IN THE HIGH COURT OF SOUTH AFRICA
(GAUTENG LOCAL DIVISION, JOHANNESBURG)

(1) REPORTABLE: YES
(2) OF INTEREST TO OTHER JUDGES: YES
(3) REVISED.

SIGNATURE DATE: 8 October 2021

Case No: A5015/2020

In the matter between:

M on behalf of L, a child Appellant

and

MEMBER OF THE EXECUTIVE COUNCIL FOR HEALTH: GAUTENG PROVINCIAL GOVERNMENT Respondent

CORAM: WEINER J, MUDAU J and WILSON AJ

JUDGMENT

WILSON AJ:

1 At the centre of this appeal is an eleven-year-old boy, L, who lives with profound mental and physical disabilities. There is no genuine dispute that these disabilities are the result of cerebral palsy. The questions in this appeal are whether the cerebral palsy was caused by hypoxia shortly before L was born, and whether that hypoxia was reasonably foreseeable and preventable

by employees of the respondent ("the MEC") whose responsibility it was to oversee L's delivery.

2 The trial court held that it had not been established on a balance of probabilities that the MEC's employees had negligently failed to prevent the hypoxic event or that the event caused L's condition. In this appeal, which is before us with the leave of the Supreme Court of Appeal, the appellant ("Ms. M"), who is L's mother, challenges both these conclusions.

The labour and the delivery

3 Ms. M was admitted to Tshwane District Hospital at 01h45 on 18 May 2010. She was already in labour. A cardiotograph ("CTG") was performed on her admission. A CTG is a monitoring tool that provides readouts indicating the foetal heart rate, the pace at which the foetal heart rate is speeding up or slowing down, and the variation of the time intervals between foetal heartbeats. According to the Guidelines for Maternity Care in South Africa (2007) ("the Guidelines") CTGs are generally only used during high-risk labour. The Guidelines indicate that a healthy range for a foetal heart rate is between 110 and 160 beats per minute, and that persistently low variability and decelerations of the foetal heartbeat late in labour may indicate foetal distress.

4 The CTG indicated possible foetal distress. Consistent with the Guidelines, Ms. M was given Ringer's Lactate, which is a fluid replacement therapy used, amongst other things, to treat foetal distress. On the administration of Ringer's Lactate, the foetus' condition stabilised.

5 A further CTG was performed at 06h24. It appears from the evidence that this CTG showed that the foetus was still stable. The senior attending midwife, Sister Motshwene, made a note directing that the CTG should be repeated within an hour. This does not appear to have happened.

6 Nonetheless, at 07h30, Ms. M entered the active phase of labour. Ms. M was seen by a doctor at 11h30, who seemed re-assured by the earlier positive CTG reading. At 11h30 a Doppler reading taken by another midwife, Sister Kemp, showed the foetal heart rate to be "140 beats per minute, [a]udible and clear". The problem with the Doppler reading, though, is that it only yielded a single measurement of the foetal heart rate at the time the instrument was applied. It was not accompanied by a trace of the foetal heart rate, information about heart rate variability or the acceleration or declaration of the foetal heartbeat. That sort of information was only provided by way of the CTGs performed on Ms. M's admission, and later at 06h24.

7 The next CTG performed on Ms. M was at 13h30, again by Sister Kemp. On the record of Ms. M's labour in the papers before us, that CTG apparently disclosed a foetal heart rate of 60 beats per minute, with "slight decelerations". The reference to a foetal heart rate of just 60 beats per minute is likely to have been an error, but Sister Kemp was concerned enough at this stage to make a note that the CTG reading should be reported to Sister Motshwene.

8 That, too, did not happen. In her evidence at trial Sister Motshwene said that Sister Kemp did not report the CTG to her, and that if Sister Kemp had done so, Sister Motshwene would immediately have taken action, by turning Ms. M on her side, administering oxygen, and organising a Caesarean section.

