
Bad Medicine: Parents, the State, and the Charge of “Medical Child Abuse”

Maxine Eichner*†

Doctors and hospitals have begun to level a new charge — “medical child abuse” (MCA) — against parents who, they say, get unnecessary medical treatment for their kids. The fact that this treatment has been ordered by other doctors does not protect parents from these accusations. Child protection officials have generally supported the accusing doctors in these charges, threatening parents with loss of custody, removing children from their homes, and even sometimes charging parents criminally for this asserted overtreatment. Judges, too, have largely treated such charges as credible claims of child abuse.

* Copyright © 2016 Maxine Eichner. Graham Kenan Distinguished Professor of Law, University of North Carolina School of Law; J.D., Ph.D. I am grateful for comments from and conversations with an interdisciplinary group of readers: Alexa Chew, J.D.; Christine Cox, J.D.; Hannah Eichner; Keith Findley, J.D.; Victor Flatt, J.D.; Michael Freeman, M.D., Ph.D., M.P.H.; Steven Gabaeff, M.D.; Mark Graber, M.D.; Heidi Harkins, Ph.D.; Clare Huntington, J.D.; Diana Rugh Johnson, J.D.; Joan Krause, J.D.; Michael Laposata, M.D., Ph.D.; Holning Lau, J.D.; Sue Luttnner; Beth Maloney, J.D.; Loren Pankratz, Ph.D.; Maya Manian, J.D.; Rachel Rebouche, J.D.; Diane Redleaf, J.D.; Maria Savasta-Kennedy, J.D.; Richard Saver, J.D.; Jessica Shriver, M.A., M.S.; Adam Stein, J.D.; Eric Stein, J.D.; Beat Steiner, M.D., M.P.H.; Judy Stone, M.D.; Deborah Tuerkheimer, J.D.; Catherine Volponi, J.D; and Deborah Weissman, J.D. Special thanks are due to Sa’Metria Jones, Rebecca Mitchell, Margaret Petersen, and Elizabeth Robinson for their excellent research assistance, and to Dave Hansen, as well, for clutch librarian research assistance.

† Dr. Mark L. Graber, M.D., FACP; President, Society to Improve Diagnosis in Medicine; Senior Fellow, RTI International; Professor Emeritus, Stony Brook University, contributed to Part IV.C of this Article, as well as to footnote 395 and accompanying text. Dr. Graber’s recent peer-reviewed publications include: Brian Hess et al., *Blink or Think: Can Further Reflection Improve Initial Diagnostic Impressions?*, 90 ACAD. MED. 112 (2015); Ashley Meyer, Hardeep Singh & Mark Graber, *Evaluation of Outcomes From a National Patient-Initiated Second-Opinion Program*, 128 AM. J. MED. 1138.25–1138.e33 (2015); Hardeep Singh & Mark Graber, *Improving Diagnosis In Health Care — The Next Imperative For Patient Safety*, 373 NEW ENG. J. MED. 2493 (2015).

Despite the rising number of parents faced with these charges, this phenomenon has received no critical attention whatsoever in legal literature. This law review article is the first to explain why, as a legal matter, medical child abuse charges are deeply and fundamentally flawed. It is certainly true that the (likely few) twisted parents who intentionally use the medical system to hurt their children have committed child abuse. Yet the broad definition of MCA developed by doctors captures within its diagnostic net many loving parents making the best decisions they can for their genuinely sick children.

This article demonstrates that the broad definition of MCA developed by physicians and adopted within the child protection system violates the constitutional rights of parents to make medical decisions for their children. Meanwhile, the framing of MCA as a medical “diagnosis” turns what should be a legal decision regarding child abuse into a medical determination, in the process omitting important legal requirements. Finally, the loose diagnostic standards constructed to “diagnose” MCA rest on both flawed science and flawed medical standards. In short, the MCA theory developed by physicians and enforced by child protection officials is bad constitutional doctrine, bad law, bad science, and bad medicine. Any of these flaws in itself should be sufficient to bar the presentation of the theory of MCA in the courtroom. The presence of all these flaws leaves this conclusion beyond doubt.

TABLE OF CONTENTS

INTRODUCTION	209
I. THE GENESIS OF MEDICAL CHILD ABUSE CLAIMS.....	214
A. <i>The Rise and Fall of the Munchausen’s Syndrome by Proxy Diagnosis</i>	214
B. <i>The Rise of the Medical Child Abuse Diagnosis</i>	218
C. <i>Medical Child Abuse Charges Today</i>	228
II. BAD CONSTITUTIONAL DOCTRINE: MEDICAL CHILD ABUSE CHARGES AND PARENTS’ CONSTITUTIONAL RIGHTS	239
A. <i>Parents’ Constitutional Right to Make Health Care Decisions for Their Children</i>	240
B. <i>The Broad Definition of Medical Child Abuse and Parents’ Constitutional Rights</i>	245
III. BAD LAW: THE MEDICAL CHILD ABUSE “DIAGNOSIS” AND PARENTS’ RIGHT TO A FAIR TRIAL	247
A. <i>Child Abuse as a Legal Decision Rather than a Diagnostic Determination</i>	249
1. <i>Differential Diagnosis Versus Differential Etiology</i> ...	249
2. <i>“Diagnosing” the Parent as Abusive</i>	252

B.	<i>Child Abuse as the Ultimate Issue</i>	255
1.	Medical Child Abuse and the Trier of Fact.....	255
2.	Medical Child Abuse and the Legal Standard for Child Abuse	257
a.	<i>Blameworthiness of the parent</i>	257
b.	<i>Unreasonable risk to the child</i>	259
c.	<i>Standard of proof</i>	260
C.	<i>Diagnosis as Profile Evidence</i>	261
IV.	BAD SCIENCE AND BAD MEDICINE: THE SCIENTIFIC AND MEDICAL CHALLENGES TO THE MEDICAL CHILD ABUSE DIAGNOSIS.....	265
A.	<i>The Scientific Validity of the General Medical Child Abuse Theory</i>	266
B.	<i>The Reliability of the Process of Diagnosing Medical Child Abuse in Particular Cases</i>	279
1.	The Diagnostic Protocol for Medical Child Abuse	281
2.	The Absence of Testing to Establish the Reliability of the Medical Child Abuse Diagnostic Protocol.....	285
3.	The Reliability of Individual Diagnostic Criteria.....	287
a.	<i>Discrepancies between the parent's account and the child's medical records</i>	288
b.	<i>Absence of objective medical evidence of child's symptoms</i>	290
c.	<i>Use of multiple medical facilities/ discharge against medical advice</i>	291
d.	<i>Pediatrician determines child's genuine medical diagnoses</i>	292
e.	<i>Pediatrician's judgment on overtreatment</i>	297
f.	<i>Use of profile evidence</i>	297
4.	The Vagueness of the Diagnostic Criteria.....	301
5.	The Low Base Rate of Medical Child Abuse	303
C.	<i>The Medical Child Abuse Diagnostic Process and Good Medical Practice</i>	306
1.	The absence of methodically chosen indicators	306
2.	The threshold of certainty for action on the diagnosis	308
3.	Due diligence in pursuing alternative diagnoses	311
D.	<i>Case Study of the Unreliability of the Medical Child Abuse Diagnostic Process</i>	312
V.	THE PROPER LEGAL TREATMENT OF CHILD ABUSE CASES INVOLVING MEDICAL CARE	314

A.	<i>Parents' Constitutional Right to Make Health Care Decisions for Their Child Absent Legally-Defined Abuse or Neglect.....</i>	315
B.	<i>Exclusion of Medical Child Abuse Diagnoses from Legal Proceedings for Child Abuse</i>	319
	CONCLUSION.....	320

INTRODUCTION¹

In February 2013, fourteen-year old Justina Pelletier was admitted to Boston Children's Hospital (BCH) for gastrointestinal issues.² At that time, Justina was being treated by a well-respected Tufts University medical team for mitochondrial disease, a genetic disease that affects energy production.³ The Tufts team had recommended to her parents that she be admitted to BCH because her long-time gastroenterologist had recently transferred there.⁴ That gastroenterologist never got the chance to treat her, however. Without consulting the Tufts doctors, BCH doctors, led by a neurologist just months out of medical training, swiftly decided that Justina did not have mitochondrial disease, an illness with complex, sometimes disputed, diagnostic criteria.⁵ Instead, BCH declared her issues psychiatric in nature, and prescribed in-patient psychiatric care.⁶

When her parents disagreed and sought to transfer her care back to Tufts, the BCH child protection team diagnosed her with a new diagnosis, "medical child abuse" (MCA).⁷ This diagnosis asserts that parents are abusing their children by subjecting them to unnecessary medical care.⁸ A pediatrician at BCH then reported suspected child abuse to child protection officials, who deferred to the doctor's assessment.⁹ Over the objections of Justina's mitochondrial disease specialist at Tufts, the juvenile court, too, deferred to BCH's expertise in diagnosing MCA, and Justina's parents lost custody.¹⁰ After more

¹ I criticized the rising phenomenon of medical child abuse charges in a 2015 New York Times op-ed, in part based on my experience as the parent of a child with complicated medical issues. See Maxine Eichner, *The New Child Abuse Panic*, N.Y. TIMES (July 11, 2015), http://www.nytimes.com/2015/07/12/opinion/sunday/the-new-child-abuse-panic.html?_r=0. The current article provides a detailed explanation of the legal shortcomings of such charges.

² Neil Swidey & Patricia Wen, *A Medical Collision with a Child in the Middle*, BOS. GLOBE (Dec. 15, 2013), <https://www.bostonglobe.com/metro/2013/12/15/justina/vnwzbbNdiodSD7WDT6xZI/story.html> [hereinafter *Medical Collision*]; Neil Swidey & Patricia Wen, *Frustration on All Fronts in Struggle over Child's Future*, BOS. GLOBE (Dec. 16, 2013), <http://www.bostonglobe.com/metro/2013/12/16/month-medical-ordeal-conclusion-still-uncertain/Y7qvYTGsq8QklkxUZvuUgP/story.html> [hereinafter *Frustration on All Fronts*].

³ See Swidey & Wen, *Medical Collision*, *supra* note 2.

⁴ See *id.*

⁵ See *id.*

⁶ See *id.*

⁷ See *id.*

⁸ See Swidey & Wen, *Frustration on All Fronts*, *supra* note 2.

⁹ See Swidey & Wen, *Medical Collision*, *supra* note 2.

¹⁰ See *id.*

than sixteen months and two birthdays out of her parents' custody, much of it in BCH's locked psych ward where she was allowed to see her parents just one hour a week, Justina was finally returned to her parents in June 2014, far sicker than when she entered.¹¹

The Pelletier case is just one of a rising number of cases in which doctors are asserting MCA. Two doctors first suggested this label in the mid-1990s,¹² but it has only recently taken significant hold in the child abuse medical community.¹³ Proponents of this new "diagnosis" argue that parents who seek medical care that a doctor deems unnecessary are committing child abuse, and doctors should report them as such to child protection officials.¹⁴ The fact that the child has genuine medical diagnoses does not exclude an MCA diagnosis.¹⁵ Neither does the fact that another doctor ordered the challenged care, and often still believes it is necessary.¹⁶

Some hospitals are now using the threat of reporting MCA to child protection officials in order to coerce parents to accept care plans drafted by the hospitals' doctors, even when the parents do not believe these plans are in their children's best interests.¹⁷ In cases in which

¹¹ See Neil Swidey & Patricia Wen, *Justina Pelletier Heads Home After Judge Ends State Custody*, BOS. GLOBE (June 17, 2014), <http://www.bostonglobe.com/metro/2014/06/17/judge-orders-custody-justina-pelletier-returned-parents/mDWtuGURNawSuObO0pDX4J/story.html#> [hereinafter *Justina Pelletier*]; Swidey & Wen, *Frustration on All Fronts*, *supra* note 2 (noting that Justina's parents would be allowed "just a single hour-long visit each week"); see also Joshua Rhett Miller, 'Awesome!' *Justina Pelletier Shouts on Way Home to Family After 16-Month Ordeal*, FOX NEWS (June 18, 2014), <http://www.foxnews.com/politics/2014/06/18/connecticut-girl-at-center-medical-dispute-faces-long-recovery-road-family-says/> (quoting Justina Pelletier's mother: "[a]nd hopefully she'll walk again — I'm not sure.").

¹² See THOMAS A. ROESLER & CAROLE JENNY, *MEDICAL CHILD ABUSE: BEYOND MUNCHAUSEN SYNDROME BY PROXY* 46-47 (2008).

¹³ See Swidey & Wen, *Medical Collision*, *supra* note 2 ("[T]he term 'medical child abuse' . . . has taken hold in the medical world just in the last few years.").

¹⁴ See, e.g., ROESLER & JENNY, *supra* note 12, at 1 (arguing that this behavior "is simply a form of child abuse").

¹⁵ See *id.* at 149 ("Seventy-four percent of the medically abused children had actual illness but also received harmful medical care that was not required.").

¹⁶ The charges of medical child abuse against Justina Pelletier's parents involved such a dispute. See *supra* notes 2-11 and accompanying text; see also Neil Swidey, *The PANDAS Puzzle: Can a Common Infection Cause OCD in Kids?*, BOS. GLOBE (Oct. 28, 2012), <https://www.bostonglobe.com/magazine/2012/10/27/the-pandas-puzzle-can-common-infection-cause-ocd-kids/z87df6Vympu7bvPtapETLJ/story.html> (As attorney Beth Maloney framed the issue to a judge in one MCA case: "What we have is an argument within the medical community about whether infection can cause behavioral disorders and mental health issues. . . . And Boston Children's Hospital is going to work that out on the backs of parents in your courtroom.").

¹⁷ See *infra* note 125 and accompanying text.

parents are reported to child protection officials for suspected abuse, these officials generally treat an MCA diagnosis as demonstrating, or at least highly indicative of, child abuse.¹⁸ The result is that increasing numbers of parents with sick children, particularly those with complex medical conditions, are fighting in court to retain custody and, in some cases, to avoid termination of parental rights.¹⁹ In a rare but rising number of cases, states prosecute these abuse charges criminally, so that parents must also fight to avoid prison.²⁰ Meanwhile their children are sometimes left in the hospital alone,²¹ sometimes forced into foster care,²² and often required to forgo

¹⁸ See, e.g., Transcript of Child Abuse Appeal of D.H. Hearing at 26-27, 48-49, *In re G.M.*, No. 329-2014 (Penn. Dep't Hum. Servs.) (Sept. 29, 2015) [hereinafter *Child Abuse Appeal of D.H.*, Sept. 29, 2015] (when asked why the county found a physician's report of MCA to be substantiated, despite considerable evidence to the contrary, the county case worker responded: "We have to go based upon the statement from the [charging child abuse] medical professional. We cannot get from each individual doctor what they feel in regards to it. We solely rely on the statement from the three [child abuse pediatricians] at the Child Advocacy Clinic . . ."); Swidey & Wen, *Medical Collision*, *supra* note 2 ("In Massachusetts, the Department of Children and Families . . . is supposed to be a neutral referee assessing the charges against the parents. Many parents and their advocates complain, however, that the state agency, because of its lack of in-house medical expertise and its longstanding ties with [BCH], is overly deferential to the renowned Harvard teaching hospital.").

¹⁹ See *infra* notes 122–130 and accompanying text.

²⁰ As this article was being written, Katie Ripstra was sentenced to twenty years in prison by a Texas court for MCA on the testimony of doctors that the mother had induced symptoms in her child through poisoning with salt, over the testimony of two physicians — one a nationally-recognized mitochondrial disease specialist — that her daughter suffered from mitochondrial disease. See Meagan Flynn, *Jury Finds Former Nurse Guilty of Salt Poisoning Daughter*, HOUS. PRESS (Sept. 25, 2015, 5:30 PM), <http://www.houstonpress.com/news/jury-finds-former-nurse-guilty-of-salt-poisoning-daughter-7794723> [hereinafter *Jury Finds Former Nurse Guilty*]. During this period, Katherine Parker was also charged criminally with MCA in Oregon for caring for her sick children. See Olivia Exstrum et al., *A Mother's Care: Oregon Stay-at-Home Mom Faces Trial in Rare Medical Child Abuse Case*, MEDILL JUST. PROJECT (Dec. 17, 2015, 1:33 PM), <http://www.medilljusticeproject.org/2015/12/17/a-mothers-care/>.

²¹ This was the case for Justina Pelletier, whose parents were allowed to visit for an hour a week. See Swidey & Wen, *Medical Collision*, *supra* note 2.

²² This was the case for teenager Isaiah Rider, who spent four months in foster care in Illinois after doctors at the Ann & Robert H. Lurie Children's Hospital in Chicago reported his mother for MCA. The report occurred during Isaiah's recovery from surgery to remove a tumor, when his mother considered transferring him to another hospital because she believed his pain was not being adequately managed. See Eric Adler, *Teen at Center of Medical Abuse Legal Wrangle Returns to KC, but Not to His Mom*, KANSAS CITY STAR (Sept. 20, 2014, 5:49 PM), <http://www.kansascity.com/news/local/article2184051.html>; see also Swidey & Wen, *Medical Collision*, *supra* note 2 (describing Mannie Taimuty-Loomis and her husband losing custody of their three children for nine months before being cleared of MCA charges).

medical treatment ordered by their own medical specialists and determined by their parents to be in their best interests.²³

Almost 40 years ago in the pages of the *Yale Law Journal*, Joseph Goldstein, a Yale law professor and one of the leading scholars in the field of American family law,²⁴ cautioned against the misuse of “the vague and subjective language of neglect and abuse statutes” to “give the state unguided discretion to supervene parental decisions with regard to health care for their children.”²⁵ Professor Goldstein warned that such statutes could be misconstrued to “release[] the rescue fantasies of those it empowers to intrude” — those “well-intentioned people who ‘know’ what is ‘best’ and who wish to impose their personal health-care preferences on others.”²⁶ Professor Goldstein’s comments presciently describe the rise of MCA charges now being leveled against parents by doctors, and the mushrooming levels of state intervention in parents’ medical decisions that has resulted.

No law review has yet critically examined the MCA phenomenon,²⁷ despite the increasing number of these charges being leveled at parents,²⁸ the approval of this theory of abuse by the American Academy of Pediatricians’ Committee on Abuse and Neglect,²⁹ a slew of medical journal articles that propound this purported diagnosis,³⁰

²³ See, e.g., Eichner, *supra* note 1 (describing Hilliard’s child’s medical condition deteriorating after his medical interventions were removed on suspicion of MCA); Swidey & Wen, *Justina Pelletier*, *supra* note 11.

²⁴ Goldstein, the Sterling Professor Emeritus of family law at Yale Law School for many years, was most noted for his groundbreaking interdisciplinary approach to the interactions between families and the legal system. See generally JOSEPH GOLDSTEIN, ANNA FREUD & ALBERT J. SOLNIT, *BEYOND THE BEST INTERESTS OF THE CHILD* (1973).

²⁵ Joseph Goldstein, *Medical Care of the Child at Risk: On State Supervision of Parental Autonomy*, 86 *YALE L.J.* 645, 650-51 (1977).

²⁶ *Id.* at 651.

²⁷ The only existing law review publication to mention this theory of child abuse is a Note that uncritically accepts the theory, and calls for state legislation to support it. See generally Tiffany S. Allison, Note, *Proving Medical Child Abuse: The Time Is Now for Ohio To Focus on the Victim and Not the Abuser*, 25 *J.L. & HEALTH* 191 (2012) (proposing legislation to fight MCA more aggressively).

²⁸ See Eichner, *supra* note 1; see also *infra* notes 122–123 and accompanying text.

²⁹ See Emalee G. Flaherty, Harriet L. MacMillan & Committee on Child Abuse and Neglect, *Caregiver-Fabricated Illness in a Child: A Manifestation of Child Maltreatment*, 132 *PEDIATRICS* 590, 593 (Aug. 2013), https://www.researchgate.net/publication/262044678_Caregiver-Fabricated_Illness [hereinafter 2013 AAP Report].

³⁰ See, e.g., Ana N. Brown et al., *Care Taker Blogs in Caregiver Fabricated Illness in a Child: A Window on the Caretaker’s Thinking?*, 38 *CHILD ABUSE & NEGLECT* 488, 488 (2014); Katharine Doughty et al., *Neurological Manifestations of Medical Child Abuse*, 54 *PEDIATRIC NEUROLOGY* 22, 22 (2016); Mary Greiner et al., *A Preliminary Screening Instrument for Early Detection of Medical Child Abuse*, 3 *HOSP. PEDIATRICS* 39, 39 (2013).

and the expanding acceptance by child protection officials and judges of this new theory of child abuse.³¹ This article is the first to explain why, as a legal matter, medical child abuse charges are deeply and intrinsically flawed. In it, I demonstrate that the MCA theory developed by physicians and enforced by child protection officials is bad constitutional doctrine, bad law, bad science, and bad medicine. Any of these flaws alone should be sufficient to disallow the MCA theory in the child protection forum and in courts. In fact, MCA has all of these flaws.

Part I of this Article describes the recent genesis of the concept of MCA in the hospital, the child protection realm, and the courtroom. Part II argues that the intervention of child protection officials and courts based on the broad definition of MCA established by doctors constitutes a vast, unprecedented, and unconstitutional expansion of the state's power to supervene and supervise parents' medical decision-making.

Part III turns to the process by which MCA charges are evaluated in the child protection system and in courts, and argues that this process violates applicable legal standards. The framing of MCA as a medical "diagnosis," it contends, turns what should be a legal decision into an expert medical determination.³² Furthermore, since the standards doctors use to identify MCA are significantly less stringent than the legal standards for identifying child abuse, allowing a medical expert to "diagnose" MCA results in over-charging parents in the child protection system and is both unduly prejudicial and profoundly misleading in court.

Part IV argues that even if MCA were otherwise deemed a medical diagnosis, its vague diagnostic standards rest on both flawed science and flawed medical practice. This diagnosis, this Part shows, does not pass the scientific gatekeeping standards appropriately applied to expert testimony because of its weak empirical support. Further, the diagnostic criteria and diagnostic process laid out by MCA proponents make MCA diagnoses poor medicine that is particularly prone to false

³¹ The state of Michigan is so supportive of the theory that it established a blue ribbon task force to promulgate "an updated multidisciplinary approach that guides various professionals through the identification, investigation and assessment of and intervention in cases involving suspected Medical Child Abuse." STATE OF MICHIGAN GOVERNOR'S TASK FORCE ON CHILD ABUSE AND NEGLECT, MEDICAL CHILD ABUSE: A COLLABORATIVE APPROACH TO IDENTIFICATION, INVESTIGATION, ASSESSMENT AND INTERVENTION 1 (Mich. Dep't of Human Servs., 2013), https://www.michigan.gov/documents/dhs/DHS_PUB_0017_200457_7.pdf [hereinafter MICH. TASK FORCE REP.].

