2020 UT 21

IN THE

SUPREME COURT OF THE STATE OF UTAH

RICHARD TAYLOR and DEANNE TAYLOR, *Petitioners*,

v.

UNIVERSITY OF UTAH, UNIVERSITY HOSPITAL, and UNIVERSITY OF UTAH PHYSICAL MEDICINE AND REHABILITATION CLINIC, *Respondents*.

> No. 20190127 Heard January 13, 2020 Filed May 8, 2020

On Certiorari to the Utah Court of Appeals

Third District, Salt Lake The Honorable Robert P. Faust No. 140903769

Attorneys:

James W. McConkie, Bradley H. Parker, W. Alexander Evans, Salt Lake City, for petitioners

Curtis J. Drake, Parker A. Allred, Salt Lake City, for respondents

JUSTICE HIMONAS authored the opinion of the Court, in which CHIEF JUSTICE DURRANT, ASSOCIATE CHIEF JUSTICE LEE, JUSTICE PEARCE, and JUSTICE PETERSEN joined.

JUSTICE HIMONAS, opinion of the Court:

INTRODUCTION

¶1 Utah Rule of Evidence 702 requires district courts to exclude expert testimony that fails to satisfy any one of several threshold requirements. These requirements include "a threshold showing that the principles or methods that are underlying in the testimony . . . are based upon sufficient facts or data." UTAH R. EVID. 702(b)(2). We are asked whether such a threshold showing is

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present where a method of logical deduction is based upon broad and attenuated facts. We hold that it is not.

BACKGROUND¹

¶2 Richard and Deanne Taylor's daughter, Ashley, was diagnosed at a young age with a neurological disorder that caused her to suffer from spasticity. To control this effect, Ashley received baclofen² through a catheter and an implanted baclofen pump that delivered it into the thecal sac around her spinal cord.

¶3 On April 17, 2013, Ashley woke up suffering from severe shaking in her legs. She saw a physician at the University of Utah Hospital, where she received an oral dose of baclofen. The physician performed several tests, gave Ashley more oral baclofen, and instructed her to return the next day. Although the following day's tests did not show an obvious sign of a problem, the physician thought there might still be a problem with the pump. During that period of time, Ashley kept vomiting and had difficulty keeping down oral doses of baclofen. After further consultation, the physician recommended surgery to replace the pump and the catheter connected to it. The surgery was performed the following day, April 19, 2013. Ashley's sister later agreed with the statement that Ashley was "back to herself" a day after the surgery.

¶4 Two to three weeks later, however, Ashley began exhibiting unusual behavioral symptoms. The Taylors consulted Dr. Judith Gooch, who had been Ashley's treating physician in the past. Dr. Gooch initially concluded that Ashley suffered from

¹ The issue before us is not affected materially by the case facts or by disputes the parties have about them. We provide the facts only to give the reader the context of our opinion. And their recitation here should not be viewed as an endorsement of either party's version.

² The University of Utah, University Hospital, University of Utah Physical Medicine and Rehabilitation Clinic, and the agents, employees, and staff employed with those institutions (collectively, the Hospital) defined baclofen in its motion at the district court as a "muscle relaxer that helps to control spasticity (clonus) in the legs." The Taylors have not challenged this definition.

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baclofen overdose and completely stopped the administration of baclofen to Ashley. Later, Dr. Gooch concluded that Ashley's change in behavior was due to baclofen withdrawal—not an overdose as she had initially found. She further concluded that although Ashley had returned to a stable condition, she suffered, and still suffers, from permanent cognitive injuries.

¶5 The Taylors brought suit against the Hospital on Ashley's behalf. They alleged that the Hospital's treatment of Ashley's baclofen withdrawal between April 17 and April 19, 2013, caused her permanent injuries.

¶6 The Taylors retained Dr. Gooch as a causation expert. The district court summarized Dr. Gooch's proximate cause theory as follows: "Baclofen withdrawal caused a metabolic disturbance, which caused encephalopathy, which produced months-long hallucinations and other abnormal behavior, resulting in or causing permanent memory and cognitive function damage to [Ashley]."