9 None of those steps was immediately taken, and by 14h30, there was no doubt that the foetus was, once again, in distress. At that point a Caesarean section was ordered, and Ms. M was taken into theatre. L was nonetheless born naturally at 15h10. It was clear at birth that L was severely hypoxic. His one-minute APGAR score was just 1. The APGAR scale measures a new-born child's condition at 1 and 5 minutes after birth by reference to the child's physical activity, heart rate, "grimace" (or response to stimuli), appearance, and rate of respiration. A score of 1 (out of a possible 10) on the APGAR scale indicates a baby in real difficulty. At birth, L was blue and floppy, but this later improved with respiratory assistance and intubation.

10 Although L's condition gradually stabilised, he continued to suffer periods of respiratory collapse, and remained on a paediatric high-care ward for a considerable period.

11 A Magnetic Resonance Imaging (MRI) scan later revealed that L had suffered an acute hypoxic ischaemic injury to his putamen. The putamen sits close to the centre of the brain, beneath the cerebral cortex and in front of the thalamus. It plays a role in speech and motor control. An ischaemic injury is simply an injury that results from low blood flow and concomitantly lower levels of oxygen reaching the relevant tissues. This is accompanied by the build-up of cellular waste in those tissues, and resultant cell death.

12 All these facts are common cause. The contested factual issues in this case relate to when L sustained his brain injury, what caused it and what its consequences were. But even here, there are large areas of agreement

between the parties' respective experts in their joint expert minutes, compiled after an examination of the available medical records.

The expert witnesses

13 The parties' experts made frequent reference the Guidelines, which set out a clear protocol for the care of a pregnant woman during labour. That protocol has the following elements –

13.1 Her vital signs, including her blood pressure, pulse, temperature and urine output, will be monitored and recorded every two hours.

13.2 There will be a vaginal examination hourly after her cervix has reached six centimetres dilation.

13.3 The foetal heart rate will be monitored half-hourly before, during and after contractions.

13.4 Once the cervix is fully dilated, the foetal heartrate must be monitored every five minutes.

14 The purpose of the protocol set out in the Guidelines is to detect any abnormalities in the mother's condition, or in the condition of the foetus. Close monitoring allows medical practitioners to intervene promptly to deliver the baby if necessary. It gives those practitioners a sense of whether the baby is coping with labour, or is in distress during contractions. The Guidelines provide a context within which to assess the experts' interpretations of the facts underlying this case.

15 The parties' expert radiologists agreed that the MRI showed that L's brain injury was as I have described it above. They also agreed that the injury occurred at or around L's birth, and that the MRI did not suggest any other injury or abnormality in L's brain, such as infection, congenital abnormality, a metabolic disorder, an inflammatory disorder or a haemorrhage.

16 The parties' obstetric experts agreed that, although there were some heart rate decelerations on the first CTG taken on Ms. M's admission to hospital, the foetus was likely overall in a good condition at that stage. This was indicated by the foetus' positive response to Ringer's Lactate being administered. They also agreed that CTG monitoring ought to have been performed throughout labour, ideally continuously, or at least once every two hours. They disagree about exactly when the foetus' condition started to deteriorate. Dr Murray, retained by Ms. M, stated that the foetal condition became "pathological" at 06h24. Dr Archer, retained by the MEC, said that the foetal condition became "pathological" at 14h30, just forty minutes before L was born.

17 It is not clear what the experts mean by a "pathological" condition, but their disagreement was later explored and illuminated in evidence. Dr Archer conceded in cross-examination that there must have been a deterioration in the foetus' condition between about 07h10 and 12h40, but maintained that, because the foetal heart rate variability remained good, there was "no foetal acidosis and no brain damage at that point". This may be true enough, but the question is whether there was a prior deterioration in the foetal condition that

rendered L's brain injury foreseeable, and whether steps could have been taken to avoid that deterioration leading to the injury.

18 To answer that question, Dr Archer's evidence – which is based on a review of the medical records made available after the fact – must be evaluated in light of Sister Motshwene's direct evidence of what happened on the day, and what she would have done had the 13h30 CTG been brought to her attention. Sister Motshwene said that she would immediately have taken action, by turning Ms. M on her side, administering oxygen, and organising a Caesarean section. Despite his disagreement with Dr Murray on when the foetus' condition became "pathological", Dr Archer's evidence corroborates the view that there was something to be concerned about at the time Sister Kemp made her note to report the decelerations evident on the 13h30 CTG.