³² See *id.* ("Medical Child Abuse is a diagnosis recognized and supported by the American Board of Pediatrics.").

positive results. The result, this Part shows, is that any given MCA diagnosis is more likely to be a false positive result rather than a true case of child abuse.

Finally, Part V turns to how the child protection and legal systems should properly treat claims of child abuse involving medical care. It argues that the only cases appropriate for state intervention on grounds of child abuse involve those in which parents intentionally induce or fabricate symptoms to get children unnecessary medical care. These cases should be handled according to existing child abuse law, rather than according to the MCA standards conceptualized by doctors. Further, expert “diagnoses” of MCA should play no role in these cases. Implementing this approach would restore parents’ constitutional rights to make their children’s health-care decisions, safeguard the welfare of sick children who are better served in their parents’ care rather than the state’s, and still protect children from the rare, blameworthy parent committing genuine child abuse through medical care.

I. THE GENESIS OF MEDICAL CHILD ABUSE CLAIMS

A. *The Rise and Fall of the Munchausen’s Syndrome by Proxy Diagnosis*

The precursor to the MCA movement dates back to 1977, when British pediatrician Roy Meadow published case studies of two mothers who had each repeatedly sought medical care for a child, but turned out to be deliberately manufacturing their child’s medical symptoms.³³ In one, the mother of a six-year-old treated for recurrent urinary tract infections for several years was found to be adding her own bloody urine to the child’s urine specimens. In the other case, the mother had given her child repeated large doses of salt, from which he later died. Both mothers, Meadow noted, “were very pleasant people to deal with, cooperative, and appreciative of good medical care”³⁴ Noting that the behavior resembled Munchausen Syndrome, the psychological syndrome in which healthy patients feign illness to obtain medical care (named for Baron von Munchausen, a fictional eighteenth-century raconteur), Meadow suggested that the phenomenon might be called “Munchausen [S]yndrome [B]y [P]roxy”

³³ See Roy Meadow, *Munchausen Syndrome by Proxy: The Hinterland of Child Abuse*, 310 LANCET 343, 343-45 (1977) [hereinafter *Hinterland*].

³⁴ *Id.* at 344.

(MSBP).³⁵ The name stuck. Beginning in the 1980s, doctors on both sides of the Atlantic began to diagnose cases of MSBP.³⁶

However, MSBP soon proved problematic for a number of reasons.³⁷ In his original article, Meadow had related the mothers' behavior to Munchausen's Syndrome somewhat facetiously, without meaning to assert that the mothers possessed a diagnosable psychological condition.³⁸ Yet the term "MSBP" was widely treated as indicating the existence of such a diagnosis.³⁹ A debate arose regarding whether MSBP truly constituted a psychological disorder with which parents could be diagnosed.⁴⁰ As Geoffrey Fisher and Ian Mitchell argued, "[t]he word diagnosis is usually understood as the identification or inferring of the presence of a disease by means of the patient's symptoms."⁴¹ In contrast, no underlying psychological disease process had been identified in mothers identified with the condition; rather the MSBP "diagnosis" "only describes a single or series of observed anomalies and discrepancies" relating to their fabricating medical conditions in their children.⁴²

There was also debate about MSBP's defining elements: Some researchers thought the parent must be motivated by the desire to

³⁵ *Id.* at 345.

³⁶ See generally Margaret Talbot, *The Bad Mother*, *THE NEW YORKER*, Aug. 9, 2004 at 62, 62-68 (discussing history of MSBP charges).

³⁷ See generally ERIC MART, *MUNCHAUSEN'S SYNDROME BY PROXY RECONSIDERED* (2002) (describing numerous conceptual and evidentiary problems with MSBP); ROESLER & JENNY, *supra* note 12, at 17-35 (describing problems with MSBP diagnosis).

³⁸ In fact, Meadow did not view MSBP as a psychological diagnosis. In his words, "In the past I have resented being asked in court whether someone is 'suffering from Munchausen syndrome by proxy': it has seemed no more appropriate than being asked if a man who has buggered his stepson is 'suffering from sex abuse.'" Roy Meadow, *What Is, and What Is Not, 'Munchausen Syndrome by Proxy'?*, 72 *ARCHIVES DISEASE CHILDHOOD* 534, 535 (1995) [hereinafter *What Is MSBP?*].

³⁹ See, e.g., Herbert A. Schreier & Judith A. Libow, *Munchausen Syndrome by Proxy: Diagnosis and Prevalence*, 63 *AM. J. ORTHOPSYCHIATRY* 318, 318 (1993) (treating MSBP as a psychological diagnosis).

⁴⁰ See, e.g., Roy Meadow, *What Is MSBP?*, *supra* note 38, at 535; see also Geoffrey C. Fisher & Ian Mitchell, *Is Munchausen Syndrome by Proxy Really a Syndrome?*, 72 *ARCHIVES DISEASE CHILDHOOD* 530, 530 (1995) ("In child neglect there are various parental psychological problems that interfere with the parent's awareness of the child's physical and emotional needs and in such cases it is not asserted that the neglecting parent has a syndrome known as 'child neglect.'"); Richard Rogers, *Diagnostic, Explanatory, and Detection Models of Munchausen by Proxy: Extrapolations from Malingering and Deception*, 28 *CHILD ABUSE & NEGLECT* 225, 227 (2004) ("At least in the classic sense of diagnostic validity, Fisher and Mitchell are correct.").

⁴¹ Fisher & Mitchell, *supra* note 40 at 532.

⁴² *Id.*

assume the sick role by proxy;⁴³ others did not believe that the parent's motive should matter.⁴⁴ Indeed, there was even debate over whether to assign the MSBP diagnosis to the parent or the child.⁴⁵ To add to the confusion, it was pediatricians who were most likely to identify this behavior, but they did not have the expertise necessary to diagnose the mental health of the parent.⁴⁶ Finally, and most consequentially, the criteria used to diagnose MSBP proved to be grossly overbroad, falsely identifying many parents of genuinely sick children.⁴⁷

Those problems with MSBP were never resolved. Instead, early this century, MSBP diagnoses in England were generally discredited after

⁴³ Meadow suggested in his original paper that the mothers described seemed to "us[e] the children to get themselves into the sheltered environment of a children's ward surrounded by friendly staff." Meadow, *Hinterland*, *supra* note 33, at 345; *see also* Herbert Schreier, *Munchausen by Proxy Defined*, 110 *PEDIATRICS* 985, 985 (2002) ("The primary motivation seems to be an intense need for attention from, and manipulation of, powerful professionals, most frequently, but not exclusively a physician.").

⁴⁴ *See, e.g.*, Donna Rosenberg, *From Lying to Homicide: The Spectrum of Munchausen Syndrome by Proxy*, in *MUNCHAUSEN SYNDROME BY PROXY: ISSUES IN DIAGNOSIS AND TREATMENT* 34 (Alex V. Levin & Mary S. Sheridan eds. 1995) (perpetrator's intent "diagnostically immaterial"); Donna A. Rosenberg, *Web of Deceit: A Literature Review of Munchausen Syndrome by Proxy*, 11 *CHILD ABUSE & NEGLECT* 547, 547-63 (1987) [hereinafter *Web of Deceit*] (perpetrator's motivation excluded from diagnostic criteria).

⁴⁵ Compare Meadow, *What Is MSBP?*, *supra* note 38, at 535 (assigning diagnosis to child), and Donna A. Rosenberg, *Munchausen Syndrome by Proxy: Medical Diagnostic Criteria*, 27 *CHILD ABUSE & NEGLECT* 421, 423 (2003) ("MSBP is a pediatric, not a psychiatric, diagnosis") [hereinafter *Medical Diagnostic Criteria*], with Schreier & Libow, *supra* note 39 (assigning diagnosis to parent). A special task force of the American Professional Society on the Abuse of Children sought to split the difference, dividing the diagnosis into two parts: "factitious disorder by proxy," properly assigned to the perpetrator, and "pediatric condition falsification," to be assigned to the child. *See* Catherine C. Ayoub et al., *Position Paper: Definitional Issues in Munchausen by Proxy*, 7 *CHILD MALTREATMENT* 105, 105-06 (2002).

⁴⁶ *See* Loren Pankratz, *Persistent Problems with the "Munchausen Syndrome by Proxy" Label*, 34 *J. AM. ACAD. PSYCHIATRY & LAW* 90, 92 (January 2006) [hereinafter *MSBP Label*] ("[S]ome MSBP experts have admitted that they are not qualified to make a psychiatric diagnosis of the mother.").

⁴⁷ By 1995, Roy Meadow himself lamented that the term's "over use has led to confusion for the medical, social work, and legal professions," and that MSBP's diagnostic criteria "lack specificity: [too] many different occurrences fulfil them." Meadow, *What Is MSBP?*, *supra* note 38, at 534. In the United States, two psychologists — Loren Pankratz and Eric Mart — have provided the most persuasive critiques of the overbreadth of MSBP diagnostic criteria. *See* MART, *supra* note 37; Pankratz, *MSBP Label*, *supra* note 46; Loren Pankratz, *Persistent Problems with the "Separation Test" in Munchausen Syndrome by Proxy*, 38 *J. PSYCHIATRY & L.* 307 (2010) [hereinafter *Separation Test*].

medical expert diagnoses of MSBP in several highly-publicized cases turned out to be false.⁴⁸ These included at least five cases in which Dr. Meadow had testified against mothers tried for the murder of their children, which were later dismissed or overturned after strong evidence emerged that the children had actually died from genuine illnesses.⁴⁹ After one such case, the United Kingdom's General Medical

⁴⁸ See Talbot, *supra* note 36. In 2004, the Attorney General of the United Kingdom opened an inquiry on previous MSBP convictions because of false diagnoses of MSBP and gross misstatements by expert witnesses. See *Anthony Latest Mother To Be Freed*, BBC NEWS (Apr. 11, 2005, 12:24 PM GMT), http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/england/somerset/4431851.stm. Although only a handful of appeals occurred, most were successful, including that of a mother who served six years for murdering her two infants. See *Baby Death Mother 'Has Nothing'*, BBC NEWS (Apr. 12, 2005, 10:40 AM GMT), http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/england/somerset/4435989.stm.

⁴⁹ The most highly publicized of these cases involved the reversal of Sally Clark's conviction for the murder of her two infants. At the trial, Meadow had testified that the odds that these two deaths would happen naturally in the same family was 73,000,000:1 — a statistic he arrived at first by calculating, based on the number of crib deaths in Britain, that one cot death in 8,543 would occur in a well-off family, and then multiplying 8,543 by 8,543 to account for both crib deaths. Among other things, the statistics failed to take account of possibility of a genetic abnormality in the family. See John Sweeney & Bill Law, *Gene Find Casts Doubt on Double 'Cot Death' Murders*, GUARDIAN (July 15, 2001, 6:54 PM EDT), <https://www.theguardian.com/uk/2001/jul/15/johnsweeney.theobserver>. Commenting later, the Royal Statistical Society declared that this testimony "cannot be regarded as statistically valid." Press Release, The Royal Statistical Society, Letter from the President to the Lord Chancellor Regarding the Use of Statistical Evidence in Court Cases (Jan. 23, 2002), <http://www.rss.org.uk/Images/PDF/influencing-change/rss-use-statistical-evidence-court-cases-2002.pdf>. Clark's conviction was reversed after she spent three years in prison, when evidence emerged that strongly suggested that her children had died from a genetic defect. She died shortly after her release from alcohol poisoning. See David Pallister, *Solicitor Wrongly Jailed for Killing Sons Died from Excess Alcohol*, GUARDIAN (Nov. 8, 2007, 6:04 AM EST), <https://www.theguardian.com/society/2007/nov/08/childrens>; Thair Shaikh, *Sally Clark, Mother Wrongly Convicted of Killing Her Sons, Found Dead at Home*, GUARDIAN (Mar. 17, 2007, 5:22 AM EDT), <https://www.theguardian.com/society/2007/mar/17/childrensservices.uknews>. The deceased children in four other murder cases in which Meadow had testified were subsequently also found to have died from genetic defects. See Rebecca Hardy, *The Unending Nightmare: Ian and Angela Gay Speak Out*, DAILY MAIL (Mar. 5, 2007, 9:32 AM), <http://www.dailymail.co.uk/news/article-440053/The-unending-nightmare-Ian-Angela-Gay-speak-out.html> (Ian & Angela Gay) ("[I]n a terrible miscarriage of justice, the Gays were accused and convicted of killing the toddler by forcing him to eat a fatal dose of salt. . . . But after the first trial, it emerged that Christian may have had a rare medical condition which allowed sodium to build up in his body. . . . [S]ome of the prosecution evidence was based on research by discredited pediatrician Professor Sir Roy Meadow"); Nicole Martin, *GMC Strikes off Meadow for 'Abusing Position' in Cot Death Trial*, TELEGRAPH (July 16, 2005, 12:01 AM BST), <http://www.telegraph.co.uk/news/uknews/1494147/GMC-strikes-off-Meadow-for-abusing-position-in-cot->

Council declared that Dr. Meadow had violated his expert authority, which “carried with it a unique responsibility to take meticulous care in a case of this grave nature.” Presaging later criticisms of pediatricians who specialize in child abuse, including those made in this article, the General Medical Council continued: “You should not have strayed into areas that were not within your remit of expertise. Your misguided belief in the truth of your arguments is both disturbing and serious.”⁵⁰

B. *The Rise of the Medical Child Abuse Diagnosis*

England’s disillusionment with MSBP did not diminish pediatricians’ zeal to root out problematic parental behavior on this side of the Atlantic, however. Instead, the controversies surrounding MSBP prompted innovation. Beginning in the mid-1990s and culminating in their 2008 book *Medical Child Abuse*, two physicians — Carole Jenny,

death-trial.html (Donna Anthony) (noting that Anthony, who had been jailed for life after being “convicted of killing [her] children largely on the strength of Prof. Meadow’s discredited evidence,” was “cleared on appeal”); *Mother Cleared of Killing Sons*, BBC NEWS (Dec. 10, 2003, 9:01 PM GMT), http://news.bbc.co.uk/go/pt/pt/-/2/hi/uk_news/england/wiltshire/3306271.stm (Angela Canning case) (“[O]n Wednesday, the Court of Appeal overturned the conviction . . . Her appeal has been the last of three major cases to receive high-profile attention because of the prosecution’s reliance on evidence from two main scientific experts.”); Stewart Payne, *Joy for Mother Cleared of Baby Deaths*, TELEGRAPH (June 12, 2003, 12:01 AM BST), <http://www.telegraph.co.uk/news/uknews/1432760/Joy-for-mother-cleared-of-baby-deaths.html> (Trupti Patel case) (“The jury’s swift acquittal of Mrs. Patel, who was charged with the murders of her sons Amar, aged three months, and Jamie, aged 15 days, and her daughter Mia, aged 22 days, came five months after the Court of Appeal quashed the convictions of Sally Clark . . . for killing her two baby sons. Two experts, who were largely discredited for the evidence they gave against Mrs. Clark — Prof. Roy Meadow and Prof. Michael Green — also testified against Mrs. Patel.”).

⁵⁰ Martin, *supra* note 49 (quoting General Medical Council’s opinion). The General Medical Council’s comments resemble those made eight years later by a U.S. federal district judge about expert testimony regarding Shaken Baby Syndrome. The court ruled that the child abuse pediatrician’s testimony at trial had turned out to be “more an article of faith than a proposition of science.” *Del Prete v. Thompson*, 10 F. Supp. 3d 907, 957 n.10 (N.D. Ill. 2014); *see also infra* notes 299–315 and accompanying text (discussing child abuse pediatrician’s flawed expert testimony in Shaken Baby Syndrome cases).

Although the General Medical Council removed Meadow’s ability to practice because of his “erroneous” and “misleading” testimony, *see* David Batty, *Q&A: Sir Roy Meadow*, GUARDIAN (Feb. 17, 2006, 10:33 AM GMT), <https://www.theguardian.com/society/2006/feb/17/NHS.health>, that decision was subsequently overturned by the Court of Appeals. *See* Joshua Rozenberg, *Sir Roy Meadow, the Flawed Witness, Wins GMC Appeal*, TELEGRAPH (Feb. 18, 2006, 12:01 AM GMT), <http://www.telegraph.co.uk/news/uknews/1510798/Sir-Roy-Meadow-the-flawed-witness-wins-GMC-appeal.html>.

a pediatrician who specialized in child abuse, and her husband, Thomas Roesler, a psychiatrist — began to argue that, while identifying the parental behavior associated with MSBP was critical, MSBP was so flawed a concept that it needed to be scrapped.⁵¹ The conduct at its core, they argued, should be dealt with by conceptualizing it, not as an illness or syndrome with which the parent could be diagnosed, but simply as a distinct form of child abuse, which they termed “medical child abuse.”⁵² All that “diagnosing” MCA required, according to Dr. Roesler and Dr. Jenny’s description, was that “a child receives unnecessary and harmful or potentially harmful medical care at the instigation” of a parent.⁵³ From pediatricians’ perspective, this new diagnosis conveniently circumvented the objection that only an expert with mental health training could diagnose MSBP: it was well within pediatricians’ capability to “diagnose” abuse in the child.⁵⁴ Indeed, pediatricians with experience diagnosing child abuse were experts in just this.⁵⁵ The MCA diagnosis, like the MSBP diagnosis, would imply the parent committed child abuse, but the diagnosing pediatrician would not need to inquire into the parent’s mental state,⁵⁶ or indeed even meet the parent⁵⁷ — despite the fact that the parent’s intent and conduct are central to any abuse claim against the parent.

⁵¹ See ROESLER & JENNY, *supra* note 12, at 43-44, 46.

⁵² See *id.* at 35, 56 (“If a large group of pediatricians and child psychiatrists cannot come to agreement, why should we expect the community at large to understand what we are trying to identify, treat, and prevent? Let’s just call it child abuse.”).

⁵³ *Id.* at 43.

⁵⁴ Dr. Jenny and Dr. Roesler were somewhat ambiguous about whether their conception of MCA should be treated as a medical “diagnosis.” Compare, e.g., *id.* at 55 (“Is this really a syndrome?” “No. . . . Child abuse is not an illness or a syndrome in the traditional sense but an event that happens in the life of the child.” with *id.* at 142 (“In the 87 children we diagnosed with ‘medical child abuse,’”). Pronouncements by the American Academy of Pediatrics make it clear that doctors should treat this as a medical diagnosis. See, e.g., John Stirling, Jr. & the Committee on Child Abuse and Neglect, *Beyond Munchausen Syndrome by Proxy: Identification and Treatment of Child Abuse in a Medical Setting*, 119 PEDIATRICS 1026, 1028 (2007) [hereinafter 2007 AAP Report] (“the falsification of a medical condition is a medical diagnosis”).

⁵⁵ See 2007 AAP Report, *supra* note 54, at 1029 (“Whenever possible, have a pediatrician with experience and expertise in child abuse consult on the case, if not lead the team. This may help to reduce ‘false-positive’ misdiagnosis and better identify actual cases.”).

⁵⁶ See ROESLER & JENNY, *supra* note 12, at 44 (“[W]ith this definition it is not necessary to determine the parent’s motivation to know that a child is being harmed and that the abuse should stop.”).

⁵⁷ Dr. Roesler and Dr. Jenny placed the medical record review at the center of the

Dr. Jenny and Dr. Roesler touted as a key advantage of their new diagnosis the fact that its diagnostic criteria identified significantly more children as victims of abuse than did the MSBP diagnostic criteria.⁵⁸ The MSPB diagnosis generally covers only parents who intentionally induce or fabricate illness in a child.⁵⁹ By contrast, MCA can be diagnosed even if the child is genuinely sick,⁶⁰ and even if the parent does not intentionally deceive the doctor.⁶¹ In fact, Jenny and Roesler specifically disclaimed the need to know the parent's motive to diagnose MCA.⁶² Further, MCA's "potentially harmful" requirement could be construed broadly so that it covers any examination, medication, or diagnostic test (such as a blood draw or an x-ray) that could produce harm, even if no harm actually resulted.⁶³ Indeed, when Dr. Jenny and Dr. Roesler conducted a retrospective review of 115 medical charts of patients referred in preceding years for suspected MSBP, they noted with approval that only thirty-three percent of these children's files met MSBP diagnostic standards while a full seventy-six percent met the new MCA criteria.⁶⁴

MCA "diagnostic" process. They interviewed the parents and evaluated the child only in cases in which a question existed about reintegrating the child into the home. *Id.* at 138-39.

⁵⁸ *Id.* at 142-44 ("Of the 115 children referred to us for evaluation of MSBP, 87 (75.7%) met the criteria for medical child abuse. . . . [W]e conclude that only 29 (33.3% of our medically abused children actually meet all 4 of the conditions Rosenberg sets out to make the [MSBP] diagnosis."); see also AMERICAN ACADEMY OF PEDIATRICS, VISUAL DIAGNOSIS OF CHILD ABUSE (Am. Acad. of Pediatrics CD-ROM, 3d ed. rel. 2007) ("Medical child abuse is a far more inclusive diagnosis than MSBP.").

⁵⁹ See Meadow, *Hinterland*, *supra* note 33, at 344 ("These two cases share common features. The mothers' stories were false, deliberately and consistently false. The main pathological findings were the result of the mothers' actions, and in both cases caused unpleasant and serious consequences for the children.").

⁶⁰ ROESLER & JENNY, *supra* note 12, at 149 (noting that seventy-four percent of the children identified as medically abused had underlying medical conditions but were overtreated for these conditions); see also 2013 AAP Report, *supra* note 29, at 593 ("It is important to understand that as many as 30% of children with fabricated illness have an underlying medical illness.").

⁶¹ See Allison M. Jackson et al., *Aspects of Abuse: Recognizing and Responding to Child Maltreatment*, 45 CURRENT PROBS. PEDIATRIC & ADOLESCENT HEALTH CARE 58, 65 (2015).

⁶² ROESLER & JENNY, *supra* note 12, at 56.

⁶³ See *id.* at 146. In Reena Isaac and Thomas Roesler's words, "Any medical procedure, for example, a blood draw, or a trial of medication that is potentially harmful, could be considered abusive if there was no clear medical reason for it to happen." Reena Isaac & Thomas Roesler, *Medical Child Abuse*, in A PRACTICAL GUIDE TO THE EVALUATION OF CHILD PHYSICAL ABUSE AND NEGLECT 291, 291 (Eileen R. Giardino ed., 2nd ed. 2010).