¶7 After deposing Dr. Gooch, the Hospital filed a motion *in limine* to exclude her testimony. The Hospital argued that the testimony "should be barred under Rule 702 of the Utah Rules of Evidence because Dr. Gooch's opinion is not based upon sufficient facts or data." In its motion, the Hospital relied on Dr. Gooch's concession in her deposition that "there is not a single reported case of baclofen withdrawal in which the patient remained stable throughout the episode and went on to suffer permanent neurological injury." Dr. Gooch also conceded that she had "never seen a patient experience the injuries that [Ashley] claims to have suffered."

Taylors opposed the motion. With their ¶8 The memorandum, they attached a declaration from Dr. Gooch where she again conceded the facts mentioned by the Hospital but contended they were irrelevant. Dr. Gooch declared that her personal experience allowed her to logically deduce that baclofen withdrawal can cause encephalopathy with permanent injuries, although she had not witnessed such an occurrence, and could not point to it in the medical literature. Dr. Gooch further explained that she had performed a differential diagnosis to determine proximate cause.

¶9 The district court agreed with the Hospital and excluded Dr. Gooch's testimony. It concluded that "Dr. Gooch [did] not

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have facts and data sufficient upon which to base her opinions or to employ her method for evaluating the causal connection in this case," that "she present[ed] no medical information or reports supporting her position," and that "her personal experience" likewise failed to provide a basis for her testimony.

¶10 The Taylors appealed. In their appeal, they outlined a similar argument to the one they had made at the district court. The court of appeals was unpersuaded and affirmed. *Taylor v. Univ. of Utah,* 2019 UT App 14, ¶1, 438 P.3d 975. The court of appeals explained that although logical deduction was not per se an "unreliable method," in this case, Dr. Gooch lacked "sufficient facts and data to employ such a method." *Id.* ¶ 10 n.1; *see also id.* ¶ 16.

¶11 The Taylors petitioned for certiorari, which we granted. We exercise jurisdiction under Utah Code section 78A-3-102(3)(a).

STANDARD OF REVIEW

¶12 On certiorari, "we review the decision of the court of appeals and not that of the district court." *State v. Hansen*, 2002 UT 125, ¶ 25, 63 P.3d 650 (citation omitted) (internal quotation marks omitted). And "we review the decision of the court of appeals for correctness." *Id.* (citation omitted) (internal quotation marks omitted).

¶13 But "[t]he correctness of the court of appeals' decision turns, in part, on whether it accurately reviewed the [district] court's decision under the appropriate standard of review." State v. Apodaca, 2019 UT 54, ¶ 25, 448 P.3d 1255 (citation omitted). In this case, the issue is the admission of evidence. "With regard to the admission of evidence, most decisions involve a threshold statement of the legal principle governing admission or exclusion, findings of facts pertinent to a determination, and the application of the legal principle to the facts at hand with regard to admissibility." Arnold v. Grigsby, 2018 UT 14, ¶ 9, 417 P.3d 606. "We review the legal questions to make the determination of admissibility for correctness." State v. Workman, 2005 UT 66, ¶ 10, 122 P.3d 639 (citation omitted). "We review the questions of fact for clear error." Id. (citation omitted). And finally, "we review the district court's ruling on admissibility for abuse of discretion." Id. (citation omitted).

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ANALYSIS

¶14 We granted certiorari on the question of whether the court of appeals erred in affirming the district court's exclusion of Dr. Gooch's expert testimony. We find no error and, consequently, we affirm.

¶15 We hold that given the gaps between the facts Dr. Gooch relied on and her logical deduction, it was not an abuse of discretion for the district court to exclude her testimony. Further, we address two arguments the Taylors make. First, we reject their argument about our case law regarding Utah Rule of Evidence 702 and clarify that the district court and court of appeals properly applied it. Second, we refuse to consider a new argument the Taylors raise in their reply brief, offering differential diagnosis testimony from Dr. Gooch, because it was untimely made.

