily" with the experts referencing additional medical literature in the *Daubert* hearing, but the court was concerned with the fact that both experts changed the *basis* for their opinions.

The court explicitly found that "Dr. Adler's deposition testimony and his *Daubert* hearing testimony do differ significantly as to the basis for the opinions." Therefore, the court granted the motion with respect to Dr. Adler. Similarly, with regard to Dr. Luciani, the court found that "Dr. Luciani had also read those opinions in which his testimony had been excluded . . . [and] made a point to emphasize [at the *Daubert* hearing] that his opinion was case specific and was only specific to [G.]" Moreover the court determined that "Dr. Luciani did not mention differential diagnosis at all in his deposition testimony, but he did testify that it was the basis for his opinion, at the *Daubert* hearing[.]" The court, noting that it was exercising its gatekeeping function under *Daubert*, granted the Appellees' Rule 5-702 motion with respect to both experts.[12]

[12] The court also noted that in so doing, it was *not* imposing a sanction pursuant to the violation of a discovery order and that it "view[ed] this as more than a discovery violation."

The court further found that Dr. Luciani's standard of care opinion was "inextricably linked and intertwined and originate[d] from the same basis" as his causation opinion and precluded Dr. Luciani's standard of care opinion. Subsequently, the court entered summary judgment for Appellees due to the preclusion of the testimony of Drs. Adler and Luciani on the issue of causation, and Dr. Luciani's opinion as to the standard of care.

Additional facts will be incorporated as they become relevant to the issues.

DISCUSSION

I. THE CIRCUIT COURT DID NOT ABUSE ITS DISCRETION IN PRECLUDING THE EXPERTS' *DAUBERT* TESTIMONY UNDER RULE 5-702.

Here, the circuit court precluded Appellants' experts from offering opinions at trial because of differences between the experts' deposition statements and their testimony during the *Daubert* hearing. Because the court determined that the experts altered the stated basis for their opinions in response to a *Daubert-Rochkind* challenge, and because such a change can properly be considered indicative of an unreliable methodology, we conclude that the circuit court did not err or abuse its discretion by excluding Drs. Adler and Luciani.

A. The Parties' Contentions

Appellants argue that the circuit court erred by precluding Drs. Adler and Luciani from testifying, and therefore, the grant of summary judgment was also erroneous. Appellants contend that even without considering the testimony of Drs. Adler and Luciani at the *Daubert* hearing, the prior deposition testimony of both experts was admissible under Md. Rule 5-702, and thus, the court erred in finding an analytical gap between the expert opinions and the underlying scientific data. Appellants also assert that the court erred in

concluding that the expert testimony in the *Daubert* hearing was inconsistent with the deposition testimony, but even assuming an inconsistency existed, experts are permitted to clarify or supplement their testimony at a *Daubert* hearing. Additionally, Appellants argue that even if the *Daubert* testimony amounted to a discovery violation, total preclusion of that testimony resulting in summary judgment was an excessive discovery sanction.[13]

Appellees disagree and assert that the circuit court acted within its discretion in excluding the expert testimony of Drs. Adler and Luciani. Specifically, Appellees contend that the court did not abuse its discretion either by concluding that altering an expert opinion between a deposition and a *Daubert* hearing rendered the updated opinion inadmissible, or by ruling that the original deposition testimony was inadmissible under the *Daubert-Rochkind* standard. Although Appellees argue that the court's refusal to consider the updated testimony was not a discovery sanction, they assert that even when viewed in that light, the circuit court acted within its discretion when refusing to consider the *Daubert* hearing testimony.