⁶⁴ ROESLER & JENNY, *supra* note 12, at 142-47 (using Donna A. Rosenberg's

The doctors were certainly correct that their new conceptual construct vastly expanded the sphere of parental behavior subject to scrutiny by doctors. Their construction of MCA holds a parent to account if she “instigated” unnecessary medical care for a child, but the doctors neither defined the term nor clarified the outer limits of the parental behavior that can constitute “instigation.”⁶⁵ The authors’ examples of MCA behavior, however, make clear that the term extends far beyond intentionally abusive behavior by parents.⁶⁶ Yet virtually all health care that children receive is “instigated” by a parent, in the sense that a parent has taken the child to the doctor for the purpose of obtaining medical care: Few children, obviously, have the wherewithal to make an appointment, get themselves to the doctor, explain to the doctor what their medical situation is, and pay for the appointment; even if they had, children lack the legal capacity to consent to treatment. (Indeed, a parent can be charged with neglect for failing to take a child to the doctor if the child needs medical care.⁶⁷) Although a diagnosis of MCA can be equated with child abuse only because the term “instigate” is read as a placeholder for some nefarious parental action, MCA can be diagnosed without any such showing.⁶⁸

A vast spectrum of behavior by parents can result in the child getting medical care that some doctor deems unnecessary, all of which is subject to being declared MCA under the vague meaning of the term “instigation.” At the more benign end of the spectrum, a parent who simply pushes for medical care with which a doctor disagrees can fall into this category — say the parent who pushes for more pain relief for a child in pain.⁶⁹ Also towards this end of the spectrum, an overly anxious parent might take the child to the doctor when the child does

diagnostic criteria for MSBP).

⁶⁵ See *id.* at 43-44.

⁶⁶ The authors provide examples of categories of behavior that constitute MCA, including an overly-anxious parent taking a child for unnecessary medical visits. See *id.* at 148 T.1, 181, 183.

⁶⁷ See *infra* notes 171–86 and accompanying text. In fact, Katherine Parker was simultaneously charged with criminal MCA for medical overtreatment of one child and neglect for undertreatment of another child. See Exstrum et al., *supra* note 20.

⁶⁸ The 2007 AAP Report, *supra* note 54, states simply that a doctor needs two circumstances to diagnose abuse: “harm or potential harm to the child involving medical care and a caregiver who is causing it to happen.” *Id.* at 1027-28.

⁶⁹ This was reportedly a central reason for MCA charges against Isaiah Rider’s mother in the MCA charges against her. See Adler, *supra* note 22. Indeed, critics also charged that medical personnel use the MSBP diagnosis to retaliate against parents deemed too “pushy” or assertive. See, e.g., MART, *supra* note 37, at 54, 56 (noting several cases that had “at least the appearance that frustrated medical staff were using the diagnosis to punish an uncooperative mother”).

not have symptoms that warrant a doctor visit, even though the parent accurately relays the child's symptoms.⁷⁰ Moving further along the spectrum, a parent could misstate a child's symptoms or condition to a doctor unintentionally, making an error that a considerable number of parents would make (say, overestimating the amount a child has spit up, or inaccurately remembering when a particular symptom began). Or, moving along the spectrum of parental conduct, a parent could intentionally overstate a child's symptoms to the doctor, as parents often do,⁷¹ in an effort to get the child treatment that the parent truly believes that the child needs. (The parent may say, for example, that the child could not get to sleep until 5 a.m. every morning as a result of a medication side effect that induced insomnia, when the child had gotten to sleep at 3 a.m. one morning.) Or a parent could significantly overstate a child's condition because the parent is simply wrong, or has been misled by the child. Or, moving still further along the spectrum, a parent could have what might be called "hypochondriasis by proxy,"⁷² and imagine symptoms that a child does not have. And all the way at the other end of the spectrum is the behavior associated with MSBP — the intentional lie or inducement of symptoms by the parent to get medical care that the parent knows that the child doesn't need for the parent's own secondary gain. All of this becomes potential grounds for intervention under the MCA definition.

The vagueness of the term "instigate" was not Dr. Roesler and Dr. Jenny's only innovation to expand doctors' supervisory authority over parents by means of MCA charges. Through including behavior by the parent that led to both harmful and potentially harmful medical care, and then defining the term "potentially harmful" to include exposure of a child to any potential degree of risk whatsoever,⁷³ the MCA

⁷⁰ See ROESLER & JENNY, *supra* note 12, at 143 T.1. Dr. Meggan Goodpasture of Wake Forest Baptist Hospital publicly noted controversy within the subfield of child abuse pediatrics on the issue of whether the term "instigates" covers overly-anxious parents who accurately recount their child's symptoms, and stated that she personally would not diagnose MCA in such a case. See Meggan Goodpasture, Ass't Professor of Pediatrics, Wake Forest School of Medicine, Medical Child Abuse: A Review of Caregiver Fabricated Illness and Its Impact on Children, Families and the Medical Team at the Wake Forest Baptist Medical Center 2015-2016 Conference Series (June 14, 2016).

⁷¹ See C. J. Morley, *Practical Concerns About the Diagnosis of Munchausen Syndrome by Proxy*, 72 ARCHIVES DISEASE CHILDHOOD 528, 528 (1995) ("Many mothers are just over anxious and trying to get the doctor to listen, or exaggeration may be part of her normal language.").

⁷² The term is Eric Mart's. See MART, *supra* note 37, at 26.

⁷³ Isaac & Roesler, *supra* note 63, at 291 ("Any medical procedure, for example, a blood draw, or a trial of medication that is potentially harmful, could be considered

definition allows doctors to scrutinize virtually any medical care for potential MCA, since few acts of medical care involve no risk whatsoever. As with the term “instigate,” the broad definition of the “potentially harmful” requirement collapses all degrees of harm and potential harm under the single category of “medical child abuse,” and gives the misleading impression that the parent imposed or sought to impose significant harm to the child. Under this definition, a mother who sought a prescription of the drug Zofran to relieve a child’s nausea caused by a medical condition could be declared a medical child abuser if the doctor believes that the slight risks associated with Zofran meant that the child should be made to tough out the nausea.⁷⁴

Finally, Dr. Roesler and Dr. Jenny also expanded the scope of doctors’ supervision considerably by declaring that children with genuine medical conditions could still be deemed subject to MCA.⁷⁵ Indeed, seventy-four percent of the children they identified as medically abused in their retrospective review had genuine medical conditions.⁷⁶ With MSBP, the question for the pediatrician was generally a simple either-or question: Did the child have an organic medical condition or was the parent fabricating it?⁷⁷ A doctor might not always be definitively able to answer this question because of the limits of medical science or his or her expertise (and, indeed, doctors wrongly answered this question in the affirmative far too often),⁷⁸ but finding an organic illness ended the inquiry.⁷⁹ In contrast to the yes/no

abusive if there was no clear medical reason for it to happen.”).

⁷⁴ Zofran is available over the counter in some countries, although not in the United States. See *Ondansetron*, DRUGS.COM, <https://www.drugs.com/international/ondansetron.html> (last visited Aug. 17, 2016) (indicating that Ondansetron, the active ingredient in Zofran, is sold as a generic drug not requiring a prescription in a number of countries); *Zofran*, U.S. DEP’T OF HEALTH AND HUMAN SERVS., <http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm?fuseaction=Search.Overview&DrugName=ZOFRAN> (last visited Aug. 15, 2016) (indicating Zofran is only available with a prescription).

⁷⁵ See ROESLER & JENNY, *supra* note 12, at 149.

⁷⁶ *Id.*

⁷⁷ See Meadow, *What Is MSBP?*, *supra* note 38, at 535 (“The first large series of cases published (in this journal in 1982) was composed mainly of similar abuse — children who had incurred prolonged false illness caused by mothers who delighted in contact with paediatricians and paediatric units.”); Morley, *supra* note 71, at 528 (“Children who are seen frequently may genuinely be ill.”); Rosenberg, *Medical Diagnostic Criteria*, *supra* note 45, at 421 (describing “the mistaken diagnosis of MSBP when the real problem is a genuine illness”).

⁷⁸ For a discussion of false charges of MSBP in England, see *supra* notes 48–50 and accompanying text. For persuasive critiques of current MSBP diagnostic practices, see MART, *supra* note 37, and Pankratz, *Separation Test*, *supra* note 47.

⁷⁹ See generally Deidre C. Rand & Marc D. Feldman, *Misdiagnosis of Munchausen*

inquiry required in MSBP, the MCA inquiry gives the doctor the power to make more subtle distinctions of gradation regarding the parent's behavior — whether, given the child's expected symptoms from a genuine medical condition, the parent instigated overtreatment. Allowing doctors to make such fine distinctions places parents of children with complicated medical issues in a continually vulnerable position.

In all this, the terminology of “medical child abuse,” and its association with MSBP, function to tar a vast range of parents as psychopaths intent on hurting their children. This is despite the fact that a large portion of behavior that falls within the broad definition of MCA might more accurately be considered simple differences of opinion between mothers and doctors, differences of opinions between two sets of doctors, or slight, within-the-bell-curve-of-normal exaggeration by a concerned parent.⁸⁰ (This is not to say that the evaluating physicians always recognize the potentially broad possible range of motives a parent may have; instead, they often leap to assuming such a psychopathic motive exists based on scant evidence.⁸¹) Rather than refer to this entire spectrum of behavior as

Syndrome by Proxy: A Literature Review and Four New Cases, 7 HARV. REV. PSYCHIATRY 94 (1999) (describing seven cases in which an undiagnosed illness was falsely described as MSBP). There were attempts to define MSBP more broadly as time wore on in order to include pervasive exaggerations of a child's symptoms, rather than the complete fabrication of an illness. See, e.g., Morley, *supra* note 71, at 529 (criticizing extension of MSBP to a broader range of cases). Nevertheless, the basic pattern still generally held. See Rosenberg, *Medical Diagnostic Criteria*, *supra* note 45, at 424 (describing MSBP diagnosis by exclusion in terms of credibly excluding “all other possible explanations for the child's condition”).

⁸⁰ See Meadow, *Hinterland*, *supra* note 33, at 344-45 (“We recognise that parents sometimes exaggerate their child's symptoms, perhaps to obtain faster or more thorough medical care of their child.”); Morley, *supra* note 71, at 529 (“[M]others frequently exaggerate their child's symptoms, not through any malignant desire to mislead the doctor but as part of common language: ‘he hasn't eaten a thing all week’, ‘he vomits up all the feed’. Such phrases are part of everyday life and experienced paediatricians do not take the mother's story at face value but take a careful history to find out exactly what has been happening.”).

⁸¹ As Lisa Ludwig, the attorney for Katherine Parker, who was charged with criminal child abuse stated, “There are two possibilities here: One is that a high-school educated, stay-at-home mom tricked literally dozens of medical professionals into doing literally dozens of unnecessary medical procedures — including brain surgery — on three different children The other possibility is the doctors made errors.” Aimee Green, *Stay-at-Home Mom Accused of Fooling Doctors into Medicating, Operating on Kids Gets Probation*, OREGONIAN (Feb. 23, 2016, 3:04 PM), http://www.oregonlive.com/portland/index.ssf/2016/02/stay-at-home_mom_accused_of_fo.html. This same leap to psychopathic motives occurs with MSBP charges. See Pankratz, *MSBP Label*, *supra* note 46, at 91 (“I am repeatedly amazed when experts who have not interviewed

“MCA,” in many situations it would be far clearer for the evaluating pediatrician to specify the particular parental behavior deemed wrongful. For example, the physician might say simply “I think you were being overly anxious and didn’t need to bring the child to the doctor.” Or “I think you mistakenly gave the other doctor an incorrect picture of the child’s symptoms. I don’t think the child’s nausea merited a prescription for Zofran.” Yet framing the parents’ behavior as “abuse” gives the evaluating doctor a potential legal lever to interfere coercively with the parent’s decision-making. In contrast, framing the conflict as a simple disagreement between a doctor and a parent over what medical care the child needs gives a doctor no power to dictate the child’s medical care, since parents are charged with the right to make health care decisions for their children absent abuse.⁸²

MCA-charge proponents further the synecdochic association between the vast expanse of behavior that can be dubbed MCA with the much narrower range of conduct associated with MSBP by continually harking back to examples of heinous and intentional MSBP behavior when justifying the need to take action on MCA.⁸³ Despite explicitly disclaiming the need for those diagnosing MCA to understand the parent’s intent,⁸⁴ the examples that Dr. Roesler and Dr. Jenny present in their book’s introduction all involve classic MSBP behavior in which a mother intentionally induces or fabricates illness in her child.⁸⁵ In the text at large, incidents of mothers intentionally giving their children ipecac to make them vomit,⁸⁶ or deliberately starving them are detailed.⁸⁷ Further, their chapter detailing case studies of the parental behavior they seek to target largely examines extreme examples of MSBP behavior — cases in which parents

the mother conclude that she is receiving secondary gain by caring for her sick child.”).

⁸² See *infra* Part II.

⁸³ For example, one author praised the MCA model’s removal of focus on “the intent of the abuser,” but shortly thereafter stated that “[p]erpetrators of Medical Child Abuse take advantage of th[e] ethical standard [requiring doctors to consider the person giving a medical history to be trustworthy], and the inaccurate historian uses this trust to exaggerate, fabricate, or induce symptoms resulting in diagnoses, medications, procedures, and attention” — thereby assuming that the parent’s deception was intentional, and her motive to gain attention. See Jackson et al., *supra* note 61, at 64.

⁸⁴ See *supra* note 56; see also 2013 AAP Report, *supra* note 29, at 590-94 (“When parental behaviors result in harm to the child, the child has been maltreated, whatever the caregiver’s motivation.”).

⁸⁵ See ROESLER & JENNY, *supra* note 12, at 2, 3, 5.

⁸⁶ *Id.* at 101-02.

⁸⁷ *Id.* at 105.

intentionally induced seizures through suffocation or drugs,⁸⁸ incidents of recurrent suffocation by a parent to mimic non-induced apnea,⁸⁹ incidents in which parents inject saliva or fecal matter into children's intravenous or central lines to cause sepsis,⁹⁰ and incidents in which parents fabricated symptoms of bowel disease in healthy children, some leading to bowel transplants.⁹¹ The authors do describe a few examples of behavior involving well-meaning parents who truly believe their child is sick, but these involve extreme illness exaggeration or deliberate and extreme deception on the part of the parent,⁹² or well-meaning parents whose illogical beliefs about their children's nonexistent illnesses, in Dr. Jenny and Dr. Roesler's words, "strain[] credulity."⁹³

The vast expansion in doctors' supervisory power over parents' medical decisions provided by the MCA definition was not motivated by empirical literature that established a problem with parents' decision-making beyond the MSBP context. The only documented problem to which Dr. Jenny and Dr. Roesler were responding was — and still is — the far more limited problem of MSBP behavior.⁹⁴ Indeed, the far more significant threat to children's health demonstrated by empirical literature is not parents' attempts to overmedicate their children, but doctors' own mistakes in providing care⁹⁵ — including their failure to diagnose rare diseases.⁹⁶ Dr. Jenny

⁸⁸ *Id.* at 78-79.

⁸⁹ *Id.* at 80-85.

⁹⁰ *Id.* at 85-87.

⁹¹ *Id.* at 87-88.

⁹² *Id.* at 79-80. For example, the authors describe a case in which a child had three serious episodes with an inflammatory lung condition caused by contact with pigeons that left him hospitalized for lengthy periods, in which the parents lied to doctors by telling them they had removed their 40 pigeons from the residence. *Id.*

⁹³ *Id.* at 80. For example, the authors described a case in which the mother, because of a false belief that her children possessed allergies, required them to sleep "on a wardrobe wrapped in toilet paper and silver foil to avoid allergens." *Id.* at 79.

⁹⁴ Chapter 2 of Roesler & Jenny's book, which makes the case for the movement from the MSBP model to the MCA model, points only to the controversies regarding MSBP as reasons to shift to the MCA model. *See id.* at 43-60. It does not make the case for the existence of a broader problem with parental behavior beyond the MSBP context.

⁹⁵ In 1999, an Institute of Medicine report described medical errors as an "epidemic." INST. OF MED., TO ERR IS HUMAN: BUILDING A SAFER HEALTH CARE SYSTEM (1999), <http://www.nationalacademies.org/hmd/~media/Files/Report%20Files/1999/To-Err-is-Human/To%20Err%20is%20Human%201999%20%20report%20brief.pdf>. A subsequent study in the BMJ found that "medical errors' in hospitals and other health-care facilities are incredibly common and may now be the third-leading cause of death in the United States — claiming 251,000 lives every year, more than

and Dr. Roesler did not address these more pervasive threats to children associated with the health care system. Indeed, their concept of MCA increases the threat of medical mistakes to children by attributing blame for unnecessary medical care to the parents rather than doctors, and therefore making it more likely that the mistakes will not be appropriately addressed.⁹⁷

Although newly-formulated diagnostic criteria should be tested to ensure their accuracy in identifying the target condition,⁹⁸ Dr. Jenny and Dr. Roesler performed no testing beyond their retrospective review that established MCA's far broader scope than MSBP.⁹⁹ Further, despite the difficulty of determining what medical care should be deemed unnecessary in a number of situations, particularly in complicated medical cases where doctors may disagree about diagnosis or treatment, the pair provided no caution regarding the difficulty of accurately distinguishing MCA cases from non-MCA cases, and no guidelines to assist doctors in this task. They simply declared instead: "[W]e feel confident that by carefully reviewing the medical care received by children, we can distinguish which children have been subjected to MCA and which have not."¹⁰⁰

Despite these issues, a 2013 report by the American Academy of Pediatrics Committee on Child Abuse and Neglect ("AAP Report") approved of the MCA diagnosis under the alternative name of

respiratory disease, accidents, stroke and Alzheimer's." Ariana Eunjung Cha, *Researchers: Medical Errors Now Third Leading Cause of Death in United States*, WASH. POST (May 3, 2016), <https://www.washingtonpost.com/news/to-your-health/wp/2016/05/03/researchers-medical-errors-now-third-leading-cause-of-death-in-united-states/>. For the results of the study, see Martin Makary & Michael Daniel, *Medical Error — The Third Leading Cause of Death in the U.S.*, 353 *BMJ* (2016). For documentation of the problems regarding misdiagnosis for children, see *infra* at notes 376–87 and accompanying text.

⁹⁶ See SHIRE RARE DISEASE IMPACT REPORT (Apr. 2013), <https://globalgenes.org/rare-disease-impact-report/> [hereinafter SHIRE].

⁹⁷ Indeed, in the Houston case of Katie Ripstra, Stanford University kidney specialist Dr. Steven Alexander testified that the first time he looked at Ripstra's daughter's file, he thought he was being asked to review a potential medical malpractice case based on the medical treatment that the child had received. See Meagan Flynn, *Defense Claims Girl's Illness Stumped Doctors, So They Blamed Salt Poisoning*, HOUS. PRESS, Sept. 23, 2015 [hereinafter *Defense Claims*]. Instead, based on expert testimony diagnosing MCA, Ripstra was sentenced to twenty years in prison. Flynn, *Jury Finds Former Nurse Guilty*, *supra* note 20.

⁹⁸ See Patrick M. Bossuyt et al., *Towards Complete and Accurate Reporting of Studies of Diagnostic Accuracy: The STARD Initiative*, 326 *BMJ* 41, 41 (2003).

⁹⁹ See *supra* note 64 and accompanying text.

¹⁰⁰ ROESLER & JENNY, *supra* note 12, at 152-53.

“caregiver-fabricated illness.”¹⁰¹ The Report affirmed Dr. Jenny and Dr. Roesler’s basic premise that, when faced with a child’s asserted overmedicalization, a pediatrician could properly diagnose a child with caregiver-fabricated illness, rather than have a mental health expert diagnose the parent, and that such a diagnosis did not need to consider the intent of the parent.¹⁰² The Report, however, defined the parental behavior necessary to diagnose the child somewhat more narrowly than did Dr. Roesler and Dr. Jenny: Caregiver-fabricated illness, according to the Report requires that the parent either induce or misrepresent the child’s symptoms.¹⁰³ Both MCA and caregiver-fabricated illness will be referred to here as MCA, as will claims styled as MSBP claims, but in which the child (rather than the parent) is diagnosed.¹⁰⁴ The closely allied diagnosis of MSBP, sometimes now called “factitious disorder imposed on another,”¹⁰⁵ which involves a mental health assessment of the parent, will be considered alongside these diagnoses, but referred to by its own name.

C. Medical Child Abuse Charges Today

Since Dr. Jenny and Dr. Roesler first proposed it, MCA has become doctors’ preferred charge for medical overtreatment by parents, although it and MSBP are sometimes treated as interchangeable diagnoses, and these charges are sometimes brought alongside one another.¹⁰⁶ Physicians are now being trained to treat MCA as a diagnosis that should be routinely considered in complicated medical cases,¹⁰⁷ and to report suspicions of MCA to child protection

¹⁰¹ 2013 AAP Report, *supra* note 29, at 593.

¹⁰² *Id.* at 590-594 (“When parental behaviors result in harm to the child, the child has been maltreated, whatever the caregiver’s motivation.”).

¹⁰³ *Id.* at 591. This variation would therefore presumably exclude diagnosis where the parent’s anxiety caused them to take a child to a doctor more than necessary but did not cause them to misstate the child’s condition. *See id.*

¹⁰⁴ *See, e.g., In re McCabe*, 580 S.E.2d 69, 71 (N.C. Ct. App. 2003).

¹⁰⁵ This was the terminology adopted by the American Psychiatric Association when in 2013 it first included a diagnosis related to MSBP as an official diagnosis in its manual, AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSIS AND STATISTICAL MANUAL OF MENTAL DISORDERS 325 (5th ed. 2013).

¹⁰⁶ *See, e.g., In re Z.S.*, No. 25986, 2014 WL 4267478, ¶ 2 (Ohio Ct. App. Aug. 29, 2014) (equating medical child abuse with MSBP); 2013 AAP Report, *supra* note 29, at 590 (“Although this condition has been widely known as Munchausen syndrome by proxy, there is ongoing debate about alternative names, including pediatric condition falsification, factitious disorder (illness) by proxy, child abuse in the medical setting, and medical child abuse.”).

¹⁰⁷ *See ROESLER & JENNY*, *supra* note 12, at 1.

authorities.¹⁰⁸ Mental health professionals, nurses, clergy, and social workers are likewise being taught to be vigilant to possible MCA cases in order to protect children from harm.¹⁰⁹

Members of these fields learn a raft of empirically unproven claims that support the need to root out MCA. Many of these claims are based on the same flawed research that gave rise to false diagnoses of MSBP, although some are based on newer research with similar flaws. Two flaws are especially prominent in this body of work. First, particular assertions enter the relevant literature despite being premised on weak evidence, and are then cited and recited as established fact without being rigorously tested.¹¹⁰ Second, doctors' identifications of MSBP or MCA in past cases are treated as confirmed diagnoses for the purposes of research that seeks to discern how to identify future MCA cases — a tautologous mode of research that cannot separate out spurious characteristics from genuine characteristics.¹¹¹

For example, MCA training literature states that “many cases of Medical Child Abuse go undetected” because perpetrating parents “are skilled at deceiving the medical community,”¹¹² a proposition lifted

¹⁰⁸ See 2007 AAP Report, *supra* note 54, at 1029 (“If the parent’s care-seeking is harming the child but the parent refuses to cooperate with the physician in limiting the amount of medical care to an appropriate level, the state child protective services agency should be informed.”); MICH. TASK FORCE REP., *supra* note 31, at 3 (“When a medical provider, or other person, recognizes that the child may be a victim of Medical Child Abuse and is at risk of harm, a report should be made with CPS”).