I. BECAUSE DR. GOOCH'S METHOD WAS NOT BASED ON SUFFICIENT FACTS OR DATA, THE DISTRICT COURT DID NOT ABUSE ITS DISCRETION IN EXCLUDING IT

¶16 Utah Rule of Evidence 702 "assigns to trial judges a 'gatekeeper' responsibility to screen out unreliable expert testimony." UTAH R. EVID. 702 advisory committee notes; *see also State v. Lopez*, 2018 UT 5, ¶ 20, 417 P.3d 116; *Eskelson v. Davis Hosp. & Med. Ctr.*, 2010 UT 59, ¶ 12, 242 P.3d 762. The applicable standard of review for a decision about admissibility, abuse of discretion, reflects the respect we have for a district court's determination in these preliminary issues. *See State v. Jones*, 2015 UT 19, ¶ 12, 345 P.3d 1195; *State v. Workman*, 2005 UT 66, ¶ 10, 122 P.3d 639.

¶17 The rule provides trial judges the framework to fulfill this assignment. Relevant to this case are subsections (b) and (c). Subsection (b) requires the party seeking admission of the expert testimony to make a "threshold showing that the principles or methods that are underlying in the testimony" are "reliable," "based upon sufficient facts or data," and "have been reliably applied to the facts." UTAH R. EVID. 702(b). Subsection (c) allows satisfaction of subsection (b)'s "threshold showing" if the "underlying principles or methods, including the sufficiency of facts or data and the manner of their application to the facts of the case, are generally accepted by the relevant expert community." *Id.* 702(c).

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¶18 The parties dispute whether the principles or methods underlying Dr. Gooch's expert testimony are based on sufficient facts or data, and whether these facts or data are generally accepted by the relevant expert community as a sufficient basis for the principles or methods underlying her testimony. They are not. The analytical gaps between the facts used as "principles" in Dr. Gooch's opinion and her proximate cause logical deduction from them are too great to be sustained. In other words, the method Dr. Gooch used—logical deduction—is not based on sufficient facts or data. Given these gaps, it cannot be said, and there is no showing, that the relevant expert community generally accepts the sufficiency of such facts as a basis for logical deduction. Under these circumstances, the district court did not abuse its discretion when it excluded the testimony.

¶19 We start by analyzing Utah Rule of Evidence 702(b).³ The Taylors argue that Dr. Gooch's testimony is a logical deduction based on three undisputed facts she has personally experienced as a treating physician. The three facts are that (1) baclofen withdrawal can cause a metabolic disturbance, (2) metabolic disturbance can cause encephalopathy, and (3) encephalopathy can result in permanent rather than merely temporary deficits. Based on these facts, Dr. Gooch deduced that she knows "through [her] personal experience . . . that baclofen withdrawal can cause encephalopathy and that the symptoms associated with the encephalopathy can be permanent." Dr. Gooch also stated that the literature is "consistent with [her] personal experience."

¶20 This court has previously acknowledged that "even highly technical or scientific testimony may be based on simple inductive or deductive reasoning that the average person uses every day." *State v. Rothlisberger*, 2006 UT 49, ¶ 34, 147 P.3d 1176. But merely invoking a logical deduction method does not make expert testimony admissible. The logical deduction must still be

³ The Taylors also make arguments about subsection (c), as they did in the court of appeals. Neither the district court nor the court of appeals based their decision to exclude the evidence on subsection (c), so its analysis is not relevant here. However, as we explain below, the facts or data Dr. Gooch used are not generally acceptable in the relevant expert community as a basis for logical deduction.

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based on sufficient facts or data, as rule 702(b)(2) orders. Here it is not.

¶21 The Taylors' counsel explained at the district court hearing that logical deduction is appropriate only so long as "each step is a reliable step that takes you logically from one point to the next." But logical deduction is not appropriate where "[t]he analytical gap between the evidence presented and the inferences to be drawn . . . is too wide." *Turpin v. Merrell Dow Pharms., Inc.,* 959 F.2d 1349, 1360–61 (6th Cir. 1992). Indeed, "[a] court may conclude that there is simply too great an analytical gap between the data and the opinion proffered, i.e., whether the expert has unjustifiably extrapolated from an accepted premise [or data] to an unfounded conclusion." *Nelson v. Enid Med. Assocs., Inc.,* 376 P.3d 212, 222 (Okla. 2016) (alterations in original) (internal quotation marks omitted) (quoting *Hollander v. Sandoz Pharms. Corp.,* 289 F.3d 1193, 1205 (10th Cir. 2002)).

¶22 Dr. Gooch derives her logical deduction from three extremely broad facts. *See supra* ¶ 19. It is undisputed that two of the terms she uses in these facts, "metabolic disturbance" and "encephalopathy," can encompass numerous situations.