B. Standard of Review

This case involves several interrelated but distinct standards of review. Factual findings are reviewed for clear error, and "we will not disturb the factual findings of the trial court if there is any competent evidence to support those factual findings." *Dickerson v. Longoria*, 414 Md. 419, 433 (2010) (alterations and internal quotations omitted). Whereas the admission of expert testimony under Md. Rule 5-702 is reviewed for abuse of

[13] For the first time in their reply brief, Appellants also posit that the court erred by failing to make the findings required prior to imposing a discovery sanction.

discretion. *Rochkind*, 471 Md. at 10. A court abuses its discretion only when its decision is "well removed from any center mark imagined by the reviewing court and beyond the fringe of what that court deems minimally acceptable[.]" *Gray v. State*, 388 Md. 366, 383 (2005). The Supreme Court of Maryland has explained that in the context of a *Daubert-Rochkind* analysis, a court also abuses its discretion by admitting evidence when "there is an analytical gap between the type of evidence the methodology can reliably support and the evidence offered." *Abruquah v. State*, 483 Md. 637, 652 (2023).

C. Analysis

1. Rule 5-702 and Daubert-Rochkind

Maryland Rule 5-702 states that expert testimony may be admitted when it "will assist the trier of fact to understand the evidence or to determine a fact in issue." Md. Rule 5-702. In *Rochkind*, the Supreme Court of Maryland adopted the standard endorsed by *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), for the purpose of applying Md. Rule 5-702. *Rochkind*, 471 Md. at 5. In so deciding, Maryland's method of determining the admissibility of expert scientific testimony became consistent with the majority of state courts and the federal system. *Id.*

Our caselaw makes clear that the central focus of a *Daubert-Rochkind* inquiry is to ensure a sufficiently attenuated connection between an expert's opinion and a scientifically reliable methodology. *See Rochkind*, 471 Md. at 31; *State v. Matthews*, 479 Md. 278, 316–17 (2022); *Katz, Abosch, Windesheim, Gershman & Freedman, P.A. v. Parkway Neuroscience and Spine Inst., LLC*, 485 Md. 335, 377 (2023) ("*Katz Abosch*"). In so doing, the *Daubert-Rochkind* standard focuses on the court's role as a "gatekeeper" applying its

discretion to ensure that only information that is both the product of a scientifically reliable methodology and useful to resolving the action reaches the factfinder. *See Katz Abosch*, 485 Md. at 362 (quoting *General Electric Co. v. Joiner*, 522 U.S. 136, 142 (1997)).

Under a *Daubert-Rochkind* analysis, expert testimony is evaluated by a "flexible inquiry into an expert's reliability, focusing on the expert's principles and methodology as opposed to their conclusions." *Covel v. State*, 258 Md. App. 308, 329 (2023). The Supreme Court of Maryland has endorsed a non-exclusive list of factors that trial courts should consider in evaluating the reliability of expert testimony, all of which focus on the trustworthiness of the underlying data, theory, methodology, field of expertise, or the reliability of the expert's ultimate conclusion and the expert themselves.[14] *See Matthews*,

[14] Those factors are:

> (1) whether a theory or technique can be (and has been) tested;
> (2) whether a theory or technique has been subjected to peer review and publication;
> (3) whether a particular scientific technique has a known or potential rate of error;
> (4) the existence and maintenance of standards and controls; and
> (5) whether a theory or technique is generally accepted[;]
> . . .
> (6) whether experts are proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying;
> (7) whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion;
> (8) whether the expert has adequately accounted for obvious alternative explanations;
> (9) whether the expert is being as careful as he [or she] would be in his [or her] regular professional work outside his [or her] paid litigation consulting; and
> (10) whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give.

479 Md. at 310–11. None of the factors are dispositive, and a court may apply some, all, or none of the factors in arriving at its conclusion regarding the admissibility of an expert's testimony. *Rochkind*, 471 Md. at 37.