¹⁰⁹ E.g., Flyer from Megan Goodpasture, M.D., for training on Medical Child Abuse: A Review of Caregiver Fabricated Illness and Its Impact on Children, Families and the Medical Team at the Wake Forest Baptist Medical Center (June 14, 2016) (on file with author) (suggesting MCA training be attended by “nurses, doctors, social workers, clergy, and any interested health care professional”).

¹¹⁰ This is precisely the same methodological flaw in research that critics have demonstrated applies to this same subfield of pediatricians’ literature on Shaken Baby Syndrome. See *infra* notes 299–315 and accompanying text. The shortcoming of this mode of research is perhaps best summarized by the words of a district judge from the Northern District of Illinois who, in overturning a conviction from ten years before, stated that the expert opinions on SBS presented at trial had turned out to be “more an article of faith than a proposition of science.” *Del Prete v. Thompson*, 10 F. Supp. 3d 907, 957 n.10 (N.D. Ill. 2014).

¹¹¹ Cf. Pankratz, *Separation Test*, *supra* note 47, at 310 (“[f]alse statistical information has entered the lore of Munchausen syndrome by proxy, which is often presented with authority by experts.”); MART, *supra* note 37, at 9 (explaining the weakness in the academic literature for MSBP by stating that “There appeared to be only one or two articles in the professional literature which might have been considered ‘hard research,’ and in these the research had been done only in the most rudimentary way.”).

¹¹² See MICH. TASK FORCE REP., *supra* note 31, at 1; see also 2013 AAP Report, *supra* note 29, at 592 (“This form of maltreatment often goes unrecognized and unreported

from literature on the far more narrow category of MSBP behavior that, to boot, lacks any credible proof.¹¹³ This literature contends, as well, that “[t]he reported incidence [of MCA] is approximately 0.5 to 2.0 per 100,000 children”¹¹⁴ — although there have been no valid incidence studies of MCA behavior.¹¹⁵ Furthermore, those trained to

even when it is recognized.”).

¹¹³ As Eric Mart points out, this assertion is reminiscent of the children’s riddle, “How many undiscovered islands are there in the Pacific Ocean?” No sensible answer is possible given that the undiscovered islands in the Pacific are exactly that — undiscovered. See MART, *supra* note 37, at 44. The 2013 AAP Report makes the claim that “many cases go unreported” by asserting that a 1996 study showed that “pediatricians needed to have a strong degree of certainty before reporting”, and suggesting, on that basis, that pediatricians are not reporting genuine MCA cases when there are less certain. 2013 AAP Report, *supra* note 29, at 592 (citing R.J. McClure et al., *Epidemiology of Munchausen Syndrome By Proxy, Non-Accidental Poisoning, and Non-Accidental Suffocation*, 75 ARCHIVES OF DISEASE IN CHILDHOOD 57 (1996)). The 1996 study, however, concerned MSBP behavior rather than the far broader category of actions identified by the MCA diagnosis. More importantly, the relevant finding in that study, which considered pediatricians’ reports of MSBP behavior, was that “one hundred and nine (85%) of paediatricians estimated the probability of their (MSBP) diagnosis being correct as greater than 90%. In fourteen cases the probability of abuse was estimated to be between 71% and 90% and in four, between 50% and 70%. In only one case was the probability less than 50%.” McClure, *supra*, at 59. This result is remarkable for the extent of perceived certainty with respect to the MSBP, when few such cases will present with strong evidence of symptom induction or fabrication. Such a result demonstrates underreporting of MSBP behavior by pediatricians only if both these pediatricians were in fact correct about their MSBP diagnoses that they did report, and, in addition, they did not report correctly diagnosed cases of MSBP when they were less confident of their diagnosis. The McClure study provides no data that answer these questions. However, we know that pediatricians of that era in the United Kingdom, including Roy Meadow, a coauthor of the study, were overconfident of their diagnoses of MSBP, and made false diagnoses based on overly broad diagnostic criteria. See *supra* notes 48–49. This suggests that, what the McClure study reveals, contrary to the suggestion of the 2013 AAP Report, is not underreporting by pediatricians, but instead overconfidence in false diagnoses of MSBP.

¹¹⁴ 2013 AAP Report, *supra* note 29, at 592.

¹¹⁵ The incidence rates reported are from studies seeking to measure rates of MSBP behavior, rather than the far broader category of MCA behavior. Yet the methodology of the studies cited for these rates are doubtful even for MSBP behavior. The higher estimate of 2.0 per 100,000 children is derived from a New Zealand study on MSBP. See S.J. Denny, C.C. Grant & R. Pinnock, *Epidemiology of Munchausen Syndrome by Proxy in New Zealand*, 37 J. PAEDIATRICS & CHILD HEALTH 240, 240 (2001). The authors counted as MSBP cases all cases that doctors reported to child protection officials or they believed were highly suspicious but did not report; the authors made no attempt to confirm the validity of these cases. See *id.* at 241. To the extent that reporting physicians made false positive rather than true positive diagnoses, which, given what we know about the number of wrongful diagnoses of MSBP during this period is eminently possible, see *supra* notes 48–49 and accompanying text, this study tells us

identify MCA are also taught that this behavior often escalates in severity, and is often fatal¹¹⁶ — also findings drawn from deeply-flawed MSBP literature.¹¹⁷

nothing about the actual rate of MSBP behavior in New Zealand, let alone the actual rate of MCA behavior in the United States. For persuasive arguments that the overly vague criteria used to diagnose MSBP have resulted in a high rate of false positive diagnoses, see MART, *supra* note 37; Pankratz, *MSBP Label*, *supra* note 47.

¹¹⁶ MICH. TASK FORCE REP, *supra* note 31, at 1; *see also In re McCabe*, 580 S.E.2d 69, 71 (N.C. Ct. App. 2003) (describing behavior as evolving to more serious forms, and stating that the “risk of morbidity or mortality . . . is fifteen to thirty percent.”); 2013 AAP Report, *supra* note 29, at 591 (“[T]here is general agreement that this condition causes serious harm and is associated with significant morbidity and mortality.”).

¹¹⁷ Like most other factual contentions made in MCA and MSBP literature, authors cite other secondary research that repeat these propositions rather than to researchers who have rigorously tested the veracity of these claims. For example, the 2013 AAP Report supports its claim that MCA causes “significant morbidity and mortality” by citing to a 2008 article. 2013 AAP Report, *supra* note 29, at 590-91 (citing R.J. Shaw et al., *Factitious Disorder By Proxy: Pediatric Condition Falsification*, 16 HARV. REV. PSYCHIATRY 215 (2008)). The 2008 article cited, however, uses narrower MSBP criteria to define the parental behavior at issue and, without making its own calculations, states that “[m]ortality rates of 10% are commonly reported in the literature, although rates may be as high as 33% in cases of suffocation or poisoning.” Shaw et al., *supra*, at 216. The 2008 article, however, is not the original source of these figures; instead it cites to a 2005 article to support these figures. *See id.* (citing N. Awadallah et al., *Munchausen By Proxy: A Case, Chart Series, and Literature Review of Older Victims*, 29 CHILD ABUSE & NEGLECT 931 (2005)). The 2005 article, though, provides no statistics whatsoever on this issue.

Pages later, the AAP Report later repeats the claim that MCA victims “suffer significant morbidity and mortality,” but this time adds specific numbers to back its assertion. 2013 AAP Report, *supra* note 29, at 592. It states that “[m]ortality rates of 6% to 9% have been reported, and approximately the same percentage suffer long-term disability or permanent injury.” *Id.* The Report cites three articles to support these statistics, all of which seek to measure mortality rates in the MSBP context rather than in the broader category delineated by MCA criteria. *See* McClure et al., *supra* note 113; Rosenberg, *Web of Deceit*, *supra* note 44; Mary Sheridan, *The Deceit Continues: An Updated Literature Review of Munchausen Syndrome By Proxy*, 27 CHILD ABUSE & NEGLECT 431, 431-451 (2003). Yet even taken as measures of MSBP, each of the studies has deep methodological flaws that should have precluded its usage.

The highest of the range of mortality rates cited comes from Donna Rosenberg’s *Web of Deceit*, which calculates a mortality rate of 9% for MSBP victims based on the author’s review of 117 case studies of MSBP published in medical journals, in which she counted ten deaths. Rosenberg, *Web of Deceit*, *supra* note 44, at 554. Yet Roy Meadow, whose cases comprised the largest series used by Rosenberg, himself wrote a letter to the editor of Rosenberg’s journal disputing those statistics on the ground that Rosenberg’s figures double counted some deaths by failing to recognize when two doctors had published case studies of the same patient. Roy Meadow, *Letter to the Editor*, 14 CHILD ABUSE & NEGLECT 289, 289 (1990). Meadow cautioned that “extreme caution should be applied to [the article’s] quantitative aspects and, in particular, to some of the figures . . . such as the mortality rate of 9% and the long-term morbidity

Pediatricians who specialize in child abuse have been central to the rise of these charges. Hospitals began to hire these specialists in the 1970s to detect child abuse, rather than to treat their own patients.¹¹⁸ While they once focused on evaluating bruises and broken bones, they have now installed themselves as central to the process of detecting MCA.¹¹⁹ One report from this group states that it is important “[w]henever possible, [to] have a pediatrician with experience and expertise in child abuse consult on the case, if not lead the team.”¹²⁰ This protocol inserts child abuse pediatricians into complicated medical cases in which they sometimes assert the presence of MCA over the objections of the child’s treating doctors — often experienced

rate of 8%.” *Id.* Mary Sheridan’s article, which used the same methods to update Rosenberg’s findings, and calculated a 6% mortality rate, as the author herself notes, is vulnerable to the same criticism. Sheridan *supra*, at 433 (noting that “some cases may be duplicates”). Furthermore, the third case study, by McClure et al., does not focus on MSBP behavior alone, but also on cases of non-accidental poisoning or suffocation. McClure et al., *supra* note 113. Although the study finds significant overlap between cases of MSBP behavior and cases of non-accidental poisoning and suffocation, it notes some number of cases in which there is no overlap. *Id.* at 59. The authors reports that eight children died in the course of the study, all from suffocation or poisoning, but does not state which, if any, of these cases were deemed MSBP, rather than suffocation or poisoning alone. *Id.* at 60. The result is that no death rates from MSBP can be reliably calculated from these data. The study could perhaps more plausibly be cited for the proposition that MSBP was not likely to be fatal in the absence of the parent using suffocation or poisoning to induce illness.

Even if each of these studies did not possess these specific flaws, as both Loren Pankratz and Eric Mart have convincingly shown, all existing studies on MSBP mortality rates, including those cited in the AAP Report, share the same general methodological flaws. First, the mortality rates were drawn from doctors’ reports or case studies of MSBP, and were never independently confirmed to be MSBP. Given the many cases of organic illnesses known to have been falsely diagnosed as MSBP during this era, *see supra* notes 48–49 and accompanying text, this is not an insignificant problem. Second, the published case studies, even assuming they truly involved MSBP behavior, are likely the most serious of MSBP cases; the mortality rate of these cases would not be representative of the mortality rate generally for MSBP behavior. *See* MART, *supra* note 37, at 34; Pankratz, *Separation Test*, *supra* note 47, at 311-13.

¹¹⁸ The identification of child abuse as a subject for pediatric concern is often dated back to the publication of two papers by C. Henry Kempe and his colleagues. *See* C. Henry Kempe et al., *The Battered Child Syndrome*, 181 J. AM. MED. ASS’N 17 (1962); C. Henry Kempe et al., *Marginal Comment, Unusual Manifestations of the Battered Child Syndrome*, 129 J. AM. MED. ASS’N 1265 (1975); *see also* Steven C. Gabaeff, *Exploring the Controversy in Child Abuse Pediatrics and False Accusations of Abuse*, 18 LEGAL MED. 90 (2016) (describing the coalescing of this group of physicians). Child-abuse pediatrics has only been a board-certified subspecialty since 2009.

¹¹⁹ 2007 AAP Report, *supra* note 54, at 1029.

¹²⁰ *Id.*

specialists — who believe that the child has one or more genuine medical diagnoses.¹²¹

It is not possible to get a firm count on how many U.S. parents are being reported for MCA to child protection officials. Most states lump such charges into their general child abuse or neglect statistics, and cannot break out MCA charges separately. Michigan is the exception. Its figures show that, on average, fifty-one reports of suspected MCA were made against caregivers each year between 2010 and 2013.¹²² If this rate is extrapolated to the general U.S. population, more than 1,600 U.S. parents are being reported each year.¹²³

Probably far more parents are informally accused of MCA behavior and coerced into reversing their chosen course of medical care in order to avoid such reports being made.¹²⁴ One Boston attorney who represents parents reports that two local hospitals have a practice of presenting parents with a detailed treatment plan if the parents disagree with doctors at the hospital regarding their child's course of

¹²¹ See, e.g., *In re McCabe*, 580 S.E.2d 69, 74 (N.C. Ct. App. 2003) (accepting child abuse pediatricians' diagnosing child with MSBP over cardiologist's contrary diagnosis). In one such case, child abuse pediatrician Dr. Adelaide Eichman, within months after she completed her residency, determined that a child needed to be "de-medicalized" based on reading the child's medical records, despite the view of the child's specialists that the child had several genuine medical diagnoses and might still have undiagnosed conditions. See Transcript of Child Abuse Expunction Appeal of D.H. Hearing at 106, *In re G.M.*, No. 329-2014 (Penn. Dep't Hum. Servs.) (Nov. 19, 2015) [hereinafter Child Abuse Appeal of D.H., Nov. 19, 2015]. After the medical records that Dr. Eichman relied on to diagnose abuse were determined to be inaccurate, the child was eventually returned to her mother's custody and the finding of abuse was expunged — still over the objection of Dr. Eichman. See *id.* at 106. In another case, Jessica Hilliard was charged with MCA for seeking medical care for her son despite the fact that an expert in mitochondrial disease had diagnosed the child as having mitochondrial dysfunction and the child's other sister had already died from what two outside specialists concluded was a genetic disease that affected mitochondrial function. See Eichner, *supra* note 1. Other cases in which child abuse pediatricians disputed the diagnoses of specialists in the field of the child's symptoms include the Ripstra case described *supra* note 20; the Parker case described *supra* note 20; and the Pelletier case, described *supra* notes 2-11 and accompanying text.

¹²² Eichner, *supra* note 1; Email from Kelcy McArthur, Analyst, Children's Protective Services, Mich. Dep't Hum. Servs., to author (Jan. 5, 2015, 11:03:38 EST) (on file with author).

¹²³ Eichner, *supra* note 1.

¹²⁴ MitoAction, a patient advocacy nonprofit for families with mitochondrial disease, which has been contacted by more than 100 parents with concerns about MCA, reports that most of the parents facing allegations of medical child abuse accede to at least some changes in their child's medical care in an effort to avoid MCA charges. Email from MaryBeth Hollinger, Nurse, Education, Support, and Advocacy Navigator, MitoAction (Oct. 4, 2016, 12:33 EST) (on file with author).

care. The attorney has spoken to six parents who report being told that if they refused to sign a consent form adopting the hospital's treatment plan they would be reported to the Massachusetts Department of Children and Families for MCA, their parental rights would be terminated, and that the court-appointed guardian would consent to the treatment plan anyway. According to the lawyer:

Each family remembered being told in no uncertain terms that “there is no point in fighting this. We always win.” or some strikingly similar iteration thereof. In each case, the hospital was true to its word: when the parents consented, the hospitals did not report abuse; when consent was withheld, the hospital's Child-Protection Team filed a report of suspected abuse or neglect immediately, the hospital did win in court, and the guardian did implement the treatment plan anyway.¹²⁵

Advocacy groups for families with rare diseases report a sharp rise of MCA allegations being brought against parents of sick children during the last few years, many of whom had suspected or confirmed diagnoses of these diseases. MitoAction, which serves families with mitochondrial disease, formed a task force on Medical Child Abuse after receiving more than 100 reports from parents asserted to have committed MCA.¹²⁶ Advocacy organizations for families of other rare disorders also report a sharp increase in such allegations — including eosinophilic disorders (disorders relating to elevated numbers of certain white blood cells),¹²⁷ Ehlers-Danlos Syndrome (a connective tissue disorder),¹²⁸ and dysautonomia (an autonomic nervous system disorder).¹²⁹ These charges are occurring across the country.¹³⁰

Once a report of suspected abuse is made, child protection agencies, because they do not have a doctor on staff, generally turn to the outside experts they rely on to assess physical child abuse. Very often, this is the child abuse protection team of the hospital from which the report was made.¹³¹ In a substantial number of MCA cases, neither the

¹²⁵ Telephone Interview with John Martin, KJC Law Firm (Wed. Sept. 28, 2016).

¹²⁶ Email from Christine Cox, Director of Outreach & Advocacy, MitoAction (Feb. 5, 2015, 5:51 EST) (on file with author). This author first became acquainted with the issue of MCA when she was invited to join this task force. *See also* Eichner, *supra* note 1.

¹²⁷ *See* Eichner, *supra* note 1.

¹²⁸ *See id.*

¹²⁹ *See id.*

¹³⁰ *See id.*

¹³¹ *See, e.g.,* ROESLER & JENNY, *supra* note 12, at 131 (noting that Hasbro Children's

state nor the evaluating pediatrician contacts existing medical providers or specialists in fields related to the child's symptoms to ascertain the merits of MCA charges.¹³² Neither do they generally talk with teachers, home nurses, or therapists — all of whom could give a more complete picture of whether the child truly has the medical symptoms that the parent sought to address.¹³³ Instead, in at least many of these cases, the evaluating pediatrician's "diagnosis" of MCA — often made without examining the child or meeting the child's parents — is deemed authoritative.¹³⁴ This gives the pediatricians in

Hospital's child protection team works closely with Rhode Island's Department of Children, Youth and Families to evaluate children suspected of abuse); Swidey & Wen, *Medical Collision*, *supra* note 2 (noting that Massachusetts Department of Children and Families has longstanding ties with Boston Children's Hospital, and treats the hospital as MCA experts even in cases in which the report of abuse comes from BCH); *see also* George J. Barry & Diane L. Redleaf, *Medical Ethics Concerns in Physical Child Abuse Investigations: a Critical Perspective*, FAMILY DEFENSE CENTER 1, 7 (Mar. 14, 2014), <http://www.familydefensecenter.net/wp-content/uploads/2014/12/medicalethicspaper.pdf> ("In many of these cases, the role of the child abuse pediatrician after the Hotline call occurred was never explained to the families. Most parents who have had direct contact with a child abuse pediatrician during the time their child was at the hospital, believed — incorrectly — that the child abuse pediatrician was one of their child's treating physicians.").

¹³² *See, e.g.*, Frank D. v. Ariz. Dept. of Econ. Sec., No. 1 CA-JV 11-0017, 2011 WL 3300669 (Ariz. Ct. App. Aug. 2, 2011) (Norris, J., concurring) (unpublished opinion), slip op at 5-6 ("Part of the problem in this case is . . . inadequate investigation by CPS . . . I would expect that CPS would have had the physicians and consultants they hired . . . conduct a complete investigation by . . . discuss[ing] their concerns with the physicians who had previously diagnosed the children or treated them and ensure[d] that all of the physicians were on the same page with the same records. . . . Very little of this occurred. . . . This incomplete investigation] at times appeared almost self-serving."); Swidey & Wen, *Medical Collision*, *supra* note 2 (child's primary specialist reports he was not consulted about child's medical condition); Child Abuse Appeal of D.H., Sep. 29, 2015, *supra* note 18, at 49 (providing testimony from one county employee about how abuse investigators do not consult with child's treating doctors about abuse diagnoses).

¹³³ *See, e.g.*, Child Abuse Appeal of D.H., Sep. 29, 2015, *supra* note 18, at 47-49 (providing testimony that county investigators only rely on the opinions of medical professionals evaluating for MCA); Pankratz, *Separation Test*, *supra* note 47, at 317-18 ("I know of at least six cases in which children were taken from parents who were utilizing the services of home health nurses. . . . Instead of consulting these care providers about his suspicions, the accusing doctor orchestrated the removal of the child into state custody."); Swidey & Wen, *Medical Collision*, *supra* note 2 (describing three-day process used to determine MCA was occurring in Justina's case).

¹³⁴ *See* Child Abuse Appeal of D.H., Sep. 29, 2015, *supra* note 18, at 26-27, 47-49 (providing examples of a child protection official treating an evaluating expert's opinion as conclusive); ROESLER & JENNY, *supra* note 12, at 138 (stating that in cases referred by the state for evaluation of possible abuse the doctors confined themselves to a medical records review in the absence of "a question about whether to reintegrate the child into a family previously deemed unsafe.").

this new subspecialty, in the words of Dr. Eli Newberger, a pediatrician who founded the child protection team at Boston Children's Hospital in 1970, but now acts as an expert witness on behalf of parents, "enormous and really unchecked power."¹³⁵

Parents suspected of MCA describe themselves as placed in a Kafkaesque situation. The fact that the child has a suspected or confirmed alternative diagnosis from another doctor does not negate a diagnosis of MCA.¹³⁶ Neither does the fact that some other doctor ordered the medical care deemed abusive, documented the medical reasons for it, or even still believes that the medical treatment that the child received was appropriate.¹³⁷ Instead, such doctors are deemed the unwitting dupes of the parent's deception.¹³⁸ Martin Guggenheim, a law professor at New York University, likens the situation of parents charged with MCA to that of women accused of witchcraft by "experts" in the seventeenth century: "If the expert declares that you're a witch, how in the world can you begin to prove that you're not?"¹³⁹ The comparison to witchcraft may be particularly apt given the MCA literature's description of the considerable powers that MCA mothers have to bend doctors to their will,¹⁴⁰ as well as the fact that it is almost universally women who are accused of masterminding MCA.¹⁴¹

¹³⁵ Swidey & Wen, *Medical Collision*, *supra* note 2 ("Newberger said he's seen a tendency for state child-welfare agencies to be 'overly credulous to hospitals' and for some child protection teams to show a 'reflexive willingness to label and to punish,' especially educated mothers who are perceived as being too pushy.")