¶23 The Hospital explained (and the Taylors have not refuted) that a "metabolic disturbance is a type of brain dysfunction that is usually caused by toxic exposure (drugs, alcohol, toxic chemicals) or by a deficiency in a hormone or vitamin (e.g., B12) in the body." The Taylors' counsel referred to metabolic disturbances at the district court hearing as situations where "your [body is] kind of freaking out." Dr. Gooch said in her deposition that encephalopathy "is a term used to describe a problem in the brain." She added that it "[t]ypically" appears "in a relatively acute onset of a structural or functional problem in the brain" resulting from "a multitude of causes," such as "toxic metabolic" or "other things."

¶24 Dr. Gooch explained that from her three facts she deduced a specific plausibility. However, this deduction suffers from the fallacy of equivocation. The fallacy of equivocation is an argument that "exploits the ambiguity of a term or phrase which has occurred at least twice in an argument, such that on the first occurrence it has one meaning and on the second another meaning." *Fallacies*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, https://plato.stanford.edu/entries/fallacies/#CorFal (last visited May 1, 2020).

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¶25 The gap this ambiguity creates often stems from contextual differences. See, e.g., United States v. Brawner, 471 F.2d 969, 988 (D.C. Cir. 1972) (en banc)⁴ ("There may be a tug of appeal in the suggestion that law is a means to justice and the jury is an appropriate tribunal to ascertain justice. This is a simplistic syllogism that harbors the logical fallacy of equivocation, and fails to take account of the different facets and dimensions of the concept of justice."); In re Ohio Execution Protocol Litig., No. 2:11-CV-1016, 2018 WL 2118817 *20 (S.D. Ohio May 8, 2018) ("The paper begins with Judge Frost's description of the use of the twodrug protocol in the McGuire execution as an 'experiment.' . . . [I]t is the fallacy of equivocation to take that word from Judge Frost's decision and apply it in other contexts where the word 'experiment' is used." (citation omitted)); United Servs. Auto. Ass'n. v. Baggett, 209 Cal. App. 3d 1387, 1396 (1989) (rejecting an argument that the word "accident" was ambiguous as used in a specific insurance policy simply because "accident" has many meanings in the abstract, and explaining that the court "would commit the fallacy of equivocation to conclude such abstract ambiguity renders the word ambiguous as used in insurer's policy").

¶26 Here, the attenuation is in the terms' broad meanings. Dr. Gooch committed the fallacy of equivocation by failing to account for whether the types of "metabolic disturbances" that can be caused by baclofen withdrawal are the same types of metabolic disturbances that can cause encephalopathy. Similarly, she has not supported the analytical leap to the conclusion that the types of encephalopathy caused by metabolic disturbances

⁴ Legal search engines suggest that *Brawner* was superseded by statute, alleging that the United States Supreme Court stated so in *Shannon v. United States*, 512 U.S. 573, 575 (1994). After reading the *Shannon* opinion, and reviewing cases that cited to *Brawner* after *Shannon*, we disagree with this suggestion. *Shannon* refers to *Brawner* only when explaining the District of Columbia law regarding successful insanity defense. But even if *Shannon* somehow implicitly stated that *Brawner* was superseded by statute, this has no significance for our use of the opinion, as a mere example of a fallacy of equivocation.

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(whether caused by baclofen withdrawal or not) can cause permanent injuries, as the Taylors argue happened here.⁵

¶27 Additionally, in her syllogism, Dr. Gooch makes an implicit sub-conclusion that ignores the impact of baclofen restoration on metabolic disturbances and encephalopathy.⁶ For example, her deduction skips over a plausible difference between metabolic disturbances whose effects are typically alleviated when baclofen is restored, and metabolic disturbances whose effects are not thus alleviated. The same is true for her use of the term encephalopathy.

⁵ Both the district court and the court of appeals focused on the fact that Dr. Gooch could not show, from personal experience or the literature, any case of encephalopathy, caused by baclofen withdrawal that resulted in permanent injury where baclofen was restored within forty-eight hours. Dr. Gooch argued that several cases of baclofen withdrawal had resulted in death, which is a permanent injury, and therefore other permanent injuries are plausible. That argument is perhaps an even more apropos example of the fallacy of equivocation than the examples cited above. Further, the cases Dr. Gooch relied on are all significantly distinguishable. Most importantly, all involved situations where baclofen was not restored prior to death. Ashley's baclofen was restored.