Additionally, a "trial court need not admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert; rather, [a] court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *Abruquah*, 483 Md. at 655 (quoting *Matthews*, 479 Md. at 311). The Supreme Court of Maryland has noted that while a *Daubert-Rochkind* reliability inquiry is "a flexible one[,]" a trial court's central focus "must be solely on principles and methodology[.]" *Rochkind*, 471 Md. at 36 (quoting *Daubert*, 509 U.S. at 594–95). However, even a "test that is generally accepted . . . may still be performed poorly" and therefore be inadmissible under Md. Rule 5-702. *Muldrow v. State*, 259 Md. App. 588, 618 (2023); *see also Katz Abosch*, 485 Md. at 342 (noting that in adopting the *Daubert* standard, Maryland "embraced a regime that prizes the reliability of an expert's methodology over its general acceptance"). Ultimately, the question a *Daubert-Rochkind* analysis seeks to answer is "not whether proposed expert testimony is right or wrong, but whether it meets a minimum threshold of reliability so that it may be presented to a jury[.]" *Abruquah*, 483 Md. at 655.

2. Alteration of expert testimony in the Daubert-Rochkind *context*

The appeal before us arises from the circuit court's ruling to preclude Drs. Adler and Luciani from testifying due to the differences between their deposition testimony and

Matthews, 478 Md. at 310–11 (internal citations omitted).

their statements during the *Daubert* hearing.

We note that experts are, to at least some degree, permitted to clarify or provide more specific or additional support for previously disclosed expert opinions during a *Daubert-Rochkind* hearing. *See Katz Abosch*, 485 Md. at 382. In *Katz Abosch*, the Supreme Court of Maryland allowed an expert to "update[]" an opinion based on the fact that she "noticed something she had not noticed before" and subsequently "sought clarification and revised her opinion[.]" 485 Md. at 381. In permitting an expert to update the dataset the expert relied upon, while retaining the same method of reaching her conclusion, the Court permitted the expert to rectify a previous mistake in her disclosed materials, but in so doing, noted that the expert's "adjustments . . . did not implicate the reliability of her methodology[,]" which is a cornerstone of the *Daubert-Rochkind* inquiry. *Id.* at 382; *see also Matthews*, 479 Md. at 309.

Our caselaw is clear that while an expert's methodology is the "center" of a *Daubert-Rochkind* reliability analysis, there can be some overlap between data and methodology. *Katz Abosch*, 485 Md. at 376. In *Katz Abosch*, the Court soundly rejected a categorical rule separating the two concepts, instead highlighting that "the *Daubert-Rochkind* regime calls for flexibility and deference." *Id.* Thus, determining whether adduction of additional data in support of an expert's opinion is either a permissible "adjustment" to an opinion, or a *post-hoc* justification suggestive of an unreliable methodology, is within the sound discretion of the trial court.[15] *See Katz Abosch*, 485 Md.

[15] To be sure, even where a court determines that such an adjustment to an expert's data is permissible, not indicative of an unreliable methodology, and the expert's testimony is

at 376, 382.

Appellants cite a federal case where the court held that "one of the very purposes of a *Daubert* hearing . . . is to give experts a chance to explain and even correct errors that they made in their reports." *Crowley v. Chait*, 322 F. Supp. 2d. 530, 540 (D.N.J. 2004). We agree. However, where an expert draws conclusions prematurely, based on incomplete data, or in a single-minded effort to achieve a particular result, and later attempts to "shore up" an unreliable opinion with additional facts, a court could certainly determine that such an approach militates against the reliability of the expert's methodology. *See Haller v. AstraZeneca Pharmaceuticals LP*, 598 F. Supp. 2d 1271, 1296–97 (M.D. Fla. 2009) (holding that such an approach "smacks of post-hoc rationalization and is devoid of the intellectual rigor that *Daubert* demands[,]" in contrast to "the relatively unremarkable situation where an expert witness merely tweaks an opinion in response to new considerations").