¹³⁶ For examples of cases in which MCA charges were brought despite a child having a suspected or confirmed diagnoses from another doctor, see, e.g., Eichner, *supra* note 1 (Hilliard case); Swidey & Wen, *supra* note 11 (Pelletier case); Swidey, *supra* note 16 (quoting attorney for parents who argued at MCA hearing: "What we have is an argument within the medical community about whether infection can cause behavioral disorders and mental health issues . . . And Boston Children's Hospital is going to work that out on the backs of parents in your courtroom.").

¹³⁷ See sources cited *supra* note 136.

¹³⁸ See, e.g., Illinois Department of Children and Family, Procedures, May 3, 2012, App. L, at 6 ("The existence of one or more physicians who may actively support the suspected parent or who hold a unique medical theory about the child's condition that does not coincide with other physicians treating the family should not be reason to suspend investigative activities or determine there is no merit to suspicions of [MCA]. In many situations, parents who practice this form of abuse are effective at securing allies or finding doctors vulnerable to their deceptions or willing to entertain improbable theories rather than accepting the possibility of intentional deception.").

¹³⁹ Telephone interview with Martin Guggenheim, Fiorello LaGuardia Professor of Law, NYU School of Law (July 24, 2014).

¹⁴⁰ See, e.g., MICH. TASK FORCE REP., *supra* note 31, at 5 ("In many cases, parents who engage in this form of abuse are effective at rallying allies or locating one or more providers who are vulnerable to their deceptions rather than accepting the possibility

In court, the state's case centers on the medical expert's "diagnosis" of abuse, often premised on the view that the parent exaggerated the child's symptoms or misstated the child's medical history.¹⁴² The expert's testimony usually focuses on differences between the medical history recounted by the parent (as recorded in the child's medical records) and the doctors' findings in the medical records.¹⁴³ This is

of Medical Child Abuse."); *supra* note 81.

¹⁴¹ Viewing mothers as the instigator of abuse derives from MSBP literature, which profiled the perpetrator as the mother. See McClure et al., *supra* note 113, at 59 (identifying mother as sole perpetrator in 85% of cases), cited in 2013 AAP Report, *supra* note 29, at 592.

The link between MCA charges and the long history of gender stereotypes that have been invoked to impugn women's judgment and to restrict their autonomy merits significant further consideration. In the United States, this history dates back not only to the trials of witches, but also to the medical diagnosis of "hysteria," which was increasingly applied to women by medical doctors in the nineteenth century. See ELAINE SHOWALTER, *THE FEMALE MALADY: WOMEN, MADNESS, AND ENGLISH CULTURE, 1830-1980*, at 145-64 (1985). Medical child abuse charges also bear similarity to forced interventions involving pregnant women insofar as both construe the actions of mothers as inimical to the interests of their children, often with scant evidence to support such a conflict. See Lynn M. Paltrow & Jeanne Flavin, *The Policy and Politics of Reproductive Health Arrests of and Forced Interventions on Pregnant Women in the United States, 1973-2005: Implications for Women's Legal Status and Public Health*, J. HEALTH POL'Y, POL. & L. 299, 317-18 (2013) ("In cases where a harm was alleged (e.g., a stillbirth), we found numerous instances in which cases proceeded without any evidence, much less scientific evidence, establishing a causal link between the harm and the pregnant woman's alleged action or inaction.") The MCA movement's suspicion of mothers' judgment also resonates with abortion jurisprudence that questions women's motives in seeking abortions or asserts that they must be protected from making wrong choices. See *Gonzales v. Carhart*, 550 U.S. 124, 127 (2007) ("Whether to have an abortion requires a difficult and painful moral decision. . . . While we find no reliable data to measure the phenomenon, it seems unexceptionable to conclude some women come to regret their choice to choice to abort the infant life they once created and sustained. . . . The State has an interest in ensuring so grave a choice is well informed."); see also Reva B. Siegel, *The Right's Reasons: Constitutional Conflict and the Spread of Woman-Protective Antiabortion Argument*, 57 DUKE L.J. 1641, 1642-45 (2008).

¹⁴² See, e.g., *In re H.H.*, No. 4-12-1009, 2013 WL 968227 at *8 (Ill. App. Ct. Mar. 12, 2013); *In re Hope L.*, 775 N.W.2d 384, 403 (Neb. 2009); *In re Z.S.*, No. 25986, 2014 WL 4267478 (Ohio Ct. App. Aug. 29, 2014).

¹⁴³ See ROESLER & JENNY, *supra* note 12, at 177 ("The medical record review is the central feature of the [MCA] evaluation."); see, e.g., *Child Abuse Appeal of D.H.*, Sep. 29, 2015, *supra* note 18, at 51 (providing testimony of an expert detailing the differences between a doctor's and a parent's assessments of a child's condition); *Frank D. v. Ariz. Dept. of Econ. Sec.*, No. 1 CA-JV 11-0017, 2011 WL 3300669 (Ariz. Ct. App. Aug. 2, 2011), slip op at *5 (Norris, J. concurring) ("As the State's key witness on [factitious disorder by proxy] testified, the primary way to determine if the parents were subjecting the children to unnecessary treatments because of FDP is to search for a pattern of parental conduct in which the alleged symptoms based on

despite the fact that, outside of the MCA context, parents' accounts of their child's medical history, as well as medical records generally, have been shown to be rife with errors.¹⁴⁴ To bolster the case, experts sometimes testify that the parent's personality comports with the MCA behavioral profile.¹⁴⁵ That profile, which was borrowed from the MSBP context, has been disclaimed even by MCA proponents,¹⁴⁶ never been empirically proven to distinguish between abusive parents and other parents, and contains behavioral traits exhibited by many — probably, most — parents of genuinely ill children, including being unwilling to leave a sick child's bedside, wanting to seek out second opinions when a doctor tells them that their sick child is not sick, and being friendly and cooperative with medical personnel.¹⁴⁷

In deciding the case, courts often give these pediatricians' opinions more credence than those of the child's treating specialists or outside

parental reporting are not observed by other persons or the alleged disease is not responsible to appropriate treatment.”); *see also In re Z.S.*, 2014 WL 4267478 (pediatrician finds medical child abuse through medical records review of child without meeting parent).

¹⁴⁴ *See infra* notes 358–367 and accompanying text.

¹⁴⁵ *See, e.g., In re Joseph P.*, 2000 Conn. Super. LEXIS 984 (Apr. 14, 2000) (“Dr. Jenny did assist the court by describing how the events of March 2000, when coupled with other factors such as mother’s medical expertise as a licensed professional nurse, her desire to debate medicine with Michael’s doctors, Michael’s status as being chronically ill, and the fact that the father, as a long-distance trucker, was not in the home on a daily basis, all fit the profile of a Munchausen case.”); *In re K.T.*, 836 N.E.2d 769 (Ill. App. 2005) (“In addition, respondent was calm and unemotional while discussing claims of such catastrophic medical conditions in her children, which was highly characteristic of factitious disorder by proxy.”); *In re Anesia E.*, No. 03877/02, 2004 WL 1563337, at *44 (N.Y. Fam. Ct. July 9, 2004) (“factors commonly found in case histories of parents, usually mothers, diagnosed with MSP include: . . . the mother’s training in nursing or related medical fields; . . . the mother’s unusually supportive and cooperative attitude toward medical personnel; and . . . the mother’s symbiotic relationship to the child.”); *see also In re Aaron S.*, 625 N.Y.S.2d 786 (N.Y. Fam. Ct. 1993) (describing a prototypical Munchausen’s mother as “articulate and bright, and possesses a high degree of medical knowledge and/or fascination with medical details and hospital gossip, and seems to enjoy the hospital environment. Normally the mother seems . . . encouraging of the physician and medical staff. She is a highly attendant parent who is reluctant to leave her child’s side . . .”), *aff’d, In re Suffolk Cty. Dept. of Social Servs.*, 626 N.Y.S.2d 227 (N.Y. App. Div. 1995).

¹⁴⁶ *See ROESLER & JENNY, supra* note 12, at 32-33 (“[I]dentifying potential perpetrators form such a profile would be essentially impossible.”); Isaac & Roesler, *supra* note 63, at 300 (making similar claim).

¹⁴⁷ *See infra* notes 402–422 and accompanying text. For one psychological profile list, *see, e.g., MICH. TASK FORCE REP., supra* note 31, at 3. For an excellent critique of the profile in the MSBP context, *see MART, supra* note 37, at 48-57.

experts, on the ground that they are experienced at detecting abuse.¹⁴⁸ In addition, courts often treat claims of MCA as if they are equivalent to claims of MSBP, despite the fact that MCA requires no proof of psychopathology on the part of the parent and few cases present any strong evidence of the sort.¹⁴⁹

From the judge's perspective, on hearing that the state's medical expert believes the parent is a serious risk to the child's safety, the far smaller risk is to put the child into state custody.¹⁵⁰ Ultimately, some parents have their parental rights terminated completely as a result of these charges.¹⁵¹ Other parents retain custody either by agreeing to outside supervision of their medical decisions for the child or by having such supervision imposed on them.¹⁵² Still others eventually have such charges dismissed, but only after months of separation from their children, and, they report, harm resulting from changes to the child's medical care in the interim.¹⁵³

II. BAD CONSTITUTIONAL DOCTRINE: MEDICAL CHILD ABUSE CHARGES AND PARENTS' CONSTITUTIONAL RIGHTS

Parents' interest in the care, custody, and control of their children is among the most venerable of the liberty interests protected by the Constitution. The Supreme Court has described the right to raise one's children by one's own lights rather than the government's as "essential,"¹⁵⁴ one of the "basic civil rights of man,"¹⁵⁵ and "far more

¹⁴⁸ See, e.g., *In re Adoption of Keefe*, 733 N.E.2d 1075, 1079 (Mass. App. Ct. 2000).

¹⁴⁹ See, e.g., *In re McCabe*, 580 S.E.2d 69, 71 (N.C. App. 2003) (child diagnosed with MSBP by child abuse pediatricians despite absence of mental health professional proof or any strong evidence to suggest such issues); *In re Z.S.*, No. 25986, 2014 WL 4267478 at ¶¶ 2–3 (Ohio Ct. App. Aug. 29, 2014) (pediatrician diagnoses MCA, presented as the same diagnosis as MSBP despite having no mental health qualifications and never having examined mother); *Dep't of Human Services v. N.B.*, 323 P.3d 479, 480 (Or. App. 2014) ("caretakers of children who are diagnosed with medical child abuse often have significant mental illness themselves").

¹⁵⁰ See, e.g., *In re Z.S.*, 2014 WL 4267478 at ¶16.

¹⁵¹ See, e.g., *In re A.J.B.*, No. 12-0071, 2012 WL 1066483 (Iowa Dist. Ct. Mar. 28, 2012).

¹⁵² This was the case in a lawsuit filed by two Massachusetts parents against the Massachusetts Department of Children and Families for violations of their parental rights. See Memorandum of Law *ex rel.* 7 (July 17, 2014), Karen T. & Robert T. Sr. v. Deveney, Civ. Action 1:14-cv-12307 (D. Mass. 2014), (state requires parents to identify a new pediatrician to oversee child's care, and later intervenes to recommend that the parents take the child to psychological counseling).

¹⁵³ This was the case for Justina Pelletier's family. See *supra* note 11 and accompanying text.

¹⁵⁴ See *Meyer v. Nebraska*, 262 U.S. 390, 399 (1923).

precious . . . than property rights.”¹⁵⁶ This constitutional guarantee rests upon the nation’s “strong tradition of parental concern for the nurture and upbringing of their children.”¹⁵⁷

Yet the scope of MCA was deliberately framed as expansive,¹⁵⁸ and takes no account of parents’ constitutional rights to make decisions for their children. In place of parents’ rights to choose which physician and medical care plan they believe best serves the interests of their child, the MCA standard substitutes the charging physician’s judgment. While courts have justified state intervention in MCA based on the state’s obligation to protect children from abuse, the broad and vague standards delineated by MCA’s framers encompass many cases that lack the compelling circumstances constitutionally necessary to justify such intervention. State interference in the child’s medical care in these cases constitutes a gross violation of parents’ fundamental rights. It also disserves the interests of children, which, our constitutional system recognizes, are best served by allowing their parents the discretion to make such choices.

A. *Parents’ Constitutional Right to Make Health Care Decisions for Their Children*

The Supreme Court has zealously guarded parents’ constitutional rights to make decisions for their children for almost a century. In the 1923 case of *Meyer v. Nebraska*, and again in *Pierce v. Society of Sisters* two years later, the Court overturned state statutes on the ground that they “unreasonably interfere[d] with the liberty of parents . . . to direct the upbringing and education of [their] children.”¹⁵⁹ In the Court’s words, “[t]he fundamental theory of liberty . . . excludes any general power of the state to standardize its children. . . . The child is not the mere creature of the state; those who nurture him and direct his destiny have the right, coupled with the high duty, to recognize and prepare him for additional obligations.”¹⁶⁰ A generation later, the Court stated again that “[i]t is cardinal with us that the custody, care and nurture of the child reside first in the parents.”¹⁶¹

¹⁵⁵ *Skinner v. Oklahoma*, 316 U.S. 535, 541 (1942).

¹⁵⁶ *May v. Anderson*, 345 U.S. 528, 533 (1953).

¹⁵⁷ *Wisconsin v. Yoder*, 406 U.S. 205, 232 (1972).

¹⁵⁸ See *supra* notes 58–64 and accompanying text.

¹⁵⁹ *Pierce v. Soc’y of Sisters*, 268 U.S. 510, 534 (1925).

¹⁶⁰ *Id.* at 535.

¹⁶¹ *Prince v. Massachusetts*, 321 U.S. 158, 166 (1944).

The Supreme Court more recently reaffirmed parents' decision-making rights for their children in the case of *Troxel v. Granville*.¹⁶² In it, the Court struck down a Washington State statute that a trial court had relied on to grant grandparents visitation with their grandchildren over the mother's objection. That statute, the Court held, unconstitutionally failed to give significant weight to a fit parent's own views of his or her children's interests. It therefore violated the presumption inscribed in American law that fit parents act in their children's best interests.¹⁶³ In Justice O'Connor's words, "so long as a parent adequately cares for his or her children (*i.e.*, is fit), there will normally be no reason for the State to inject itself into the private realm of the family to further question the ability of that parent to make the best decisions concerning the rearing of that parent's children."¹⁶⁴ In words that have great import when applied to the MCA issue, the Court stated, "the Due Process Clause does not permit a State to infringe on the fundamental right of parents to make childrearing decisions simply because a state judge believes a 'better' decision could be made."¹⁶⁵

The Court has made clear that parents' constitutionally protected authority over their children includes the right to make decisions regarding health care.¹⁶⁶ Further, the presumption that fit parents act in the best interests of their children also extends to medical decision making.¹⁶⁷ Parents' right to determine medical care is not, of course, absolute.¹⁶⁸ Laws in every state prohibit abuse and neglect of children and allow government intervention to enforce these prohibitions. To the extent that parental decisions regarding health care fall within these prohibitions, government intervention is permitted.¹⁶⁹ Yet, as Professor Joseph Goldstein noted decades ago, the boundary between parents' medical decision-making rights and the state's right to intervene based on dependency law is one vulnerable to incursion.¹⁷⁰

¹⁶² *Troxel v. Granville*, 530 U.S. 57, 57 (2000).

¹⁶³ *Id.* at 58.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* at 72-73.

¹⁶⁶ *Parham v. J.R.*, 442 U.S. 584, 602 (1977).

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ See *Newmark v. Williams*, 588 A.2d 1108, 1110 (Del. 1991); *Custody of a Minor*, 393 N.E. 836, 843 (Mass. 1979); *In re Application of L.I. Jewish Med. Ctr.*, 557 N.Y.S.2d 239, 243 (N.Y. Sup. Ct. 1990); *In re Willmann*, 493 N.E.2d 1380, 1388-89 (Ohio 1986).

¹⁷⁰ See *supra* notes 25-26 and accompanying text.

Accordingly, parents' rights require careful protection in abuse and neglect cases to ensure that they are not eroded by the state.

Until MCA was conceptualized, the only cases that had tested the line between parents' decision making authority and the state's right to intervene to protect children were medical neglect cases. In these cases, doctors asserted that parents were depriving children of appropriate treatment — in other words, undertreating them, in contrast to the MCA cases' assertions of overtreatment. To protect parents' rights in these medical neglect cases, courts carefully drew the line circumscribing state intervention at a place that supported parents' decision-making rights while still protecting children's wellbeing.

The limits that courts imposed on government intervention in medical neglect cases are instructive in the MCA context. To safeguard parents' decision-making rights, courts have declared that “[s]tate intervention is justifiable only under compelling conditions.”¹⁷¹ While different courts have phrased the legal tests to ascertain the presence of such compelling conditions in slightly different ways, at their core, they authorize intervention only when three circumstances are present. First, the state's preferred course of treatment must be compelling in the sense that all the child's medical doctors agree that it is the correct one.¹⁷² Second, the state's preferred course of treatment must be both likely to result in great benefit and to pose few countervailing risks to the child.¹⁷³ Third, the threat to the child's health from forgoing the treatment must be significant.¹⁷⁴ Under these standards, for example, courts generally authorize blood transfusions when doctors agree that a child's life is at stake but the parent refuses such treatment based on religious reasons.¹⁷⁵ Likewise, courts will

¹⁷¹ *Newmark*, 588 A.2d at 1117.

¹⁷² See, e.g., *In re Storar*, 420 N.E.2d 64, 73 (N.Y. 1981); *In re Hofbauer*, 393 N.E.2d 1009, 1014 (N.Y. 1979); *Custody of a Minor*, 393 N.E. at 843.

¹⁷³ See *Newmark*, 588 A.2d at 1117-18; Goldstein, *supra* note 25, at 653; see also *In re Burns*, 519 A.2d 638, 645 (Del. 1986).

¹⁷⁴ See, e.g., *In re D.L.E.*, 645 P.2d 271, 275-77 (Colo. 1982) (en banc) (permitting state to intervene where minor has a life threatening medical condition); *Muhlenberg Hosp. v. Patterson*, 320 A.2d 518, 521 (N.J. Super. Ct. Law Div. 1974) (allowing state intervention “where treatment is necessary for the sustaining of life or the prevention of grievous bodily injury”); *In re Green*, 292 A.2d 387, 390-93 (Pa. 1972) (the state may intervene only if the child's life is immediately imperiled by his physical condition).

¹⁷⁵ See, e.g., *In re Pogue*, No. M-18-74 (D.C. Super. Ct. Nov. 11, 1974); *People ex rel. Wallace v. Labrenz*, 104 N.E.2d 769 (Ill. 1952); *In re Guardianship of L.S. & H.S.*, 87 P.3d 521 (Nev. 2004); *John F. Kennedy Mem'l Hosp. v. Heston*, 279 A.2d 670 (N.J. 1971); *In re Cabrera*, 552 A.2d 1114 (Pa. Super. Ct. 1989); *Jehovah's Witnesses v.*

override the decision of a parent who refuses clearly-warranted medical treatment for no good reason when death is the likely consequence.¹⁷⁶

By contrast, courts refuse intervention when physicians disagree among themselves. For example, in the case of *In re Hofbauer*, the New York Court of Appeals refused to declare a child with Hodgkin's disease a neglected child although his parents declined the standard treatment of radiation and chemotherapy, instead placing him on nutritional therapy and injections of laetrile.¹⁷⁷ Despite the unconventionality of the parent's preferred treatment, the Court held that the decision was within the parents' rights since a licensed physician was administering their chosen treatment.¹⁷⁸ According to the Court, "great deference must be accorded a parent's choice as to the mode of medical treatment to be undertaken and the physician selected to administer the same."¹⁷⁹ The Court continued:

[T]he most significant factor in determining whether a child is being deprived of adequate medical care, and, thus, a neglected child within the meaning of that statute, is whether the parents have provided an acceptable course of medical treatment for their child in light of all the surrounding circumstances. This inquiry cannot be posed in terms of whether the parent has made a "right" or "wrong" decision, for the present state of the practice of medicine, despite its vast advances, very seldom permits such definitive conclusions. Nor can a court assume the role of a surrogate parent and establish as the objective criteria with which to evaluate a parent's decision its own judgment as to the exact method or degree of medical treatment which should be provided, for such standard is fraught with subjectivity. Rather, in our view, the court's inquiry should be whether the parents . . . have provided for their child a treatment which is recommended by

King Cty. Hosp. Unit No. 1, 278 F. Supp. 488 (W.D. Wash. 1967), *aff'd per curiam*, 390 U.S. 598 (1968).

¹⁷⁶ See, e.g., *In re Vasko*, 263 N.Y.S. 552 (N.Y. App. Div. 1933) (affirming operation to remove child's eye with likely-malignant growth over parents' lack of consent where child would likely die without the operation).

¹⁷⁷ *In re Hofbauer*, 393 N.E. 2d at 1015.

¹⁷⁸ *Id.* at 1014.

¹⁷⁹ *Id.* at 1013.

their physician and which has not been totally rejected by all responsible medical authority.¹⁸⁰

The reason for the rule requiring agreement among doctors is straightforward. In Professor Goldstein's words:

No one has a greater right or responsibility and no one can be presumed to be in a better position, and thus better equipped, than a child's parents to decide what course to pursue if the medical experts cannot agree. . . . Put somewhat more starkly, how can parents in such situations give the wrong answer since there is no way of knowing the right answer? In these circumstances, the law's guarantee of freedom of belief becomes meaningful and the right to act on that belief as an autonomous parent becomes operative within the privacy of one's family.¹⁸¹

By the same token, Massachusetts' highest court authorized state intervention to administer chemotherapy for a child's cancer only because all the child's doctors agreed to the treatment.¹⁸² In the Courts words, "[u]nder our free and constitutional government, it is only under serious provocation that we permit interference by the State with parental rights. That provocation is clear here."¹⁸³

On the same rationale, courts refuse to intervene in medical neglect cases when the state's proposed course of treatment presents significant risks to a child or lacks a high chance of success, even where a child's life is threatened by the absence of this treatment. For example, the Supreme Court of Delaware refused to order that a child receive a novel form of chemotherapy because the "proposed medical treatment was highly invasive, painful, involved terrible temporary and potentially permanent side effects, posed an unacceptably low [forty percent] chance of success, and a high risk that the treatment itself would cause his death."¹⁸⁴ These factors, the Court held, undercut the compelling conditions necessary to "outweigh the

¹⁸⁰ *Id.* at 1014; see also *In re Storar*, 420 N.E.2d 64, 73 (N.Y. 1981) ("Of course it is not for the courts to determine the most 'effective' treatment when the parents have chosen among reasonable alternatives."); *id.* at 69 n.3 ("[A]s a matter of public policy a medical facility generally has no responsibility or right to supervise or interfere with the course of treatments recommended by the patient's private physician, even when the patient is incapable of consent due to age.").

¹⁸¹ Goldstein, *supra* note 25, at 655.

¹⁸² See *Custody of a Minor*, 393 N.E. 836, 846 (Mass. 1979).