19 The parties' paediatric neurologists agreed that L suffers from cerebral palsy. Dr Pearce, retained by Ms. M, stated that the cerebral palsy most likely resulted from "intrapartum hypoxia" – in other words that the cerebral palsy resulted from a hypoxic brain injury of the type diagnosed by the expert radiologists. However, Dr Rademeyer, retained by the MEC, stated that, in his view, the MRI findings were "not in keeping with peripartum hypoxia". Dr Rademeyer nonetheless chose to defer to the parties' expert radiologists on that point. As I have already pointed out, the parties' radiologists agreed that the MRI demonstrated that L had suffered a hypoxic brain injury at around the time of his birth – which is what "peripartum" means. Dr Rademeyer's reservations notwithstanding, therefore, the binding expert agreement about what the MRI meant was that recorded between the radiologists.

20 It has long been accepted that a fact agreed in a joint expert minute is a fact of which no evidence need be tendered at trial. It is considered a fact that a court can, and must, accept as true (see *Bee v Road Accident Fund* 2018 (4) SA 366 (SCA) ("*Bee*"), paragraphs 64 to 66 and *Thomas v BD Sarens (Pty) Ltd* [2012] ZAGPJHC 161 ("*Thomas*"), paragraph 9).

21 It follows from this, and from the common cause facts and portions of the joint expert minutes that I have summarised above, that the trial court would ordinarily have been bound to accept that Ms. M's foetal condition on admission to hospital was good, but that the first CTG gave cause for concern; that continuous CTG – or at least two hourly – monitoring ought to have been implemented, but was not; that the foetal condition deteriorated further at 13h30, to the extent that the senior midwife on duty would have taken immediate action had she been told about it; that the situation deteriorated rapidly after 14h30; that L was born severely hypoxic; and that L's cerebral palsy probably resulted from a brain injury that occurred during labour.

22 However, the case before the trial court was unusual, in that, on the eve of the trial, the MEC retained a new expert, who took issue with almost every material agreement that the parties' other experts had reached.

23 That new expert was Professor Izelle Smuts, at the time an Associate Professor in Paediatric Neurology at the University of Pretoria, practicing at the Steve Biko Academic Hospital. Her medico-legal report, dated 2 September 2017, seeks to cast doubt on many of the conclusions reached by the other experts in the case. The report emphasised the absence from L's case of what Professor Smuts regarded as otherwise typical features of

cerebral palsy caused by a hypoxic peripartum injury. She concluded that "there is no correlation between the clinical degree the patient is affected and the MRI findings. It **cannot** be dogmatically concluded that hypoxia due to poor perinatal care is the cause of this child['s] disability" (emphasis in original).

24 On the basis of Professor Smuts' report, the parties filed a new joint expert minute. This minute, dated 13 September 2017, was compiled by Dr Pearce, Dr Rademeyer and Professor Smuts. It purported to replace "all previous joint minutes". In this minute, Dr Pearce's views remained unaltered, but Dr Rademeyer resiled from some of the agreements reached in the previous minute. For example, despite previously having agreed that his examination of L was "in keeping with" the MRI results, Dr Rademeyer changed his position in the 13 September minute, for reasons that are not clear from the minute itself. Because he was not called to give evidence at trial, we do not know what caused Dr Rademeyer's change of heart on this, and on some other critical issues.

25 In the new expert minute, Professor Smuts recorded a third set of views. She ranged widely over the facts of the case, often expressing opinions that appeared to be well beyond her expert ken. On the interpretation of the MRI, for example, Professor Smuts expressed the view that "the MRI findings are very mild. Other radiological features [typically] associated with [L's injury] are absent". Professor Smuts then quoted academic literature at length, apparently drawing the conclusion that the MRI was inconsistent with the diagnosis of cerebral palsy. In their earlier joint minute, however, Dr

Rademeyer and Dr Pearce had agreed that cerebral palsy was the probable diagnosis, with Dr Rademeyer merely deferring to the expert radiologists on whether the MRI supported this. It appears, however, that Professor Smuts felt that no such deference was warranted, even though she did not purport to qualify herself as a radiologist.