Other federal courts have, likewise, found that a change in an expert's testimony can be indicative of an unreliable methodology. *See Hall v. Baxter Healthcare Corp.*, 947 F. Supp. 1387, 1405, n.39 (D. Or. 1996) (finding that an expert's willingness to change their opinion due to the release of a single unpublished abstract was both the result of an unreliable methodology and "not only suspect, but shocking"); *see also Rembrandt Vision Techs., L.P. v. Johnson & Johnson Vision Care, Inc.*, 282 F.R.D. 655, 667–68 (M.D. Fla.

otherwise admissible under Rule 5-702, such an alteration might well bear on "the care with which [the expert] applied [their] methodology, which is a matter to be explored on cross-examination before the jury[.]" *Katz Abosch*, 485 Md. at 382.

2012), *aff'd* 725 F.3d 1377 (Fed. Cir. 2013) (holding that, among other reasons for preclusion, *Daubert* compelled striking an expert's testimony when, in response to cross-examination, the expert "completely changed his testimony as to how he conducted the . . . test."); *see also In re Johnson & Johnson Talcum Powder Prods. Mktg., Sales Pracs. & Prods. Litig.*, 509 F. Supp. 3d 116, 154–155 (D.N.J. 2020) (holding that an expert's use of a test he had previously considered unreliable in the relevant factual context indicated that the expert had "changed his view . . . solely for the purposes of this litigation" and that the related expert opinion was unreliable under *Daubert*).[16]

3. Application to the instant case

At the close of the *Daubert* hearing, the circuit court made factual findings that the basis of both experts' testimony had changed. Moreover, the court specifically noted that it was "clear" that Drs. Adler and Luciani had read the opinions in which two federal district courts had excluded their testimony under *Daubert*, and "incorporated some of that very specific language" into their *Daubert* hearing testimony in the instant case. The court noted that the experts' "deposition testimony seemed to be in line with their previous testimony in other cases in which their opinions had been excluded." The court also found that their testimony in the instant case "obviously was geared toward the purpose of the *Daubert* hearing and to satisfy the requirements of *Daubert*[.]" The court concluded that

[16] Indeed, the principle that a material alteration from an expert's previous beliefs or procedures, especially when unexplained, could be indicative of an unreliable methodology is closely related to *Rochkind*'s explicit holding that the reliability of expert testimony is frequently impacted by "whether [experts] have developed their opinions expressly for purposes of testifying[.]" 471 Md. at 35 (quotation omitted).

in contrast to their prior acceptance of the theory that physician-applied traction was the sole cause of a brachial plexus injury in an otherwise healthy infant, which led to Drs. Adler and Luciani being precluded from testifying in previous cases, the experts altered their opinions in the *Daubert* hearing. In their *Daubert* testimony, Drs. Adler and Luciani advanced "case specific and fact specific" opinions about G.'s injury in particular.[17] Thus, the court found that the experts "were able to fill in the analytical gap" in their opinions through their altered *Daubert* testimony, which, for the first time, rejected a categorical view of the cause of the injury.

During the hearing on Appellees' motion to reconsider, the circuit court made several findings regarding the testimony of Drs. Adler and Luciani. The court noted that it found the initial deposition testimony "very generalized, very . . . *ipse dixit* like." The court reiterated that at the *Daubert* hearing, "[i]t was clear, having read those opinions and then listening to their testimony, . . . that [Drs. Alder and Luciani] were familiar with those opinions as well," and consequently, presented updated opinions "very specific to this case." The court noted that Dr. Adler, for the first time in his *Daubert* testimony, "ruled out maternal forces" as a cause for G.'s specific injury, as opposed to in his deposition testimony, where he *categorically* rejected maternal forces as a potential cause. In his deposition, Dr. Adler had testified that he considered it impossible for maternal forces to cause a brachial plexus injury in an otherwise healthy baby, but in his *Daubert* testimony,

[17] Notably, in precluding the expert opinion of Dr. Kozin, a ruling which Appellees do not challenge on appeal, the court determined that Dr. Kozin's testimony was "extremely similar" to Dr. Adler's deposition testimony in that Dr. Kozin had not considered other causes of G.'s injury other that physician applied traction.

Dr. Adler rejected maternal forces as a potential cause because "nothing was documented in the records to suggest undue or severe force." Dr. Adler specifically denied his previously held belief, which had formed a basis for his previous opinion.