¹⁸³ *Id.*

¹⁸⁴ *Newmark v. Williams*, 588 A.2d 1108, 1118 (Del. 1991).

[parents'] parental prerogative."¹⁸⁵ Concomitantly, courts that have authorized medical treatment over a parent's objection have noted that intervention would be inappropriate if the treatment was inherently dangerous or invasive, or reasonable persons could disagree about whether the child's life after the intervention would be worth living.¹⁸⁶

B. *The Broad Definition of Medical Child Abuse and Parents' Constitutional Rights*

The broad definition of MCA developed by its physician inventors undercuts the careful balance between parent and state that courts have constructed in medical neglect cases. That definition, by allowing a physician to designate abuse any time he or she believes that a parent has instigated unnecessary, potentially risky medical treatments,¹⁸⁷ gives no deference whatsoever to parental decision making. Under it, a doctor can designate abuse almost any time he or she disagrees with the choice a parent makes regarding medical treatment, even where some other doctor ordered the treatment and, in many cases, still supports it. Likewise, that definition does not exclude situations in which the benefits and risks of particular treatments are unclear, or in which the doctor and the parent weigh these pluses and minuses differently. Yet basing state intervention on a standard that accords broad deference to the physician's judgments and none to parents' violates our constitutional scheme. In the words of one judge properly concerned about this issue in an MCA case, to be sufficient to establish abuse:

the conflict in evidence before the trial court has to be more than physicians disagreeing over whether the prior diagnoses of and treatment plans for the children were correct. Rather, the conflict must be whether those diagnoses and treatment

¹⁸⁵ *Id.* at 1119; *see also In re Phillip B.*, 156 Cal. Rptr. 48, 52 (Ct. App. 1979) (refusing state's request to repair child's heart defect over parents' objection based on the risks posed by the surgery).

¹⁸⁶ *See, e.g., People ex rel. Wallace v. Labrenz*, 104 N.E.2d 769, 773 (Ill. 1952) (noting the low risk associated with blood transfusion). *Muhlenberg Hosp. v. Patterson*, 320 A.2d 518, 521 (N.J. Super. Ct. Law Div. 1974) (stating "if the disputed procedure involved a significant danger to the infant, the parents' wishes would be respected"); *State v. Perricone*, 181 A.2d 751, 760 (N.J. 1962) (declaring parents would have a strong argument that they should make the decision if "there were substantial evidence that the treatment itself posed a significant danger to the infant's life").

¹⁸⁷ *See ROESLER & JENNY, supra* note 12, at 43 ("Medical child abuse occurs when a child receives unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker.").

plans in part were based on voluntary misreporting of symptoms by parents to meet their own psychological needs.¹⁸⁸

The state's intervention in Justina Pelletier's MCA case, described in the introduction,¹⁸⁹ demonstrates such a breach of parents' constitutional rights. In that case, the state intervened based on the parents accepting the Tufts' doctors' diagnosis of mitochondrial disease over the BCH doctors' diagnosis of psychological illness. When doctors disagree, however, it is properly the role of parents, not the state, to make these tough medical decisions on behalf of their children.¹⁹⁰ Furthermore, as fit parents, the Pelletiers' decision was entitled to the presumption that it serves the child's best interests.¹⁹¹ Recall the words of the New York Court of Appeals in *Hofbauer* that the state may not "assume the role of a surrogate parent and establish as the objective criteria with which to evaluate a parent's decision its own judgment as to the exact method or degree of medical treatment which should be provided, for such standard is fraught with subjectivity."¹⁹² The state's forcible intrusion into the Pelletiers' decision-making, and its taking sides on which doctor's opinion to accept, placed the state in precisely the role of surrogate parent forbidden by the Constitution.

Indeed, the Pelletier case shows exactly why such governmental intervention generally disserves the best interests of children, even if state officials act with the best of intentions. When two sets of physicians fundamentally disagree about diagnosis and treatment, the decision maker best positioned to resolve the conflict is generally not a court or child protection official who has spent little to no time with the child. Instead, it is the parent who knows the child best, is most motivated to ensure their welfare, and who has seen the child's medical issues develop over time. In Justina's case, in the face of diametrically conflicting medical opinions, the best decision makers were her parents.

¹⁸⁸ Frank D. v. Ariz. Dep't of Econ. Sec., No. 1 CA-JV 11-0017, 2011 WL 3300669 at *5 (Ariz. Ct. App. Aug. 2, 2011) (Norris, J. concurring).

¹⁸⁹ See *supra* notes 2–11 and accompanying text.

¹⁹⁰ See *Custody of a Minor*, 393 N.E. 836, 846 (Mass. 1979);); *In re Storar*, 420 N.E.2d 64, 73 (N.Y. 1981); *In re Hofbauer*, 393 N.E.2d 1009, 1013 (N.Y. 1979); Goldstein, *supra* note 25, at 652 (state may overcome presumption of parental autonomy in health-care matters only when "the medical profession is in agreement about what non-experimental medical treatment is right for the child . . .").

¹⁹¹ See *Troxel v. Granville*, 530 U.S. 57, 69 (2000).

¹⁹² *In re Hofbauer*, 393 N.E.2d at 1014.

While proponents of the MCA theory use the fact that a few parents have intentionally used the medical system to abuse children in order to cast suspicion on all parents who disagree with a doctor's care plan, this rare abuse does not justify the wholesale scrutiny of medical decisions by parents of children with complex medical issues. As the Supreme Court recognized, "[t]hat some parents 'may at times be acting against the interests of their children' creates a basis for caution, but is hardly a reason to discard wholesale those pages of human experience that teach that parents generally do act in the child's best interests."¹⁹³ Further, "[s]imply because the decision of a parent . . . involves risks does not automatically transfer the power to make that decision from the parents to some agency or officer of the state."¹⁹⁴ The failure of the MCA theory to accord appropriate deference to parents' decisions regarding their children's medical care renders it unconstitutional and bars its use in court.

III. BAD LAW: THE MEDICAL CHILD ABUSE "DIAGNOSIS" AND PARENTS' RIGHT TO A FAIR TRIAL

Even apart from the constitutional infringement on parents' decision-making, courts that accept the MCA theory violate parents' rights to a fair trial when they allow medical experts to testify to their "diagnosis" of MCA. Opinion testimony by experts has long generated controversy because of "the crucial and often determinative weight an expert's opinion may carry."¹⁹⁵ Because of this, courts have carefully sought to cabin the testimony of experts to the area within their legitimate expertise. Accepting MCA as a medical "diagnosis" to which medical experts may testify, as I show in this section, makes an end run around these carefully constructed limitations by turning what is properly a legal determination — whether a parent has committed child abuse — into a diagnostic decision (that a child "has MCA") supposedly within the realm of a physician's diagnostic expertise.

In conceptualizing MCA, its framers took three separate, albeit related, inquiries and lumped them together into a larger inquiry that they pronounced a single new diagnosis.¹⁹⁶ First, the child's genuine underlying medical diagnoses must be determined. Second, it must be decided whether, given these genuine medical conditions, the child

¹⁹³ Parham v. J.R., 442 U.S. 584, 602-603 (1977) (citations omitted).

¹⁹⁴ *Id.* at 603.

¹⁹⁵ People v. Bowker, 249 Cal. Rptr. 886, 890 (Ct. App. 1998).

¹⁹⁶ See, e.g., MICH. TASK FORCE REP., *supra* note 31, at 1 ("Medical Child Abuse is a diagnosis recognized and supported by the American Academy of Pediatrics.").

has received unnecessary, potentially risky medical care. Third, and finally, it must be determined whether, given the first and second inquiries, the parent's actions rise to the level that she should be held responsible for (in MCA terminology, be deemed to have "instigated") the unnecessary medical care.¹⁹⁷ Although MCA proponents treat these three determinations as together comprising the "diagnostic" determination for MCA, in truth, only the first inquiry — which medical diagnoses a child genuinely possesses — constitutes a diagnostic determination. The second inquiry — whether the child has received unnecessary, potentially risky medical care — although not properly a diagnostic determination, is still within the proper expertise of a medical expert's testimony. In fact, this second inquiry is quite similar to that performed by experts in medical malpractice cases.¹⁹⁸

However, it is the third and ultimate inquiry — whether the parent seeking medical care committed "medical child abuse" by "instigating" the medical care — that is the subject of this Part. This third inquiry, in which the doctor "diagnoses" MCA, this Part shows, allows doctors to pronounce as a medical expert what is properly a legal determination. In doing so, this "diagnosis" undermines the parent's right to a fair legal proceeding for three separate reasons. First, section A shows that the third inquiry exceeds the proper province of a diagnosis by going beyond the internal cause of a child's condition to point blame at the parent. Second, section B demonstrates that even if MCA were a proper medical diagnosis, a medical expert would still be prohibited from testifying to its presence in a child abuse proceeding since whether the parent has committed child abuse is the ultimate issue before the court. This section also shows that a physician's diagnosis of MCA at trial is particularly problematic because the medical standards used by doctors to "diagnose" MCA are far less strict than the legal definitions of abuse. Third, and finally, section C explains how admitting evidence of a "diagnosis" of MCA functions the same way in trial as does admitting personality profile evidence, and should be banned for the same reasons that courts ban such profile evidence.

¹⁹⁷ The 2013 AAP Report recognizes that these determinations are lumped together into the diagnostic determination, although it frames them slightly differently: "1. Are the history, signs, and symptoms of disease credible? 2. Is the child receiving unnecessary and harmful or potentially harmful medical care? 3. If so, who is instigating the evaluations and treatment?" 2013 AAP Report, *supra* note 29, at 593-94.

¹⁹⁸ See generally 2 STEVEN E. PEGALIS, AMERICAN LAW OF MEDICAL MALPRACTICE § 8:1 (3d ed.2016) ("Expert testimony is almost always required in the medical malpractice case to establish the departure from the standard of care and causation.").

A. *Child Abuse as a Legal Decision Rather than a Diagnostic Determination*

Although courts have treated MCA as a medical diagnosis within a physician's competence, as this section shows, the MCA inquiry exceeds the proper scope of a diagnostic inquiry in two ways. First, insofar as the third MCA inquiry seeks to determine whether the parent "instigated" the child's overtreatment, that inquiry is not a search for a diagnostic cause, which seeks the underlying, internal physical or psychological source of a patient's symptoms; it is instead a search for an etiological cause, which identifies a factor deemed responsible for the condition that is external to the patient. Second, although MCA "diagnoses" the parent as abusive, courts have made clear that the diagnosis of a medical condition does not properly include an identification of the perpetrator being tried. Each of these issues will be addressed in turn.

1. *Differential Diagnosis Versus Differential Etiology*

In incorporating a determination of whether the parent "instigated" the child's overtreatment — the third inquiry in the MCA diagnosis — MCA exceeds the proper scope of a medical diagnosis. This is because the diagnostic inquiry in which physicians are trained involves a search for a particular kind of cause. That diagnostic process consists of using the patient's "signs" (objective phenomena) and "symptoms" (subjective phenomena) to determine systematically whether and which abnormal underlying condition or disease the patient has.¹⁹⁹ To take a simple example of a differential diagnosis, when a patient presents with a sore throat, the doctor may investigate whether the symptoms are caused by the bacteria associated with strep throat or, alternatively, by a cold virus. To do so, the doctor will use signs and symptoms like the patient's temperature, swollen lymph glands, and presence or absence of a cough, to make an informed judgment — a "diagnosis" — regarding which of these conditions the patient likely has.²⁰⁰

¹⁹⁹ "Differential diagnosis" is the process used by physicians to identify and isolate the medical diseases or conditions from which a patient is suffering. DORLAND'S ILLUSTRATED MEDICAL DICTIONARY 514 (31st ed. 2007). In the words of Richard Rogers, an expert in diagnostic and clinical assessment, "The *sine qua non* of diagnosis is measurable and reliable differences in signs and symptoms." Rogers, *supra* note 40, at 228.

²⁰⁰ One diagnostic protocol for strep indicates, for example, that most sore throats result from a viral infection, rather than the bacterial infection of strep, and then quantifies the percentage of strep cases of all sore throat cases. See Beth A. Choby, *Diagnosis and Treatment of Streptococcal Pharyngitis*, 79 AM. FAM. PHYSICIAN 383 (2009) ("Group A beta-hemolytic streptococcus (GABHS), the most common bacterial

This type of diagnostic determination certainly occurs in the first part of the MCA inquiry, when the physician uses the child's signs and symptoms to determine which, if any, genuine diseases or conditions the child truly has.²⁰¹ Yet courts have also allowed MCA-charge proponents to treat the third part of the inquiry — regarding whether the parent should be held responsible for “instigating” the treatment — as part of the diagnostic process, and therefore allowed testimony on this issue based on the physician's supposed diagnostic expertise.²⁰² In truth, however, this third inquiry requires a very different process from the internal causation identified by the differential diagnostic process because it focuses on factors external to the child.²⁰³

Medical experts and courts differentiate between internal and external explanations for causation by distinguishing between inquiries involving “differential diagnosis” and “differential etiology.”²⁰⁴ As stated by Dr. Ronald Gots, both types of inquiries

etiology, accounts for 15 to 30 percent of cases of acute pharyngitis in children and 5 to 20 percent in adults.”). The diagnostic protocol then specifies which diagnostic signs and symptoms, such as headache, fever, swollen glands, and which laboratory tests, indicate the presence of the bacteria associated with strep, how strong these indicators are, and how often these signs and symptoms are associated with false positive or false negative diagnoses. *Id.* at 383-84.

²⁰¹ See *supra* notes 197–98 and accompanying text.

²⁰² See, e.g., *Dep't of Human Services v. N.B.*, 323 P.3d 479 (Or. App. 2014 (upholding finding of child abuse based on pediatrician's expert testimony that he had “diagnosed L as suffering from medical child abuse[,] . . . a diagnosis adopted relatively recently by the American Academy of Pediatrics [The expert] had previously diagnosed each of mother's four older children with medical child abuse”).

²⁰³ Indeed, in transitioning from MSBP to the concept of MCA, Dr. Jenny and Dr. Roesler specifically sought to dismiss the idea that MCA depends on some underlying medical or psychological condition to be diagnosed in the child, in the way that MSBP was believed to have been a diagnosable psychological disorder in the parent. Instead, they argued, doctors should give up the search for an internal condition, and simply identify what happened to the child as child abuse. In response to the question of whether the behavior at the root of the MCA diagnosis is really a syndrome, they answered, “No. The behavior commonly called MSBP is a form of child abuse that takes place in a medical setting. Child abuse is not an illness or a syndrome in the traditional sense but an event that happens in the life of the child.” See, e.g., ROESLER & JENNY, *supra* note 12, at 54.

²⁰⁴ See *Bowers v. Norfolk S. Corp.*, 537 F. Supp. 2d 1343, 1360 (M.D. Ga. 2007), *aff'd*, 300 F. App'x 700 (11th Cir. 2008) (“The distinction is more than semantic; it involves an important difference.”); *New Mexico v. Consaul*, 332 P.3d 850, 863 (N.M. 2014) (Differential etiology is “a process that identifies a list of external agents . . . that potentially caused the disease.”). Deborah Tuerkheimer's *Flawed Convictions* contains an excellent analysis of this distinction. See DEBORAH TUERKHEIMER, *FLAWED CONVICTIONS: “SHAKEN BABY SYNDROME” AND THE INERTIA OF INJUSTICE* 75-82 (2014).

“seek to uncover causes, but of very different things.”²⁰⁵ Differential diagnosis seeks to identify “the internal disease or process which produces or causes the patient’s symptoms or findings;” meanwhile differential etiology “describes the investigation and reasoning that leads to the determination of external causation.”²⁰⁶ As the New Mexico Supreme Court observed,

the process whereby doctors attempt to determine the external, nonmedical cause of the injury, [is] a legal [rather than a medical] construct called differential etiology. . . . Importantly, “physicians receive more formal training in differential diagnosis than in differential etiology. . . . [P]racticizing physicians have more experience working with the differential diagnosis technique, since in many cases the cause of an illness is irrelevant to the patient’s treatment.” Our Court of Appeals has further acknowledged that “in many cases, including toxic tort cases . . . the determination of the external cause of a patient’s disease is a complex process that is unrelated to diagnosis and treatment, and which requires specialized scientific knowledge regarding the external agents involved.”²⁰⁷

The third inquiry in the MCA determination, by focusing on whether the parent should be held responsible for the child’s excessive medical care, is an etiological determination rather than a diagnostic determination, and must therefore be removed from the diagnostic assessment. While expert opinions on etiology are sometimes admissible even if they are not accorded as much deference as diagnostic opinions,²⁰⁸ the particular etiological determination involved in MCA is inadmissible both because it “diagnoses” the parent as abusive, and because the assessment that the parent is legally culpable is the ultimate issue in a child abuse proceeding.

²⁰⁵ Ronald E. Gots et al., *Differential Diagnosis Versus Causation Assessment: Why They Are Separate Methodologies and How They Relate to Daubert*, INT’L CTR. FOR TOXICOLOGY & MED. (last visited Nov. 14, 2015, 9:37 PM), http://www.ictm.com/Reports/ereport_Vol2No6.pdf.

²⁰⁶ *McClain v. Metabolife Int’l, Inc.*, 401 F.3d 1233, 1252 (11th Cir. 2005) (citing *Mary Sue Henifin et al.*, FED. JUDICIAL CTR., *Reference Guide on Medical Testimony*, in REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 439, 481 (2d ed. 2000)).

²⁰⁷ *Consaul*, 332 P.3d at 863.

²⁰⁸ As one district judge put it, when it comes to doctors’ determinations, “[t]he differential diagnosis method has an inherent reliability; the differential etiology method does not.” *Bowers*, 537 F. Supp. 2d at 1361.

2. “Diagnosing” the Parent as Abusive

MCA differs from other medical diagnoses not only because it represents a conclusion regarding etiological rather than medical cause, but also because this conclusion explicitly identifies the parent as the perpetrator responsible for the child’s condition.²⁰⁹ In other contexts, courts have appropriately rejected attempts to use the diagnostic process to cast blame on particular persons. Using a diagnosis to identify a particular perpetrator, these courts have held, exceeds a medical or psychological expert’s province, and in fact encroaches on the province of the finder of fact. Courts should bar MCA diagnoses for the same reasons.

For example, courts have rejected attempts by child abuse experts to use their diagnoses of abuse to cast blame on a particular person in cases of sexual abuse. In the words of one court, “it is the specific identification of defendant as perpetrator which crosses over the line into impermissible testimony.”²¹⁰ While an expert can appropriately diagnose the child’s condition, these courts have announced, determining *who* is responsible for the abuse is an issue within the court’s province rather than an expert’s.²¹¹ As the North Carolina Court of Appeals put it, the expert “was in no better position than the jury to determine whether defendant was the perpetrator.”²¹²

Furthermore, one court has already extended this rule to child abuse proceedings in which MSBP is asserted. The Ohio Court of Appeals reversed a mother’s conviction for poisoning her son, based on medical experts’ testimony, not simply diagnosing the mother as having MSBP, but also testifying that the diagnosis caused the mother to administer the poison. In the court’s words:

²⁰⁹ See ROESLER & JENNY, *supra* note 12, at 43 (“Medical child abuse occurs when a child receives unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker.”).

²¹⁰ State v. Streater, 678 S.E.2d 367, 374 (N.C. Ct. App. 2009).

²¹¹ See, e.g., *In re Rebecca*, 643 N.E.2d 26, 35 (Mass. 1994) (“[Expert] testimony identifying the persons who had abused the twins, and opining that their mother had been present, amounted in essence to testimony that he believed the statements made to him by the twins, and was equally inadmissible.”); State v. Alberico, 861 P.2d 192, 211 (N.M. 1993) (“Although a psychologist can independently evaluate the victim’s allegations of sexual abuse by cross-checking her symptoms with those recognized in DSM III–R, there appears to be no similar verification for identifying the alleged abuser.”); State v. Bush, 595 S.E.2d 715, 719 (N.C. Ct. App. 2004) (“[T]he testimony of Dr. Russo in this case was of greater prejudicial impact than that in *Stancil*, as she concluded, based upon her credibility assessment of PB’s story, that it was defendant who had sexually abused PB.”);

²¹² State v. Figured, 446 S.E.2d 838, 842 (N.C. Ct. App. 1994).

The testimony . . . went beyond testimony concerning the nature of Munchausen syndrome by proxy and opinion testimony as to whether TM was a victim of that abuse. Dr. Tracy Karolyi, Dr. Carmen Weeber-Morse, and Dr. Elaine Pomeranz each testified to an opinion that appellant caused TM's medical condition or, more directly, to an opinion that appellant poisoned TM. . . . In our view a jury is capable of undertaking such an analysis and making a determination of who, if anyone, gave TM ipecac on its own without the aid of expert testimony.²¹³

The decisions in these cases allow expert witnesses to testify regarding the sexual abuse diagnosis but do not allow the witness to identify the perpetrator. In MCA cases, however, the MCA diagnosis itself incorporates identification of the perpetrator as the child's parent. Guaranteeing the parent a fair trial therefore requires barring the MCA diagnosis completely.

Not only is expert testimony diagnosing MCA inadmissible because it "diagnoses" the parent as at fault, it is also inadmissible because the MCA diagnosis turns on the medical expert's assessment of credibility rather than on medical expertise. Courts have rejected diagnoses of sexual abuse when they are premised on the physician's assessment of the credibility of the involved parties, rather than on physical evidence from the examination.²¹⁴ For example, the Supreme Court of South Dakota reversed a conviction for sex abuse that turned on a medical expert's assessment of the child's credibility, stating that experts

²¹³ *State v. Weaver*, 898 N.E.2d 1023, 1036-37 (Ohio Ct. App. 2008).

²¹⁴ *See, e.g., United States v. Charley*, 176 F.3d 1265, 1279-80 (10th Cir. 1999) ("if Dr. Ornelas largely based her opinion on the statements of the girls, then under the foundation (or lack thereof) presented in this case, we consider it inadmissible"); *see also United States v. Mullins*, 69 M.J. 113, 116 (C.A.A.F. 2010) ("To allow an 'expert' to offer his opinion on the resolution of a credibility dispute goes too far"); *State v. Favocchia*, 51 A.3d 1002, 1009 (Conn. 2012) (noting that experts "cross the line into impermissible vouching and ultimate issue testimony when they opine that a particular complainant has exhibited" characteristics consistent with abuse); *In re Rebecca*, 643 N.E. 2d at 35 ("[Expert] testimony identifying the persons who had abused the twins, and opining that their mother had been present, amounted in essence to testimony that he believed the statements made to him by the twins, and was equally inadmissible. "); *Alberico*, 861 P.2d at 211 ("[S]uch testimony encroaches too far upon the jury's function as arbiter of the witnesses' credibility."); *State v. Stancil*, 559 S.E.2d 788, 789 (N.C. 2002) ("[A]bsent physical evidence supporting a diagnosis of sexual abuse, such testimony is an impermissible opinion regarding the victim's credibility."); *Bush*, 595 S.E.2d at 719 (N.C. Ct. App. 2004) (explaining that expert testimony "based upon her credibility assessment of PB's story, that it was defendant who had sexually abused PB" was error).