Additionally, the Taylors argued in their reply brief that Ashley's condition during the baclofen withdrawal was not stable, and the cases that had resulted in death also had non-stable baclofen withdrawals, and therefore are applicable to her case. Although Dr. Gooch raised this point in her declaration, it was not presented in this court until the Taylors reply brief. We therefore decline to address it. *See infra* ¶ 50.

⁶ At the district court hearing, the Taylors' counsel argued that once metabolic disturbances and encephalopathies occur, they "work[] according to [their] own rules," and therefore their effects should be evaluated without considering their origin. The Taylors did not repeat this argument to this court, and Dr. Gooch contradicted this argument in her deposition. She stated that "the ultimate outcome depends on how quickly intrathecal Baclofen withdrawal is managed," connoting a connection between the baclofen withdrawal and the resulting encephalopathy effects.

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¶28 Because courts "require inferences to be sound logically, and refuse to allow a jury of laymen to engage in guesswork, speculation and conjecture," *Hamilton v. Kirson*, 96 A.3d 714, 730 (Md. 2014) (citation omitted) (internal quotation marks omitted), we hold that the facts Dr. Gooch relied on are insufficient to support her method of logical deduction.

¶29 Analyzing these facts under Utah Rule of Evidence 702(c) leads to the same conclusion.⁷ Because of the gaps outlined above, it cannot be said that the three facts Dr. Gooch used are generally accepted by the relevant expert community as sufficient to employ a legal deduction method that yields her proximate cause testimony.

¶30 It is common for experts to extrapolate from data. However, the analytical gaps between the broad facts and the case-specific conclusion mean that Dr. Gooch asks the trier of fact to rely on her *ipse dixit*.⁸ There is nothing in rule 702 that requires a court to allow that. And so, the district court did not abuse its discretion by excluding the testimony. *See Gen. Elec., Co. v. Joiner*, 522 U.S. 136, 146 (1997) ("[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.").

¶31 In her declaration, Dr. Gooch stated her logical deduction is consistent with the literature. But it is only not inconsistent. In fact, Dr. Gooch explained in the same declaration that the literature "does not indicate that baclofen withdrawal cannot cause permanent injury," but the literature includes only the permanent injuries of death and multi-organ failure. She presented no literature referring to the kind of permanent injury

⁷ In *Lopez*, we held the inverse, which is consistent with our holding here. 2018 UT 5, ¶ 29. We found that the expert testimony there did not comply with the rule 702(c) requirement and explained that for the same reasons it did not comply with rule 702(b). *Id.*

⁸ "Something asserted but not proved." *Ipse Dixit*, BLACK'S LAW DICTIONARY (11th ed. 2019).

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Ashley suffered. As the Hospital succinctly put it in its motion *in limine*, if "[Dr. Gooch] were to attempt to publish her opinion regarding [Ashley] in a peer-reviewed journal, the first question likely to be asked is, 'Where is your data?' Because there are no supporting facts or data, the article would never be published."

¶32 In sum, the facts and data underlying the logical deduction method Dr. Gooch used are insufficient to withstand a rule 702 inquiry.

II. THE TAYLORS' ARGUMENTS FOR REVERSAL ARE UNPERSUASIVE

¶33 The Taylors resist this outcome with two arguments. First, they claim that the district court and court of appeals misconstrued our case law and impermissibly assessed the sufficiency of the facts or data underlying Dr. Gooch's *testimony* instead of those underlying her *method*. Second, in their reply brief, the Taylors offer an additional argument on proximate causation—a specific causation argument based on differential diagnosis.

¶34 The first argument miscomprehends what the district court and the court of appeals decided. The Taylors forfeited the second argument because they raised it only in their reply brief. Although we cannot properly adjudicate the argument because the Taylors raised it too late, we point out two issues that arise from the Taylors' briefing, which lead us to believe it would be bound to fail even if considered.