26 In this and other respects, Professor Smuts took issue not just with Dr Pearce's assessments, but also with those made at the behest of the MEC by Dr Rademeyer. For example, even in the 13 September 2017 minute, Dr Rademeyer and Dr Pearce agreed that L had suffered the early onset of neonatal encephalopathy (essentially that L's brain was injured at or soon after birth). Professor Smuts demurred. She registered her disagreement with this proposition, commenting, somewhat airily, that "[i]t is very difficult to determine the degree" of the brain injury.

27 Fundamentally, rather than advance a competing explanation for L's condition, Professor Smuts sought to cast doubt on the probabilities that had been established by the expert agreements previously reached. Her argument appeared to be that to attribute L's condition to cerebral palsy caused by hypoxic brain injury during labour was "dogmatic" and that there were too many unknowns to reach any definite conclusions. During her evidence at trial, Professor Smuts was ultimately to contend that L's condition was the result of an as yet undiagnosed genetic defect.

The status of Professor Smuts' evidence

28 The introduction of Professor Smuts' evidence in the manner and at the stage it came naturally raises the question of whether the trial court ought to have

admitted it, and whether, having admitted it, the trial court ought to have assigned it any weight. Although the trial court does not expressly isolate or deal with the issues of the admissibility and weight of Professor Smuts' evidence, it is plain from its judgment that the court both had regard to, and was impressed by, that evidence.

29 In my view, however, Professor Smuts' evidence should not have been admitted, because it sought impermissibly to undo agreements previously reached by the parties' experts. In the circumstances of this case, those agreements were binding on the parties, and on the trial court.

30 In *Bee* the Supreme Court of Appeal accepted in principle that agreements reached between experts in joint minutes are capable of repudiation, so long as the repudiation is clear and timeous (see paragraph 69). In *Thomas*, which *Bee* approved, it was held that the repudiation of an agreed expert fact or opinion must take place before the trial commences. But both *Bee* and *Thomas* left open the question of whether a party seeking to repudiate such agreements could do so at will, or had to show good cause. In *Bee* Rogers AJA, writing for the majority, did, however, remark that "litigants should not be encouraged to repudiate agreements for 'tactical' reasons. Whatever may have been the attitude to litigation in former times, it is not in keeping with modern ideas to view it as a game. The object should be just adjudication, achieved as efficiently and inexpensively as reasonably possible. Private funds and stretched judicial resources should only be expended on genuine issues" (paragraph 67). The approach taken to joint expert minutes in *Bee* was recently endorsed by a unanimous Supreme Court of Appeal in *MEC for*

Health and Social Development, Gauteng v MM on behalf of OM [2021] ZASCA 128.

31 In *MEC for Health, Eastern Cape v DL obo AL* [2021] ZASCA 68, the court had to deal with a situation in which an agreement had been reached in a joint expert minute, but then evidence contrary to that agreement had been led by another expert during trial. This evidence appears to have been led without any clear repudiation of the agreement, and in those circumstances, the appellate court held that the trial court was not entitled to have regard to the evidence led contrary to the expert agreement (see paragraph 24).

32 Although the trial court in the present case condoned the late filing of Professor Smuts' expert notice, there is no indication on the record that there was a consideration of whether, and to what extent, the MEC had repudiated, or ought to be permitted to repudiate, the agreements in the joint expert minutes that Professor Smuts' evidence would by its very nature undo.

33 It is a matter for comment that the extent of Professor Smuts' departure from the expert agreements previously reached only became clear in the joint minute of 12 September 2017 – which was produced on the seventh day of trial. It was only really at that stage that the MEC could reasonably be said to have repudiated the expert agreements. That, of course, was too late. Both *Bee* and *Thomas* make clear that the last opportunity to repudiate previously agreed expert minutes is the commencement of the trial.