“cannot pass judgment on a witness’s truthfulness in the form of a medical opinion.”²¹⁵ Such diagnoses, in the words of the Supreme Court of Oregon, cast a “misplaced aura of reliability or validity” on the testimony.²¹⁶

Yet as MCA proponents explicitly and repeatedly acknowledge, in most cases the medical child diagnosis turns on an assessment of the parent’s credibility.²¹⁷ This is despite the fact that physicians have no special expertise compared to courts in determining such matters; in fact, the reverse is likely true given that assessing credibility is something that judges do often in child abuse proceedings. Accepting the expert’s opinion in these MCA cases, as in sexual abuse cases, therefore presents too great a risk that the trier of fact will treat this testimony as coming from “the only seemingly objective source, offering it a much sought-after hook on which to hang its hat.”²¹⁸

This means that in cases in which child abuse through medical care is alleged, doctors may certainly testify to the genuine medical diagnoses that the child possesses and whether, given these diagnoses, the treatment the child received was legitimate. Yet they may not “diagnose” the child with MCA and, through this, assert that the parent committed abuse. Simply because doctors have concocted a new diagnosis that they claim allows them to point blame at the parent does not mean that they may properly testify to it in court. As in cases of sex abuse, the doctor is in no better position to determine whether

²¹⁵ *State v. Buchholtz*, 841 N.W.2d 449, 459 (S.D. 2013) (citation omitted); *see also* *Tingle v. State*, 536 So. 2d 202, 205 (Fla. 1988); *Weatherford v. State*, 561 So. 2d 629, 634 (Fla. Dist. Ct. App. 1990).

²¹⁶ *State v. Southard*, 218 P.3d 104, 113 (Or. 2009); *see also* *State v. Iban C.*, 881 A.2d 1005, 1017 (Conn. 2005) (holding sexual abuse diagnosis in the absence of physical evidence “constituted inadmissible opinion evidence regarding the credibility of the victim and was not helpful to the jury in deciding the issue”); *Ramayo v. State* 132 So. 3d 1224, 1228 (Fla. 2014) (explaining that expert testimony is improper “if the juxtaposition of the questions propounded to the expert gives the jury the clear impression that the expert believed that the child victim was telling the truth.”); *Geissler v. State*, 90 So. 3d 941, 947 (Fla. Dist. Ct. App. 2012) (explaining that experts may not “vouch for the truthfulness or credibility of a witness.”); *State v. Beauvais*, 354 P.3d 680, 690 (Or. 2015) (en banc) (concluding that a diagnosis of sexual abuse is inadmissible despite some physical evidence “when that diagnosis otherwise rests on what a jury reasonably could perceive to be a credibility-based evaluation”).

²¹⁷ *See* 2013 AAP Report, *supra* note 29, at 593 (advising evaluator of MCA to “assess the veracity of the claims made by the caregiver . . . for each symptom and sign . . . [and] to consider whether the medical history provided by the caregiver matches the history in the medical record and whether the diagnoses provided by the caregiver match the diagnoses made by the physician”).

²¹⁸ *People v. Peterson*, 450 N.W.2d 857, 868 (Mich. 1995).

the parent deserves blame for medical care the child received than is the trier of fact.

B. Child Abuse as the Ultimate Issue

Not only is the third inquiry in the medical child abuse diagnosis — determining whether the parent should be held responsible for “instigating” the child’s unnecessary care — not properly a part of a medical diagnosis, it is also the ultimate issue in child abuse proceedings. As such, it is properly resolved by the court rather than a medical expert. As the Advisory Committee to Federal Rule of Evidence 704 stated, the Rules of Evidence should be interpreted to “afford ample assurances against the admission of opinions which would merely tell the jury what result to reach, somewhat in the manner of the oath-helpers of an earlier day. They also stand ready to exclude opinions phrased in terms of inadequately explored legal criteria.”²¹⁹ Both of these problematic features — telling the trier of fact what result to reach, and doing so in terms of inadequately explored legal criteria — are present when doctors testify to a diagnosis of MCA.

1. Medical Child Abuse and the Trier of Fact

Testimony affirming an MCA diagnosis in a particular case usurps the role of the trier of fact, whose job it is to determine whether child abuse has occurred. Federal Rule of Evidence 704, which states that “[a]n opinion is not objectionable just because it embraces an ultimate issue,” at first blush might seem to permit this testimony.²²⁰ Yet courts have made clear that this rule “does not open the door to all opinions. . . . [Q]uestions which would merely allow the witness to tell the jury what result to reach are not permitted. Nor is the rule intended to allow a witness to give legal conclusions.”²²¹ On this basis, courts allow experts to testify to factual issues underlying the ultimate

²¹⁹ FED. R. EVID. 704 advisory committee’s note.

²²⁰ FED. R. EVID. 704.

²²¹ *Owen v. Kerr-McGee Corp.*, 698 F.2d 236, 240 (5th Cir. 1983); *see also* *United States v. Perkins*, 470 F.3d 150, 158 (4th Cir. 2006) (expert opinion must be “helpful[] to the jury,” and therefore state some information other than a legal conclusion); *Monroe v. Griffin*, No. 00—CV-00795, 2015 WL 5258115, at *6 (N.D. Cal. Sept. 9, 2015) (noting that an expert opinion is not objectionable just because it embraces an ultimate issue; “[h]owever, an expert witness cannot give an opinion as to her legal conclusion, i.e., an opinion on an ultimate issue of law” (quoting *Elsayed Mukhtar v. Cal. State Univ., Hayward*, 299 F.3d 1053, 1065-66 n.10 (9th Cir. 2002))).

issue, but preclude testimony on the ultimate legal issue itself.²²² For example, in *Young v. State Farm Mutual Automobile Ins. Co.*,²²³ the plaintiff, who sued his insurer to establish that his daughter's injuries were covered, sought to introduce an expert to testify that "in his opinion [plaintiff's daughter] was covered under the insurance policy."²²⁴ The court rejected this testimony on the ground that it presented "nothing more than a legal conclusion as to the ultimate issue in the case."²²⁵

An expert's use of legal language is a red flag on this issue: "Courts have held that expert witnesses' use of 'judicially defined terms,' 'terms that derived their definitions from judicial interpretations,' and 'legally specialized terms' . . . constitute [an] expression of opinion as to the ultimate legal conclusion."²²⁶ For this reason, an expert's testimony in a police excessive force suit that an officer had used "grossly unlawful, unnecessary, and excessive violence," was deemed impermissible.²²⁷ In the Court's words, an expert must avoid use of "language that constitutes legal conclusions, credibility determinations, or otherwise 'merely tell[s] the jury what result to reach.'"²²⁸

This evidentiary rule bars a medical expert's testifying to the presence of MCA in a child abuse proceeding, since the ultimate issue to be determined is whether the parent's instigation of medical care constituted child abuse. As Carole Jenny and Thomas Roesler noted when coining the term, "medical child abuse" is meant to announce

²²² See FED. R. EVID. 704 advisory committee's note ("Did T have capacity to make a will?" impermissibly asks for a legal conclusion, while the question "Did T have sufficient mental capacity to know the nature and extent of his property" does not).

²²³ *Young v. State Farm Mut. Auto. Ins. Co.*, No. 2:97-CV-24-B-B, 1999 WL 33537177, at *2 (N.D. Miss. Feb. 16, 1999).

²²⁴ *Id.*

²²⁵ *Id.*

²²⁶ *In re ConAgra Foods*, 302 F.R.D. 537, 558 (C.D. Cal. 2014) (declaring improper an expert's opinion that ConAgra "falsely and deceptively labeled" its products" since "false" and "deceptive" are judicially defined terms relating to the ultimate issue in this case); see also *S.E.C. v. Leslie*, No. C 07-3444, 2010 WL 2991038, at *9 (N.D. Cal. July 29, 2010) (excluding expert's opinion because "it is for the jury to determine whether Defendants' statements in fact were misleading").

²²⁷ *Monroe v. Griffin*, No. 14-CV-00795-WHO, 2015 WL 5258115, at *7 (N.D. Cal. Sept. 9, 2015); see also *Estate of Bojic v. City of San Jose*, No. 05 cv 3877 RS, 2007 WL 3314008, at *3 (N.D. Cal. Nov. 6, 2007) ("[W]hile [plaintiff's expert] may freely opine that [the officer] should not have acted in the manner that he did, or that he should have done something else, he should not be asked for or volunteer an opinion that [the officer] acted unconstitutionally or exercised 'excessive force.'").

²²⁸ *Monroe*, 2015 WL 5258115, at *7.

that the parent has committed child abuse.²²⁹ That determination, however, is properly the ultimate legal question in the case, and must be resolved by the trier of fact rather than a medical expert.

2. Medical Child Abuse and the Legal Standard for Child Abuse

Not only does a medical expert's "diagnosis" of MCA usurp the role of the trier of fact, it is also profoundly misleading because MCA standards are less stringent than the legal standards that define child abuse in three important ways. First, in contrast to abuse law's requirement that an abuser demonstrate a level of blameworthiness above simple negligence, the medical standards do not require any showing of culpability on the part of the parent instigating medical care. Second, abuse law demands, at the very least, some significant level of risk to the child, while MCA standards impose liability when a parent subjects the child to any degree of potential risk. Third, the standard of proof to show child abuse is "clear and convincing evidence" in dependency proceedings and "beyond a reasonable doubt" in criminal proceedings. Yet no such standards apply to a doctor's diagnosis of MCA. I discuss each of these issues in turn.

a. Blameworthiness of the parent

MCA-charge proponents make clear that a parent's culpable intent is not required to diagnose MCA. As Dr. Jenny and Dr. Roesler put it, MCA "occurs when a child receives unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker. . . . [W]ith this definition it is not necessary to determine the parent's motivation to know that a child is being harmed."²³⁰

On this basis, MCA proponents assert that MCA may be found not just when a parent intentionally lies about a child's symptoms, but also when a parent's anxiety from an earlier, traumatic pediatric health crisis causes them to take a child to the doctor unnecessarily, or when their anxiety or faulty memory causes them to misstate their child's symptoms.²³¹ Yet these standards omit the critical showing of blameworthiness required by law to find child abuse.

As our legal system has long recognized, parents will never be perfect, and sometimes — probably often — will make mistakes.

²²⁹ See *supra* note 52 and accompanying text.

²³⁰ ROESLER & JENNY, *supra* note 12, at 43-44.

²³¹ 2013 AAP Report, *supra* note 29, at 591, 594; ROESLER & JENNY, *supra* note 12, at 182.

These mistakes do not constitute child abuse, even if significant harm to the child results, unless they are accompanied by sufficient blameworthiness on the part of the parent. Requiring more than a simple mistake that results in injury, in the words of the New Jersey Supreme Court, “reflect[s] a compromise between a parent’s right to raise a child as he sees fit and the child’s right to receive protection from injuries.”²³² The Maryland Supreme Court explored the level of culpability required to find child abuse in a civil dependency proceeding in the case of *Taylor v. Harford County Department of Social Services*.²³³ In the court below, an administrative law judge had found abuse by a father who kicked a footstool in anger, which inadvertently hit and injured his daughter.²³⁴ The Maryland Supreme Court reversed on the ground that considering any intentional act that resulted in harm to the child to be “child abuse” would:

basically creat[e] a strict liability standard for parents or caretakers who unintentionally injure their children. We consider, for example, . . . a father . . . swinging a hammer while nailing together pieces of a partition wall and does not notice that his child has walked up behind him. The father swings the hammer backwards and strikes the child in the face, causing significant injury. Under the ALJ’s reading . . . , because the act of swinging the hammer back before striking a nail was an intentional act and not “accidental or unintentional,” and his child was injured because of this intentional act, the father might be found to have committed child physical abuse. We doubt that [the statutory scheme] intends for such a draconian strict liability standard²³⁵

The court held that a finding of child abuse under the relevant Maryland Family Law Article requires that the parent’s act at least be “reckless,” meaning “[c]haracterized by the creation of a substantial and unjustifiable risk of harm to others and by a conscious (and sometimes deliberate) disregard for or indifference to that risk.”²³⁶ Reckless conduct, the court declared, “is much more than mere negligence: it is a gross deviation from what a reasonable person would do.”²³⁷

²³² G.S. v. Dep’t of Human Servs., 723 A.2d 612, 620-21 (N.J. 1999).

²³³ *Taylor v. Harford Cty. Dep’t of Soc. Servs.*, 862 A.2d 1026, 1036-37 (Md. 2004).

²³⁴ *Id.* at 1036.

²³⁵ *Id.*

²³⁶ *Id.* at 1033.

²³⁷ *Id.* (citation omitted); see also G.S. v. Dep’t of Human Servs., 723 A.2d at 620-21

Many if not most acts deemed abuse by MCA standards would not rise to the standard of culpability needed for child abuse. For example, it is doubtful that the parent who takes a child to the doctor too often as a result of a previous health crisis would be deemed negligent, let alone reckless. The same is likely true for parents who inadvertently misstate their child's medical history, particularly given, as I show in Part IV.B, that a large number of parents routinely misstate their child's medical history outside of the medical child abuse context.²³⁸ Further, in a case like Justina Pelletier's case, where doctors were split on their views of the child's proper diagnosis,²³⁹ the state would have been hard pressed to show that her parents' actions in choosing one doctor's views over another constituted negligent, let alone reckless, behavior.

b. Unreasonable risk to the child

The standards for diagnosing MCA also go well beyond the legal definition of child abuse by imposing liability on a parent who exposes a child to *any* level of potential risk of harm, no matter how remote. MCA proponents claim that “[a]ny medical procedure, for example, a blood draw, or a trial of medication that is potentially harmful, could be considered abusive if there was no clear medical reason for it to happen.”²⁴⁰ Yet courts have made clear that when a parent did not intend harm, the child must be subjected to a significant, actual risk of harm to constitute abuse.²⁴¹ Some states frame this standard as requiring at least a “substantial” or “serious” risk of harm.²⁴² Others require that the harm be “imminent” or “immediate.”²⁴³

Neither of these tests would be met by the far more speculative harms deemed to meet MCA standards. For example, Dr. Jenny and Dr. Roesler state that in their MCA study, the “most common form of

(recognizing that the wanton and willful standard “reflect[s] a balance between a parent’s right to raise a child . . . and the child’s right to receive protection from injuries”).

²³⁸ See *infra* notes 358–67 and accompanying text.

²³⁹ See *supra* notes 2–11 and accompanying text.

²⁴⁰ Isaac & Roesler, *supra* note 63, at 291.

²⁴¹ See SORAM, 25 I. & N. Dec. 378, 382 (BIA 2010) (noting that, with respect to state’s civil definitions of child abuse, in Pennsylvania, Tennessee, and Wyoming, the threat of harm must be quite high, requiring that the child be placed in “imminent” or “immediate” danger of injury or harm, while “the remaining States use various terms to describe the level of threat required, including ‘realistic,’ ‘serious,’ ‘reasonably foreseeable,’ ‘substantial,’ or ‘genuine’”).

²⁴² *Id.*

²⁴³ *Id.*

abusive behavior was subjecting children to unnecessary medical examinations.”²⁴⁴ Yet most medical examinations present an extremely small risk of harm to the child. The same is true for many noninvasive tests, as well as a number of relatively benign medications. While all of these might present some slight level of risk, most or all of these do not rise to the level of risk that would constitute child abuse under applicable state law.

c. Standard of proof

Establishing child abuse in a civil dependency proceeding in most courts requires proof “by clear and convincing evidence.”²⁴⁵ In a criminal child abuse proceeding the standard of proof is still higher: “beyond a reasonable doubt.”²⁴⁶ Yet although the centerpiece of evidence of abuse in a medical abuse case is the doctor’s “diagnosis” of MCA, the diagnostic standards used by doctors incorporate no such heightened standards of proof.

The New Mexico Supreme Court in *State v. Consaul* reflected on the problems that such expert testimony presented in a criminal case of physical abuse, in which a child abuse pediatrician testified that a child’s injuries were caused by suffocation.²⁴⁷ In the Court’s words,

doctors usually testify as to what caused a patient’s condition using phrases like “to a reasonable medical probability” or “to a reasonable medical certainty,” phrases that demonstrate a sufficient degree of conviction to be probative. These phrases “are also terms of art in the law that have no analog for a practicing physician.” Essentially, these phrases satisfy a minimal standard of probability, and therefore admissibility, that an opinion is more likely than not true.

In a criminal trial, however, unlike a medical differential diagnosis, the jury must determine beyond a reasonable doubt that a defendant is guilty of the crime charged. The jury must have a sufficient evidentiary basis to conclude that the defendant actually committed the criminal act he is accused of. . . . Essentially, the doctors in this case testified in various

²⁴⁴ ROESLER & JENNY, *supra* note 12, at 146.

²⁴⁵ See, e.g., PAUL C. GIANNELLI & PATRICIA YEOMANS SALVADOR, OHIO JUVENILE Law § 41:10 (2016).

²⁴⁶ See, e.g., *State v. Consaul*, 332 P.3d 850, 864 (N.M. 2014).

²⁴⁷ Because defendant’s attorney did not object to the admission of the testimony at trial, the court explicitly did not address the issue of admissibility rather than the weight to be given the testimony. *Id.* at 864.

ways, and with various degrees of conviction, that they suspected child abuse, that they could not rule out child abuse, that they could not think of other explanations for Jack's injuries, or that child abuse was a likely cause. . . . The best these opinions could offer was that, to a preponderance of the evidence, [the child] was likely suffocated.²⁴⁸

The *Consaul* court reversed the defendant's conviction because the doctors' testimony in the case constituted the heart of the prosecution's case, rather than supplemented other significant evidence that supported the conclusion that the defendant had, indeed, suffocated the child.²⁴⁹ This evidence in itself, the Court held, was not sufficient to establish proof beyond a reasonable doubt.²⁵⁰ The same situation arises in cases of MCA "diagnoses" of children by medical experts. Insofar as such "diagnoses" are the centerpiece of the state's case that the parent has committed child abuse, that evidence is not sufficient to prove either civil child abuse by the requisite clear and convincing evidence standard or criminal child abuse beyond a reasonable doubt.

C. Diagnosis as Profile Evidence

Finally, expert diagnoses of MCA should be barred from trial for the same reasons that courts have barred personality profiles in trial — because they tag the asserted perpetrator with guilt by association,

²⁴⁸ *Id.* at 865-67.

²⁴⁹ *Id.* at 865. In a footnote particularly relevant to the MCA context, the *Consaul* court noted the extent to which pediatricians' testimony in SBS cases — another arena in which the expert testimony has been the centerpiece of the case — has been called into question as unscientific in recent years:

Shaken baby syndrome (SBS) cases may provide a reasonable analogy because medical testimony comprises the foundation of the prosecution's theory in many of these cases. In SBS cases, scholars and advocates for the wrongly convicted have begun to question whether testimony from medical experts that is used to establish a "triad" of indicators of SBS by itself is enough to establish beyond a reasonable doubt that the accused shook a baby.

According to this research, scientific advances now debunk the idea that a "triad of symptoms" could only be caused by a caretaker shaking a baby. More recently, scholars have noted that "[w]here expert testimony is the case, we should be especially wary of the outcomes that result."

Id. at 864 n.4 (citations omitted) (quoting Deborah Tuerkheimer, *Science-Dependent Prosecution and the Problem of Epistemic Contingency: A Study of Shaken Baby Syndrome*, 62 ALA. L. REV. 513, 564 (2011) (emphasis in original)).

²⁵⁰ *Consaul*, 332 P.3d at 866.

thereby evading the state's burden to prove wrongdoing. As noted above, the term "diagnosis" usually identifies the presence of a particular underlying disease process.²⁵¹ Yet in both MSBP and MCA, no underlying disease process has been identified in either the parent (for MSBP) or in the child (for MCA). As Geoffrey Fisher and Ian Mitchell notice, "a 'diagnosis' of [MSBP] only describes a single or series of observed anomalies and discrepancies."²⁵² Put another way, rather than identifying an underlying disease responsible for the parent's condition, all the MSBP diagnosis indicates is the expert's observation that the parent in some ways resembles other parents who have deliberately sought unnecessary medical care for a child. The MCA diagnosis functions in the same way, yet at one more remove, since it supposedly establishes wrongdoing of the parent based on "diagnosing" the child as a member of the group of child victims of MCA.

Yet courts have rejected profile evidence in criminal trials that serve exactly this same function on a number of related grounds. The fact that a group of people who commit particular types of crimes, (say, pedophiliacs or child batterers), generally possess characteristics that the defendant possesses is not relevant evidence that the particular defendant has committed the charged crime, these courts have ruled.²⁵³ In the words of the Supreme Judicial Court of Massachusetts²⁵⁴:

Evidence of a "child battering profile" does not meet the relevancy test, because the mere fact that a defendant fits the profile does not tend to prove that a particular defendant physically abused the victim. The use of criminal profiles as substantive evidence of guilt is inherently prejudicial to the defendant . . . since it invites a jury to conclude that because . . . someone fit[s] a particular profile, it is more likely than not that this individual committed the crime.²⁵⁵

Similarly, courts have rejected profile evidence because it violates the prohibition on using character evidence to prove that the defendant

²⁵¹ See Fisher & Mitchell, *supra* note 40, at 532-33.

²⁵² *Id.*

²⁵³ See *Gruwell v. State*, 254 P.3d 223, 233-35 (Wyo. 2011); see also *Haakanson v. State*, 760 P.2d 1030, 1035-36 (Alaska Ct. App. 1988); *People v. Walkey*, 223 Cal. Rptr. 132, 138-39 (Cal. Ct. App. 1986); *Sanders v. State*, 303 S.E.2d 13, 18 (Ga. 1983); *State v. Hester*, 760 P.2d 27, 33 (Id. 1988); *In re D.L.*, 401 N.W.2d 201, 203-04 (Iowa App. 1986); *State v. Loebach*, 310 N.W.2d 58, 62-64 (Minn. 1981).

²⁵⁴ *Commonwealth v. Day*, 569 N.E.2d 397 (Mass. 1991).