A. The District Court and Court of Appeals Did Not Mistakenly Analyze the Testimony Instead of the Principles or Methods Underlying It

¶35 The Taylors argue that the district court and the court of appeals construed Dr. Gooch's testimony as experience based. Consequently, they allege, the district court and court of appeals reviewed whether her testimony itself, i.e., her conclusion, is based on sufficient facts or data, allegedly under the standard we set out in *Eskelson v. Davis Hospital & Medical Center*, 2010 UT 59, ¶ 12, 242 P.3d 762.

¶36 According to the Taylors, this was a mistake because while the facts Dr. Gooch relied on as the basis for her logical deduction derived from her experience, her testimony was based on a "method[]"—logical deduction. When a testimony is based

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on "principles or methods," the Taylors advance, a court's rule 702 review is limited to the facts or data underlying those principles or methods and cannot reach the actual testimony, under *State v. Clopten*, 2015 UT 82, ¶ 51, 362 P.3d 1216.

¶37 This alleged difference matters because the Taylors argue that the district court and court of appeals excluded Dr. Gooch's testimony on the ground that they did not find facts or data supporting her *conclusion*. The Taylors insist this was impermissible and that the relevant question is whether the *method* Dr. Gooch used—logical deduction—is based on sufficient facts or data.

¶38 We agree with the Taylors that the relevant question is whether Dr. Gooch's method was based on sufficient facts or data. But this does not help them because, as we explain above, Dr. Gooch's method was *not* based on sufficient facts or data.

¶39 Regardless, the Taylors' argument as to our case law and its application by the district court and court of appeals is meritless. First, the Taylors wrongly construe our decisions in *Eskelson* and *Clopten*. Both decisions apply rule 702 in the same manner. Second, the district court and court of appeals properly analyzed this case under our rule 702 precedent. Specifically, both courts analyzed the facts or data that formed the basis of Dr. Gooch's method, not her testimony.

¶40 First, rule 702(b)'s "reliability requirement does not apply to expert witnesses' conclusions, but rather to the 'principles and methods' underlying their conclusions." *Clopten*, 2015 UT 82, ¶ 51. Contrary to the Taylors' argument, *Eskelson* did not hold otherwise. *Eskelson* was this court's first opportunity to address rule 702 after its amendment in 2007. We elaborated on the amendment and explained the relationship between the amended rule and our past case law. *Eskelson*, 2010 UT 59, ¶¶ 9–12. We established no special rule regarding experience-based expert testimony. We merely applied the rule to the facts of that case.

¶41 The expert testimony in dispute in *Eskelson* lacked an identified method. Instead, the expert relied on "his experience as a physician, in dealing with similar situations" to the one in question. *Id.* ¶ 15. The district court there held the testimony should not be admitted because the lack of an identified method meant that the expert testimony was not reliable. *Id.* ¶ 13. We rejected that argument and held that "[i]n [that] case, amended

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rule 702 requires no more" than the expert's experience because the "[i]dentification of a methodology is not necessary where exposure to a nearly identical situation forms the basis of the expert's opinion." *Id.* ¶ 15. We also stressed that "[w]hat is required for a threshold showing of reliability will vary depending on the complexity of the particular case." *Id.*

¶42 In other words, this court held in *Eskelson* that when an expert can present exposure to a nearly identical situation, this exposure acts as their method de facto. This court cabined its holding by adding the case's complexity as a factor in that determination. *See id.*

¶43 The situation that the *Eskelson* expert testimony addressed was not complex at all, but rather routine for him—the removal of foreign objects from children's ears. *See id.* In that type of case, the expert's "exposure to a nearly identical situation" sufficed to "constitute[] a threshold showing of reliability." *Id.* This court then treated the expert's exposure as his de facto method and examined the facts or data that formed its basis. *Id.* ¶ 16.

¶44 In *Clopten*, the petitioner argued that the State's expert testimony was not reliable because "his conclusions differed from those of the majority of researchers." 2015 UT 82, ¶ 50. We rejected that argument "because rule 702(b)'s reliability requirement does not apply to expert witnesses' conclusions, but rather to the 'principles and methods' underlying their conclusions." *Id.* ¶ 51. We explained that in that case, "nothing amiss has been identified in the methodological basis for [the expert]'s testimony," *id.* ¶ 52, and therefore the testimony was admissible under the rule. *Id.* ¶¶ 49–52.