34 The late repudiation also, in my view, lacked the clarity required by the court in *Bee*. It was not enough that the tripartite joint minute submitted by Dr Pearce, Dr Rademeyer and Professor Smuts on 12 September 2017

purported to replace all previous minutes. Because Professor Smuts herself disputed some of Dr Rademeyer's conclusions, the trial court was left none the wiser about what the MEC's new position on the agreements previously reached was. Even accepting in principle that the new joint minute was a repudiation of the agreements previously reached, the precise extent to which the MEC sought to repudiate those agreements could not have been clear to anyone involved.

35 In any event, I think the time has come to require more than clear and timeous repudiation of expert agreements before a trial court can disregard them. This matter is a prime example of a case which is likely to turn on expert evidence. In all but the most exceptional of situations, the existence of a large body of professional knowledge is ideally likely to lead to agreement on a broad range of issues relevant to the determination of liability. It is to be expected that, as the facts considered by the experts become less general, and more confined to the circumstances of a particular case, disagreements may multiply, and the court will have to determine where the probabilities lie. However, at the very least, expert agreements provide a critically important way of framing the true issues for determination, and of providing a logical framework within which a court can come to a sound conclusion on facts of which it has no specialist knowledge.

36 The court in *Bee* emphasised that effective case management requires, at the very least, that expert agreements be adhered to, unless they are clearly and timeously repudiated. However, I think the value of expert agreements goes much further than the facilitation of effective case management. Because of

the role expert agreements play in framing the ultimate issues for decision, the repudiation of those agreements creates substantial problems of fairness. It also begs the question of just how far a court can be expected to accept that the facts in issue are truly capable of expert analysis.

37 There will no doubt be difficult cases in which, having accepted an agreed fact as true, a party will in good faith wish to change tack, perhaps because of the emergence of a series of factors or complications which were not considered by the experts previously, or because of new information about the qualifications or expertise of a particular expert, or because of the emergence of new learning on a subject that might be particularly relevant to the facts at hand. This is not a closed list. There may be a variety of other reasons for re-visiting expert agreements, capable of motivation by one of the parties (see, for example, *Thomas*, paragraph 11).

38 However, given the importance of expert agreements, their repudiation should, in my view, be rare. When necessary, it should be motivated, on application to the trial court, and that application should be granted on good cause shown. In seeking to show good cause, a party ought, at the very least, to identify the specific agreements sought to be repudiated, and the facts to which they relate; to set out, clearly and succinctly, the new facts sought to be proved; to explain why those facts are so material to the issues at trial that they justify the undoing of the relevant expert agreements; and to demonstrate that the need to introduce those facts overcomes any prejudice caused to any other party by setting aside the expert agreements already reached.

39 There was obviously no such application before the trial court. The nature and extent of the MEC's repudiation of the previous joint minutes was never set out or analysed. Nor was there any indication that Professor Smuts' evidence was so weighty and material that its introduction, and the re-opening of so many issues on which there had previously been agreement, was justified.

40 In these circumstances, I am driven to conclude that Professor Smuts' evidence should not have been admitted, because it constituted a late repudiation of previously agreed expert facts, because it was never made clear precisely which of the expert agreements that evidence sought to undo, and because there is no indication on the record that there was good cause for the introduction of the evidence in these circumstances.

The weight to be attached to Professor Smuts' evidence

41 Having excluded Professor Smuts' evidence, I feel constrained to point out that, had it been necessary to evaluate Professor Smuts' evidence against the probabilities established by the expert agreements with which it sought to interfere, I would have struggled to attach much weight to it. Mr. du Plessis, who appeared for Ms. M, criticised Professor Smuts as an unreliable witness, who appeared to have prejudged the case on its merits, and who was eager to testify to facts beyond her expertise.