Similarly, Dr. Luciani no longer based his opinion on the theory that a permanent brachial plexus injury can only result from physical applied traction. The court concluded that Dr. Luciani had altered the basis for his opinion, by failing to reference a differential diagnosis in his initial deposition testimony.[18]

Ultimately, the court excluded both experts because it determined the basis for their opinion had changed between the deposition and the *Daubert* hearing. Under the circumstances of this case, we discern no abuse of discretion in the court's holding. In so deciding, the court had evidence before it which supported the conclusion that Drs. Adler and Luciani had changed the basis for their opinions after reviewing out-of-state opinions in which two federal judges had found their testimony relying on the previous basis inadmissible.

Pursuant to a *Daubert-Rochkind* analysis, which seeks to determine if an expert's methodology is sufficiently reliable, the circuit court was permitted to exercise its discretion and conclude that experts' alterations of the basis for their opinions was

[18] Although Dr. Luciani's deposition testimony excluded some alternative explanations for G.'s injury, the opinion was still grounded in the rejected premise that "the only way [the] injury could occur under the circumstances" was because of physician-applied traction. We do not conclude that the court abused its discretion in considering Dr. Luciani's exact phrasing, as the court was engaged in the determination of whether Dr. Luciani was providing *post-hoc* justifications of his opinion after learning that similar testimony had been precluded in other cases. *See Gray*, 388 Md. at 383.

indicative of an unreliable methodology. *See Rochkind*, 471 Md. at 36. As federal caselaw has concluded, articulating a new basis for a previously held opinion might well indicate *post hoc* rationalization of an unreliable opinion ostensibly presented as the result of a scientific process. *See AstraZeneca Pharmaceuticals LP*, 598 F. Supp. 2d at 1296–97. A significant change in the basis of an opinion also implicates some of the enumerated *Daubert-Rochkind* factors, including "whether [an expert has] developed their opinions expressly for the purposes of testifying[,]" and "whether the expert is being as careful as [the expert] would be in [the expert's] regular professional work[.]" *Abruquah*, 483 Md. at 654 (quoting *Rochkind*, 471 Md. at 35–36); *see also Rochkind*, 471 Md. at 37 (noting that a trial court "may apply some, all, or none of the factors depending on the particular expert testimony at issue"). Furthermore, these principles are particularly salient, when, as here, the experts in question were found by the trial court to have altered their opinions in response to being precluded from testifying in other cases.

Our *Daubert-Rochkind* standard is one that requires both flexibility on the part of, and deference to, the trial court's exercise of discretion. *Katz Abosch*, 485 Md. at 376; *see also Matthews*, 479 Md. at 306 ("Post-*Rochkind*, it is still the rare case in which a Maryland trial court's exercise of discretion to admit or deny expert testimony will be overturned."). Therefore, we find no error in the circuit court's conclusion that a significant change in the experts' basis for their opinions, apparently altered not because of an updated scientific understanding, but due to previous preclusion in other trials, rendered their opinions

unreliable under Rule 5-702.[19]

For the reasons stated above, we affirm the judgment of the circuit court.

JUDGMENT OF THE CIRCUIT COURT FOR MONTGOMERY COUNTY AFFIRMED. COSTS TO BE PAID BY APPELLANT.

[19] We note that despite Appellees' contention that the experts' *Daubert* testimony had referenced previously undisclosed sources of support for their opinions, the court stated that it did not "have a problem necessarily with the medical literature" being supplemented. Although the court was also concerned with the potential prejudicial effect of the altered expert opinions, it specifically acted to preclude the experts pursuant to *Daubert-Rochkind* and Rule 5-702, as opposed to imposing a discovery sanction. Because we conclude that the circuit court did not abuse its discretion in precluding the experts pursuant to Rule 5-702, we need not reach Appellants' contention that precluding the opinions of Drs. Adler and Luciani was an inappropriate discovery sanction.