¶45 *Eskelson* and *Clopten* do not offer different standards for expert opinion admissibility under rule 702. Both cases applied rule 702 to the specific facts they adjudicated. In *Eskelson*, the expert's near-identical experience acted as his de facto method, and the court examined the sufficiency of the facts or data underlying it. 2010 UT 59, ¶ 16. In *Clopten*, this court held that although the expert's conclusions were not generally accepted in the relevant expert community, these conclusions were based on "a thirty-year history of peer-reviewed field studies" and on a "generally accepted principle of psychological science." 2015 UT 82, ¶ 52. Both cases, therefore, examined the sufficiency of the facts or data that formed the basis for the relevant expert's "method." The differences between them are merely factual.

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¶46 Second, the district court and court of appeals correctly applied our precedent to evaluate the facts or data underlying the method Dr. Gooch used in her testimony. Because *Eskelson* and *Clopten* represent the same standard, the use of either in a rule 702 analysis is valid.

¶47 The district court determined that "Dr. Gooch [did] not have facts and data sufficient upon which to base her opinions or to employ her method for evaluating the causal connection in this case as she present[ed] no medical information or reports supporting her position nor [did] her personal experience provide[d] such a basis." The court of appeals expressly noted that the logical deduction method Dr. Gooch applied was not supported by "sufficient facts or data." *Taylor v. Univ. of Utah*, 2019 UT App 14, ¶ 16, 438 P.3d 975. The court of appeals went on to explain that Dr. Gooch did not have "exposure to a nearly identical situation" or "any supporting medical literature." *Id.* ¶¶ 16–17 (citation omitted) (internal quotation marks omitted).

¶48 The Taylors characterize this analysis as impermissibly scrutinizing Dr. Gooch's conclusions, i.e., her statement that "baclofen withdrawal can cause encephalopathy and that the associated with the encephalopathy symptoms can be permanent." We disagree. We recognize that some of the phrases used by the district court and court of appeals could be construed as assessing Dr. Gooch's conclusion, but ultimately, it is clear that this is not what these courts did. As we explain above, Dr. Gooch did not present sufficient facts or data to support her method – logical deduction. The courts below homed in on these gaps by discussing the lack of facts or data supporting Dr. Gooch's logical inferences. These logical inferences indeed constitute her conclusion, but they are also the heart of her method. Id. ¶ 10 n.1 (finding that the district court determined that "the expert lacked sufficient facts and data ... to employ [a logical deduction] method"); *see also id.* ¶¶ 16–17.

B. The Taylors Forfeited their Specific Causation Argument

¶49 In their reply brief, the Taylors presented a new argument about proximate cause. They argued that the logical deduction Dr. Gooch used was only general causation testimony, and that she additionally offered specific causation testimony based on the

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general causation testimony and a differential diagnosis she performed.⁹

¶50 "When an appellant saves an issue for the reply brief, [they] deprive[] the appellee of the chance to respond." That leaves this court "without a central tenet of our justice system – adversariness. That is fatal. We have consistently held that issues raised by an appellant in the reply brief that were not presented in the opening brief are considered [forfeited] and will not be considered."¹⁰ Kendall v. Olsen, 2017 UT 38, ¶ 13, 424 P.3d 12 (citations omitted) (internal quotation marks omitted).

¶51 The Taylors argue in their opening brief that Dr. Gooch's logical deduction method constituted their "proximate cause" testimony. The Hospital replies that "[i]f Dr. Gooch's 'logical deduction' method is employed in a vacuum and not in the context of [Ashley's] case, the three facts may well be sufficient [under rule 702]," but "[t]here is no evidence to support the third fact ('[e]ncephalopathy can result in permanent rather than merely temporary deficits') in the context of this case." In their reply brief, the Taylors note that their opening argument refers only to general causation and argue for the first time to this court a separate argument about specific causation (or proximate cause).

¶52 By only bringing this argument up in their reply brief, the Taylors forfeited it. The fact that the Taylors made this argument below and that the district court did not address it does not

⁹ "General causation is whether a substance is capable of causing a particular injury or condition in the general population, while specific causation is whether that substance caused the particular individual's injury." *Nelson*, 376 P.3d at 221–22.