42 I do not think it is necessary to go as far as saying that Professor Smuts had prejudged the case as a whole and tailored her evidence to support that prejudgement. The more fundamental problem with Professor Smuts' evidence is its fragmented and unfocussed nature. Instead of trying to piece together the facts to explain what happened to L – which is what all of the

other experts in this case appear to have tried to do – Professor Smuts sought merely to throw doubt on anything that might have pointed towards the conclusion that L suffered from cerebral palsy caused by a peripartum hypoxic brain injury. Ms. Mansingh, who appeared for the MEC, relied heavily on Professor Smuts' evidence to contend that "we just do not know" what happened to L.

43 However, as Ms. Mansingh very fairly conceded in argument, if that is the contention that Professor Smuts' evidence was meant to support, it is plainly an unhelpful one. Our duty, and the duty of the trial court, is not to "know" anything with any certainty. It is to establish whether, on a balance of probabilities, the MEC's staff wrongfully and negligently caused L's injury. A conclusion drawn either way on those issues is perfectly consistent with the proposition that there is some uncertainty about L's injury – that we will never know conclusively what caused it. Courts determine legal liability on facts proved to the applicable evidentiary standard. They do not provide an infallible historical record.

44 What Professor Smuts has done is provide a series of views that dissent, presumably on the basis of her own scientific judgement, from a series of agreements that had already been reached by the parties' respective experts, and that widen the ambit of whatever disagreements there were between them. Even if that were permissible (as I have held, it is not), the infusion of Professor Smuts' doubts would have done very little to alter the probabilities established by the agreements that her evidence sought to disturb. In most cases, they amount to no more than assertions of dissent. Ms. Mansingh was

correct to submit that the MEC is not required to devise and prove a positive theory of what "really happened" to L. But Professor Smuts' failure to advance such a theory affects the weight of her evidence in circumstances where much of the rest of the expert evidence had coalesced around the proposition that L had cerebral palsy caused by a hypoxic brain injury. It also limits the extent to which Professor Smuts' evidence can truly be said to displace the probabilities created by the other experts' agreements and evidence.

45 Be that as it may, Professor Smuts' evidence ought, in my view, to have been excluded, and the matter decided on the agreements reached by the remaining experts, and the other evidence led at trial.

Approach to the evidence

46 Once Professor Smuts' evidence is set aside, it becomes necessary to re-evaluate Ms. M's claim on the basis of the remaining evidence, including the expert agreements as they stood before Professor Smuts' evidence was introduced.

47 In doing so, it is important to emphasise that Ms. M and Sister Motshwene were the only witnesses to give direct evidence of Ms. M's labour and L's delivery. The MEC did not call Sister Kemp. On the issue of the extent to which the foetus was monitored, Ms. M's version was not challenged. Nor was Sister Motshwene's.

48 In *MV Pasquale Della Gatta* 2012 (1) SA 58 (SCA), the Supreme Court of Appeal had this to say about the role of the court in evaluating the relationship between fact and expert opinion –

"The court must first consider whether the underlying facts relied on by the witness have been established on a prima facie basis. If not then the expert's opinion is worthless because it is purely hypothetical, based on facts that cannot be demonstrated even on a prima facie basis. It can be disregarded. If the relevant facts are established on a prima facie basis then the court must consider whether the expert's view is one that can reasonably be held on the basis of those facts. In other words, it examines the reasoning of the expert and determines whether it is logical in the light of those facts and any others that are undisputed or cannot be disputed. If it concludes that the opinion is one that can reasonably be held on the basis of the facts and the chain of reasoning of the expert the threshold will be satisfied. This is so even though that is not the only opinion that can reasonably be expressed on the basis of those facts. However, if the opinion is far-fetched and based on unproven hypotheses then the onus is not discharged" (paragraph 26).

49 In *Meyers v MEC, Department of Health, Eastern Cape* (2020 (3) SA 337 (SCA), Ponnan JA, in dealing with the onus of proof in a medical negligence case, found that, once the plaintiff had given an acceptable explanation for her claim –

"[it] was sufficient as to place an evidentiary burden upon [the doctor] to shed some light upon the circumstances attending [the plaintiff's] injury. Failure to do so meant that, on the evidence as it then stood, he ran the risk of a finding of negligence against him. For, whilst [the plaintiff] bore the overall onus in the case, [the doctor] nonetheless had a duty to adduce evidence to combat the prima facie case made by [the plaintiff]. It remained for him to advance an explanatory (though not necessarily exculpatory) account that the injury must have been due to some unpreventable cause, even if the exact cause be unknown" (paragraph 71).