¹⁰ Our case law uses the verb "waive" in this context and not the verb "forfeit" that we use here. "Although jurists often use the words interchangeably, forfeiture is the failure to make the timely assertion of a right[;] waiver is the intentional relinquishment or abandonment of a known right." *Kontrick v. Ryan*, 540 U.S. 443, 458 n.13 (2004) (alteration in original) (citation omitted) (internal quotation marks omitted). We do not opine (or know) if the Taylors relinquished their argument intentionally and therefore prefer to use "forfeit."

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change this conclusion. They did not timely raise it to this court, and that is to their detriment.

¶53 Because the Taylors brought up their specific causation argument only on reply, the Hospital could not address it, and without the benefit of adversarial briefing, we cannot determinatively decide it. But two issues with this argument seem problematic to us, even without the Hospital's input, and lead us to believe that it would be bound to fail even if considered.

¶54 First, the "specific causation" argument relies on the validity of the "general causation" argument the Taylors make and we reject above. In their reply brief, the Taylors argue that "in addition to the testimony regarding general causation [Dr. Gooch] provided ... testimony regarding specific causation." (Emphases omitted.) They add that it "is based upon different 'facts or data'" (emphasis omitted) than the general causation testimony. But the specific causation testimony does not stand on its own two feet. It assumes that the general causation testimony is admissible. The Taylors' court of appeals opening brief, to which they refer in their reply brief in this court, explained that "the reasonable inference upon which Dr. Gooch's [general causation] conclusion is based is the principle underlying [] her [specific causation] conclusion." (Emphases omitted.)

¶55 Second, the differential diagnosis that the Taylors present does not comport with evidentiary requirements. The diagnosis here focuses only on temporal proximity. Showing causation through differential diagnosis requires more than that. *See, e.g., Ervin v. Johnson & Johnson, Inc.,* 492 F.3d 901, 904 (7th Cir. 2007) (providing that "expert opinions employing differential diagnosis must be based on scientifically valid decisions as to which potential causes should be 'ruled in' and 'ruled out'"); *Beard v. K-Mart Corp.,* 2000 UT App 285, ¶ 20, 12 P.3d 1015 (rejecting differential-diagnosis expert testimony because "[t]he expert medical testimony merely established a chronological relationship between the accident and her symptoms," and "[n]o expert medical testimony was received that the neck and wrist surgeries were necessitated by her accident").

¶56 In *Majors v. Owens*, our court of appeals found that differential diagnosis testimony relying on patient statements, temporal proximity, physical examination, and imaging studies suffices under rule 702. 2015 UT App 306, ¶ 20, 365 P.3d 165. But here the Taylors fail to present anything more than temporal

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proximity. In their reply brief, the Taylors argue that Dr. Gooch's differential diagnosis considered "1) Ashley's health history; 2) the extent, duration and severity of the symptoms associated with Ashley's episode of baclofen withdrawal; 3) Ashley's condition before and after the episode; 4) the symptoms Ashley was experiencing after the episode; and 5) the timeline of relevant events." But when evaluating these considerations, they all relate to the same issue-the temporal proximity between the baclofen withdrawal episode and Ashley's injuries. Dr. Gooch provided no data about other causes she "ruled in" or "ruled out." See Ervin, 492 F.3d at 904. In her declaration, filed with the district court, she also mentioned these considerations only in a conclusory manner. And in real-time, after the baclofen withdrawal, Dr. Gooch herself was uncertain about what was causing Ashley's reactions. This also weakens the temporal proximity argument. Given the lack of any meaningful information beyond temporal proximity, the Taylors' differential diagnosis argument seems to fail on its merits.

¶57 To conclude, the Taylors' arguments about the district court's and court of appeals' mistakes in interpreting our case law fail to persuade. Additionally, they forfeited their differential diagnosis argument.

CONCLUSION

¶58 The Taylors did not make a threshold showing that the method underlying their proximate cause expert's testimony – logical deduction – was based on sufficient facts or data. Nor have they shown that these facts or data are generally accepted by the relevant expert community as a sufficient basis for the application of the logical deduction method in this case. Therefore, the district court did not abuse its discretion when it excluded the expert testimony on proximate cause, and the court of appeals properly affirmed.