50 An expert opinion must accordingly be based on relevant facts disclosed by admissible evidence. A court must ascertain whether the opinions expressed by the experts are logically based upon those facts. If facts do not ground an explanation of the injury (whether offered by experts or otherwise) which refutes one or more of the elements of the plaintiff's claim, then the defendant stands in peril of a judgment against them. It is with these principles in mind

that the facts of this matter, and the opinions offered by the experts on them, must be considered and assessed.

Liability for L's injury

51 I now turn to consider whether, on the facts that were properly before the trial court, Ms. M's claim had been established. Counsel before us were agreed that the central issues in that inquiry are those of negligence and causation.

Negligence

52 There was no dispute between the parties that Ms. M's labour was high-risk from the outset. The CTG on admission showed decelerations in the foetal heart rate, and Ringer's Lactate was applied to address these. The experts agreed that Ms. M's condition required continuous monitoring, at the very least by further CTGs every two hours. A reasonable medical practitioner would accordingly have been alert to the possibility of harm to the foetus caused by an abnormal or distressed foetal heart rate. The questions in this case are really what steps would reasonably have been taken to prevent that harm, when those steps would reasonably have been taken, and whether those steps were in fact taken.

53 As I have already pointed out, the Guidelines required examinations at two-hourly intervals from admission, increasing to hourly examinations once the cervix was six centimetres dilated. The foetal heartrate should have been monitored half-hourly, before, during and after contractions. When she was fully dilated, Ms. M should have been monitored every 30 minutes.

54 But the handwritten record of Ms. M's labour, and the uncontroverted evidence of Sister Motshwene demonstrates that the standard of Ms. M's care fell significantly below what the Guidelines required. Ms. M was monitored four times over a twelve hour period. Given that the initial CTG gave cause for concern, Ms. M ought arguably to have been given even closer attention than the Guidelines prescribed. She was certainly entitled to no less than they required.

55 The handwritten record of Ms. M's labour shows that the CTG done at 13h30 disclosed the recurrence of decelerations in the foetal heart rate. These were naturally cause for concern. Sister Kemp made a note to report the readings to Sister Motshwene.

56 Unfortunately, that did not happen. Sister Motshwene's evidence was unequivocal. She said that Sister Kemp did not report the re-emergence of the decelerations to her, and that, if Sister Kemp had done so, she would immediately have taken steps to protect the foetus, by turning Ms. M on her side, by administering oxygen and, to the extent necessary, by ordering an emergency Caesarean section.

57 Ms. Mansingh submitted that little weight can be attached to Sister Motshwene's evidence, because she had no direct recollection of Ms. M's labour and L's delivery. But I do not think that is an accurate interpretation of Sister Motshwene's evidence. What Sister Motshwene said was that a review of the record of Ms. M's labour had triggered her recall of the day in question. That is not the same as saying she had no direct memory of it. Sister Motshwene had a clear, direct and reliable recollection of the material events.

That placed her in a fundamentally different position from all the other witnesses who testified (with the exception of Ms. M), who had to piece together what happened from the available documents.

58 By 14h30, the foetus was in obvious trouble. The decelerations of the foetal heartrate had intensified. There was clear foetal distress. An emergency Caesarean section was ordered, but L was in any event delivered naturally – and severely hypoxic – forty minutes later.

59 In my view, the probabilities are fairly clear. Ms. M's labour required more careful monitoring than was performed. In addition, CTGs were taken erratically – one at admission, one five hours later and then another seven hours after that. This fell below the standard of monitoring that the parties' experts agreed was necessary – a minimum of one CTG trace every two hours, and, ideally, continuous CTG monitoring. Maternal and foetal heart rate monitoring are critically important. They indicate the condition of the foetus. If they are not reassuring, they prompt intervention to deliver the baby. Once the third CTG indicated the recurrence of a problem with the foetal heart rate that was first noted at Ms. M's admission, action could and should have been taken, at around 13h30. But it was not.

60 On the probabilities, the management of Ms. M's labour was negligent in that inadequate monitoring was carried out, and no action was taken for at least an hour after the third CTG warranted it. The bare minimum that should have been done – a report to the senior sister on duty for further assessment and action – was not done. Sister Kemp did not testify at trial to explain this lapse.

Causation

61 The remaining question is whether, on the probabilities, L would not have been afflicted with his injury, but for the negligence attributable to the MEC's staff. There was no dispute that, at the point of Ms. M's admission, the foetal condition gave cause for concern. Initial indications of foetal distress had been successfully treated with Ringer's Lactate. The first indication of renewed foetal distress came at 13h30. That distress had deepened by 14h30, and L was born severely hypoxic at 15h10. The neonatologists initially briefed by the parties (Professor Smith and Dr Murray) agreed that the injury was the result of a recurring hypoxic onslaught suffered during birth; that the foetus became acidotic, with an anaerobic metabolism resulting in the production of lactic acid and the eventual collapse of foetal oxygen reserves. Had the foetal condition been adequately monitored, a "recurring hypoxic onslaught" would clearly have been detected. The failure to monitor the foetal heartrate continuously as required by the Guidelines cannot be disputed.

62 The expert radiologists excluded by agreement a range of other causes for L's brain injury, such as infection, congenital abnormality, a metabolic disorder, an inflammatory disorder or a haemorrhage. A possible genetic cause – Sotos syndrome – was also ruled out by agreement between the parties' clinical geneticists.

63 It is accordingly at least probable, in my view, that, had the interventions that Sister Motshwene suggested ought to have been undertaken after the 13h30 CTG actually been implemented, any further indications of foetal distress could have been dealt with timeously. This would probably have ensured that

stable condition of the foetus was maintained, either for as long as it took for L to be born naturally, or for a Caesarean section to be performed.

64 I am satisfied that, on a balance of probabilities, the failure to take the steps necessary to maintain a healthy foetal condition at 13h30 caused the hypoxic brain injury that was later identified.

Wrongfulness and harm

65 Before us, it was conceded on the MEC's behalf that, if there was negligence of the nature that I have found, then that negligence was wrongful. Insofar as the negligence inhered in a failure to act when the MEC's staff should have acted, it was common cause that there was a duty to act, and the failure to act was unreasonable and wrongful. There was obviously no dispute that L has suffered harm by reason of his disability.

Relief

66 For all these reasons, it is my respectful view that the trial court erred when it permitted Professor Smuts' evidence to be introduced in the manner and at the stage it was. On an evaluation of the remaining evidence, it was established, on a balance of probabilities, that L's cerebral palsy was caused by the negligent and wrongful failure of the MEC's staff charged with the management of Ms. M's labour to take steps that would have prevented L's hypoxic brain injury.

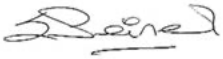
67 In these circumstances, I would allow the appeal with costs, including the costs of two counsel. I would set the order of the trial court aside, and replace it with an order declaring that the MEC is liable for 100% of L's proven or

agreed damages arising from his brain injury, and making appropriate directions as to interest and costs. I would endorse the draft order submitted to us by Ms. M's legal representatives on 8 September 2021, which appears on the Caselines entry for this appeal at pages G1 to G5.

S D J WILSON
Acting Judge of the High Court

WEINER J:

68 I agree, and it is so ordered.



S WEINER
Judge of the High Court

MUDAU J:

69 I agree.

pp **T P MUDAU**
Judge of the High Court

HEARD ON: 6 September 2021
DECIDED ON: 8 October 2021

For the Appellant: DTvR du Plessis SC
P Uys
Instructed by Wim Krynauw Inc

For the Respondent: R Mansingh
(Heads of argument drawn by P Pauw SC and R Mansingh)
Instructed by the State Attorney