²⁵⁵ *Id.* at 399 (citations omitted).

committed the charged criminal misconduct. As the Wyoming Supreme Court stated in excluding such evidence, “[f]inding guilt by reference to common characteristics of a class of individuals to which one belongs” is impermissible.²⁵⁶

Finally, courts have rejected profile evidence relating to psychological disorders because such evidence suggests that the defendant has that disorder without requiring the state to prove it. Thus the Supreme Court of Kentucky held improper evidence that defendant fit the profile for pedophilia:

The only conceivable purpose the terms “pedophile” and “pedophilia” served here was to characterize the mental state of the appellant as a person with an abnormal propensity to engage in “sexual activity with children.” . . . [Such c]oncepts . . . have no conceivable bearing on a criminal case *except* as they bear on the accused’s mental condition at the time of the alleged offense. The proposition that they should be used as evidence to convict or acquit without further testimony from an expert qualified in the field positively establishing that the condition is a recognized scientific entity, and then tying the accused to this mental state, is indefensible.²⁵⁷

These rationales appropriately apply to bar diagnostic evidence of MSBP and MCA in a child abuse proceeding. The Supreme Court of Queensland, Australia reached just this result when it reviewed a criminal conviction against a mother for child abuse.²⁵⁸ At trial, a psychiatrist had described the MSBP diagnosis (referred to as “factitious disorder by proxy”) generally, and the children’s treating physicians testified that they believed the mother had the disorder and had deliberately induced the children’s medical symptoms to get them unnecessary care.²⁵⁹ The Supreme Court ruled this evidence improper on two grounds. First, MSBP “is merely descriptive of a [behavior], not a psychiatrically identified illness or condition” that relates “to an

²⁵⁶ Ryan v. State, 988 P.2d 46, 55 (Wyo. 1999); *see also* United States v. Hernandez-Cuartas, 717 F.2d 552, 555 (11th Cir. 1983) (drug courier profile); State v. Percy, 507 A.2d 955, 960 (Vt. 1986) (rapist profile); State v. Maule, 667 P.2d 96, 99 (Wash. Ct. App. 1983) (child abuse profile).

²⁵⁷ Dyer v. Kentucky, 816 S.W.2d 647, 653 (1991) (emphasis in original); *see also* In re Custody of Eleanor, 610 N.E.2d 938, 942 (Mass. 1993) (“such evidence cannot support a finding that sexual abuse actually occurred”).

²⁵⁸ R v LM [2004] QCA 192 (4 June 2004) ¶ 71 (Austl.), <http://www.austlii.edu.au/au/cases/qld/QCA/2004/192.html>.

²⁵⁹ *Id.* ¶ 67.

[organized] or [recognized] reliable body of knowledge or experience.”²⁶⁰ Second, the probative nature of the evidence was overshadowed by the danger that jurors, faced with medical experts “using impressive medical expressions,” “may place undue emphasis on its very limited relevance and probative value.”²⁶¹

The Queensland Supreme Court went on to state that expert testimony describing MSBP as a diagnosis, as well as diagnosing the defendant as possessing the diagnosis has the effect of allowing expert evidence of “the propensity, not of the accused but of other people, to engage in similar unlawful [behavior]” to be used as substantive proof against the parent.²⁶² Yet such evidence “has no or very limited relevance to the determination of whether this appellant has done acts or given false reports to intentionally harm her children.”²⁶³ Ultimately, the court held, this testimony risked distracting the jury from concentrating on the legally relevant question of “whether the prosecution had established beyond reasonable doubt that the appellant had committed acts causing symptoms, or reported or caused false symptoms, intending to harm the children”²⁶⁴ A

²⁶⁰ *Id.* The fact that the American Psychiatric Association subsequently recognized “factitious disorder imposed on another” as a diagnosis in 2013, *see supra* note 105, should not be taken to mean that the MSBP diagnosis rests on an organized body of knowledge. Eric Mart and Loren Pankratz have already amply demonstrated that this diagnosis patently fails the test of scientific reliability. *See supra* notes 47, 78. Further, outside of the MSBP context, commentators have mustered persuasive critiques of the reliability of the American Psychiatric Association’s process to select new diagnoses. *See, e.g.*, Jack Drescher, *Out of DSM: Depathologizing Homosexuality*, 5 BEHAV. SCI. 565, 568-70 (2015) (arguing that past inclusion of homosexuality as a disorder was not based on legitimate scientific research, but on the subjective, unscientific opinions of early therapists, who had been influenced by psychoanalytic theories); Allen J. Frances, *DSM5 in Distress: Two Who Resigned From DSM-5 Explain Why*, PSYCHOLOGY TODAY BLOG (July 12, 2012), <https://www.psychologytoday.com/blog/dsm5-in-distress/201207/two-who-resigned-dsm-5-explain-why> (noting that two members of a DSM-5 working group on personality disorders resigned because of the group’s “truly stunning disregard for evidence. Important aspects of the proposal lack any reasonable evidential support of reliability and validity. . . . Even more concerning is the fact that a major component of proposal is inconsistent with extensive evidence.”); S. Nassir Ghaemi, *Why DSM-III, IV, and 5 are Unscientific*, PSYCH. TIMES (Oct. 14, 2013) (“As so well documented by [Hannah S.] Decker and historian Edward Shorter and others who observed the process, . . . [the DSM] diagnoses were based almost entirely on the opinions and beliefs of leaders and interest groups in the psychiatric profession. . . . Were those ideas tested with observational studies, and then revised based on confirmations and refutations of their content? Not before 1980, and hardly since.”).

²⁶¹ *R v LM* [2004] QCA 192 (4 June 2004) ¶ 68 (Austl.).

²⁶² *Id.* ¶ 66.

²⁶³ *Id.*

²⁶⁴ *Id.* ¶ 68.

Justice of the England and Wales High Court reached a similar conclusion in a concurring opinion. MSBP and related diagnoses “are child protection labels that are merely descriptions of a range of behaviours, not a paediatric, psychiatric or psychological disease that is identifiable. . . . In these circumstances, [such a diagnosis] in any individual case is as likely to be evidence of mere propensity which would be inadmissible at the fact finding stage”²⁶⁵

IV. BAD SCIENCE AND BAD MEDICINE: THE SCIENTIFIC AND MEDICAL CHALLENGES TO THE MEDICAL CHILD ABUSE DIAGNOSIS

Even if MCA were otherwise appropriately considered a medical diagnosis rather than a legal conclusion, the diagnosis would still need to be demonstrated to be scientifically reliable to be admissible in court.²⁶⁶ As the U.S. Supreme Court made clear in the case of *Daubert v. Merrell Dow Pharmaceuticals*,²⁶⁷ with state courts following suit,²⁶⁸ judges should act as gatekeepers to ensure that expert testimony is adequately grounded in science. To ascertain this, expert testimony must be shown to be based on knowledge derived by the scientific method.²⁶⁹ Without gatekeeping to ensure sound science, *Daubert* recognized, “expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it.”²⁷⁰ Except in the few, rare cases in which the MCA diagnosis is based on laboratory results that establish the presence of some toxin or video evidence of the parent mistreating the child, for example, such diagnoses do not meet the *Daubert* bar of scientific soundness.

Only one published decision thus far considers a *Daubert* challenge to the MCA diagnosis,²⁷¹ although other courts have admitted these

²⁶⁵ *A County Council v. A Mother* [2005] EWHC (Fam.) 31, [175]–[178] (Eng.), <http://www.bailii.org/ew/cases/EWHC/Fam/2005/31.html>.

²⁶⁶ “When an expert reaches a conclusion as to the cause of an injury and purports to use medical or scientific techniques in doing so, a party may challenge the scientific validity of those techniques . . . , whether or not the conclusion is a cognizable ‘medical diagnosis.’” *State v. Sanchez-Alfonso*, 352 Or. 790, 798 (2012).

²⁶⁷ *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 579-80 (1993).

²⁶⁸ See EDWARD J. IMWINKELRIED, *THE NEW WIGMORE: A TREATISE ON EVIDENCE, EVIDENTIARY PRIVILEGES* 1505-06 (2d ed. 2009) (stating that most states have replaced previous standards for expert testimony with the *Daubert* test).

²⁶⁹ *Daubert*, 509 U.S. at 595.

²⁷⁰ *Id.*

²⁷¹ See *Delaware v. McMullen*, 900 A.2d 103, 119 (Del. 2006) (rejecting *Daubert* challenge to pediatric falsification condition). Furthermore, courts have admitted MSBP diagnoses over challenges to their reliability, despite the patently unscientific nature of this evidence. See, e.g., *Reid v. State*, 964 S.W.2d 723, 728-29 (Tex. App.

diagnoses without specifically considering their gatekeeping role.²⁷² In the decision that considered *Daubert*, the Superior Court of Delaware held that the MCA diagnostic process cleared the relevant legal bar because it relied on differential diagnosis, the diagnostic process long used by physicians to determine which if any medical diagnoses apply to a patient. In the court's words, "[d]ifferential diagnosis generally is a technique that has widespread acceptance in the medical community, has been subject to peer review, and does not frequently lead to incorrect results."²⁷³ In the MCA context, the court held, "[s]o long as physicians employ objective diagnostic techniques when performing a differential diagnosis, their diagnosis will be reliable under *Daubert* even if the conclusion is 'novel' and not widely known in the medical community."²⁷⁴ In reaching this result, however, the court failed to consider the many features of the MCA diagnostic process that make it far less reliable than other medical diagnoses.

As this Part shows, the diagnostic process for MCA is patently unscientific, as well as bad medicine. Section A explores the scientific flaws of the general theoretical construct of MCA. Section B then turns to the process by which MCA diagnoses are rendered in individual cases and demonstrates that this process is scientifically unreliable, untested, and more likely to identify children with complex medical conditions than those who have been abused. Section C describes how the diagnostic process for MCA fails to comport with standard medical practice. Finally, section D recounts a case that amply demonstrates the way that the MCA diagnostic process can easily lead to targeting an innocent parent.

A. *The Scientific Validity of the General Medical Child Abuse Theory*

To be admissible as "scientific knowledge," not only must the diagnostic process for identifying MCA in individual cases be reliable,

1998) (holding that expert testimony on MSBP cleared scientific gatekeeping standards); *State v. Hocevar*, 7 P.3d 329, 341-42 (Mont. 2000) (stating that the *Daubert* standard is inapplicable "because it only applies to the admissibility of novel scientific evidence[,] . . . MSBP is neither novel nor scientific"). For a persuasive demonstration of the unscientific nature of MSBP diagnoses, see MART, *supra* note 37, *passim*.

²⁷² See, e.g., *People v. Rector*, 248 P.3d 1196 (Colo. 2011) (upholding the defendant's conviction for felony child abuse based on an MCA diagnosis on the ground that a scientific challenge was not appropriately raised); *Department of Human Services v. N.B.*, 323 P.3d 479 (Or. App. 2013) (affirming the lower court's MCA finding without considering reliability of MCA diagnosis).

²⁷³ *McMullen*, 900 A.2d at 117-18.

²⁷⁴ *Id.* at 118.

the general theory of MCA must also be shown to be a product of the scientific method.²⁷⁵ Yet the basic theory of MCA fails this test. As *Daubert* makes clear, a primary criterion for “the scientific status of a theory is its falsifiability, or refutability, or testability.”²⁷⁶ This is because the scientific method is defined by a process in which scientists first make a tentative hypothesis (meaning an educated guess that is consistent with observed phenomena), and then perform experiments that allow them to prove or disprove their hypothesis.²⁷⁷ If the hypothesis cannot be tested in a manner in which it can be falsified (meaning proven wrong), it is not scientific.²⁷⁸

Usually, the general hypothesis that underlies a medical diagnosis postulates that a particular biological process produces a certain constellation of symptoms. Such a hypothesis, according to *Daubert*, is scientific only if it can be disconfirmed based on observational or experimental evidence.²⁷⁹ For example, the flu is a medical diagnosis that postulates that a particular set of related viruses cause a particular set of symptoms that include fever, achiness, and lack of energy. This medical hypothesis is potentially testable and falsifiable by, for example, evidence suggesting that some other agent, for example a bacterial agent, is responsible for this set of symptoms, or by showing that no such viruses exist. To take another example, the theory underlying the controversial diagnosis of chronic Lyme disease is that

²⁷⁵ *Daubert*, 509 U.S. at 580; see also *Raynor v. Merrell Pharm., Inc.*, 104 F.3d 1371, 1375-76 (D.C. Cir. 1997) (holding doctor’s causation opinion based on differential diagnosis inadmissible when no reliable evidence first proved general causation); *Coastal Tankships v. Anderson*, 87 S.W.3d 591, 601-02 (Tex. App. 2002) (distinguishing between general and specific causation, and requiring show of reliability for both); cf. *Doe v. Ortho-Clinical Diagnostics, Inc.*, 440 F.Supp.2d 465, 471 (M.D.N.C. 2006) (“General causation ‘is established by demonstrating . . . that exposure to a substance can cause a particular disease. . . . Specific, ‘or individual causation, however[,] is established by demonstrating that a given exposure is the cause’ of a particular individual’s disease.”).

²⁷⁶ *Daubert*, 509 U.S. at 593; see also *Giorgini v. Ford Motor Co.*, No. 06-0968, 2008 WL 859230, at *12 (E.D. Pa. Mar. 28, 2008) (“Where a theory is novel and, thus, outside support would not exist, some form of testing or verification is required to prevent the theory from being ‘opinion evidence which is connected to existing data only by the ipse dixit of the expert.’”).

²⁷⁷ See, e.g., James T. Richardson, et al., *The Problem of Applying Daubert to Psychological Syndrome Evidence*, 79 JUDICATURE 10, 12 (1995) (“[A]n explanation or hypothesis that cannot be subject to the possibility of rejection based on observation or experiment cannot be regarded as scientific.”).

²⁷⁸ Christine V. McLelland, *The Nature of Science and the Scientific Method*, GEOLOGICAL SOC’Y AM. 2, <http://www.geosociety.org/educate/NatureScience.pdf> (last visited Jan. 25, 2016).

²⁷⁹ *Id.* at 1.

Lyme disease remains in the body of patients for long periods of time and causes a long-term cluster of symptoms that include fatigue, pain, and decreased short-term memory.²⁸⁰ Currently, doctors are conducting multiple experiments in an attempt to prove or disprove the hypothesis underlying this diagnosis. For example, researchers recently tested the genetic “fingerprint” of the bacteria in the blood of patients who have had a resurgence of active Lyme disease to determine if it matches the old Lyme bacteria; the finding that that these two “fingerprints” do not match weighs against the hypothesis that chronic Lyme disease remains in the body and is the cause of the resurgence of Lyme symptoms.²⁸¹

Yet the general theory of MCA establishes no such testable scientific hypothesis. Its proponents’ description of this diagnosis as a “child [who] receives unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker”²⁸² does not produce a testable hypothesis regarding an underlying disease process or other underlying cause that is responsible for the MCA symptoms. Indeed, it is difficult to conceptualize how one would test this general diagnosis. Unlike strep, there is nothing that can be tested in a lab; unlike cancer, it cannot be seen in a scan; unlike Lyme disease, there are no blood tests to disprove or refine the theory. It is also difficult to pinpoint any particular set of facts that would disprove or refine this diagnosis.

It could be argued that the hypothesis that underlies the MCA diagnosis is that parents’ instigation of medical care causes MCA in the same way that a virus causes the flu. Yet, if the term “instigation” is read as simply a factual description of parents’ actions, similar to the but-for cause test for causation in torts, the hypothesis posited by MCA proponents is essentially tautological: given that almost all medical care received by children is instigated by a parent, this tells us nothing meaningful about medical child abuse that, for example, would let us distinguish children who have been the victims of medical malpractice from children who have been the victims of Munchausen-type behavior. This reading of MCA is equivalent to postulating that lungs are the cause of the cluster of symptoms associated with lung cancer: Of course, lungs are the necessary precondition to having those symptoms, but positing lungs as the problem tells us nothing useful about what has gone awry with this

²⁸⁰ Denise Grady, *New Infection, Not Relapse, Brings Back Lyme Symptoms*, *Study Says*, N.Y. TIMES, (Nov. 14, 2012), http://www.nytimes.com/2012/11/15/health/new-infection-not-relapse-brings-back-symptoms-of-lyme-disease-study-finds.html?_r=01.

²⁸¹ *Id.*

²⁸² See ROESLER & JENNY, *supra* note 12, at 43.

condition. The same is true of focusing on parents “instigating” medical care as the cause of MCA symptoms.

In the alternative, to the extent that the term “instigate” is interpreted in a manner that incorporates some judgment that the parent’s seeking medical care is blameworthy, the determination is not an empirical determination within the province of science, but instead a normative judgment within the province of the court.²⁸³ The postulate regarding strep can ultimately be scientifically documented, verified, and directly observed in individual cases. In contrast, the postulate regarding a parent’s role in MCA involves a value judgment regarding moral responsibility. This postulate is not testable or falsifiable in the same way that a patient’s strep diagnosis is testable and falsifiable.

Indeed, the boundaries of the MCA diagnosis were not established with the goal of accurately distinguishing a particular group that, researchers believed, scientific testing would reveal had a particular underlying condition. Instead, they were constructed in order to cast as broad a net as possible over children that pediatricians believe are “overmedicalized.”²⁸⁴ Recall that Dr. Jenny and Dr. Roesler tested their new diagnostic construct, not to determine false negative and false positive rates and therefore to establish its reliability, but solely to determine how many children in their pool it identified compared to MSBP diagnostic criteria, and then touted the greater percentage of children identified by their new criteria as evidence of the superiority of the MCA construct.²⁸⁵ This was not testing whose purpose was to ensure empirical validity or reliability — key goals of scientific testing — but rather testing to verify that a preferred policy result was obtained.

MCA proponents may therefore certainly argue to a state legislature that this broad group of parental behaviors should all, as a matter of public policy, be considered abuse. However, they may not do so as an expert witness in court based on their claimed scientific expertise. As one court observed, the claim that a diagnosis is reached through the differential diagnostic process “is not some incantation that opens the

²⁸³ See FED. R. EVID. 702, Advisory Committee Note (2000 amends.) (court is required to consider whether the expert’s theory can be tested or challenged by objective means or whether, instead, it is based simply upon the subjective, conclusory assertions of the expert); *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (trial court is not required to “admit opinion evidence that is connected to existing data only by the ipse dixit of the expert”).

²⁸⁴ See *supra* notes 58–64 and accompanying text.

²⁸⁵ See *supra* notes 64, 98–99 and accompanying text.

Daubert gate to allow an expert's opinions to be admitted at trial," regardless of whether it is based in science.²⁸⁶ Allowing expert testimony regarding MCA gives it the misleading appearance of a true medical diagnosis like polio or breast cancer. This cloaks the medical expert's own unscientific opinion regarding the parent's actions under a veneer of scientific respectability and reliability.

In seeking to present an expert's subjective opinion in the guise of a scientific finding, medical child abuse has much in common with the largely-discredited "diagnosis" of "Parental Alienation Syndrome" (PAS). That term was first used in 1985 by child psychiatrist Richard Gardner to describe a constellation of symptoms in children that Gardner contended resulted from the mother's attempts to "brainwash" the child to dislike the other parent.²⁸⁷ The PAS "diagnosis" became rapidly and successfully deployed in the late 1980s and 1990s by psychiatrists testifying in favor of fathers in custody cases.²⁸⁸ As one commentator put it, framing these doctors' views as a diagnosis "sounds more impressive coming from the lips of a testifying mental health professional than 'She's just a lying, angry woman.'"²⁸⁹

Neither the PAS nor MCA diagnoses were invented by doctors seeking to treat a child's condition therapeutically; instead, both were conceptualized for the purposes of putting a pejorative spin on a parent's actions in the legal system.²⁹⁰ Furthermore, PAS, like MCA, was never subjected to rigorous empirical research or testing either then or since.²⁹¹ In addition, although the real target of the PAS diagnosis is the

²⁸⁶ *Bowers v. Norfolk S. Corp.*, 537 F.Supp.2d 1343, 1360 (M.D. Ga. 2007).

²⁸⁷ See Joan S. Meier, *A Historical Perspective on Parental Alienation Syndrome and Parental Alienation*, 6 J. CHILD CUSTODY 232, 235 (2009).

²⁸⁸ Paula J. Caplan, *Parental Alienation Syndrome: "Another Alarming DSM-5 Proposal,"* PSYCHOL. TODAY (June 7, 2011), <https://www.psychologytoday.com/blog/science-isnt-golden/201106/parental-alienation-syndrome-another-alarming-dsm-5-proposal>.

²⁸⁹ *Id.*

²⁹⁰ For the development of MCA for legal proceedings, see ROESLER & JENNY, *supra* note 12, at 43 ("We are talking about child abuse, a different presentation of child abuse, but abuse just the same."). For PAS's development for the purpose of legal proceedings, see generally Meier, *supra* note 287.

²⁹¹ For a discussion of the absence of empirical research supporting PAS, see, e.g., *Snyder v. Cedar*, No. NNHCV010454296, 2006 WL 539130, at *8 (Conn. Super. Ct. Feb. 16, 2006) ("[T]here appears to be an absence of empirical research that reliably identifies a cause for the behavior of a pre-adolescent child who decides to reject contact with a parent. The prevailing opinion in the field, as Rotnem herself admitted when pressed, is that such empirical studies are unlikely ever to result in a reliable means of identifying such a "syndrome" or its causes."). For a discussion of the limited and flawed empirical research on MCA, see *supra* notes 98–99, 110–117 and

parent, as with MCA, experts invented a diagnosis for the child.²⁹² Indeed, with both diagnoses, the charging expert has often never examined the child, let alone the parent.²⁹³ For all these reasons, an increasing number of courts have deemed PAS inadmissible as junk science, or have rejected expert opinions based on this theory.²⁹⁴ Judges should reach the same result when it comes to MCA.

accompanying text, as well as *infra* Part IV.B.

²⁹² For a discussion of the loose diagnostic standards for PAS, see, e.g., *Snyder*, 2006 WL 539130, at *8-9 (“Rotnem testified that Aviva — the ‘victim’ — exhibited all of the classic characteristics of an ‘alienated child,’ notwithstanding that Rotnem had not . . . laid eyes on Aviva since [seven years before the asserted abuse]. . . . Rotnem’s answers to questions about her ‘scientific certainty’ make clear that Rotnem’s opinion, far from being held to any degree of certainty, scientific or otherwise, is both subjective and fluid and is based on no more than Rotnem’s individual human observations and conclusions having nothing to do with her proffered expertise. While an experienced clinical social worker may be able to understand and interpret complex human behavior, it does not necessarily follow that the social worker can offer her conclusions in court under the guise of expert testimony when those views lack any scientific foundation.”); *Mastrengelo v. Mastrengelo*, No. NNHFA054012782S, 2012 WL 6901161, at *9 (Conn. Super. Ct. Dec. 20, 2012) (“[T]he analytical basis of, and one of the strongest objections to the scientific validity of, ‘parent alienation syndrome’ is that, rather than encompassing a review of the actions of the aligned parent, estranged parent and the child or children, the so-called syndrome focuses solely on the behaviors or actions of the child or children.”). For a discussion of the loose diagnostic standards associated with MCA, see *supra* notes 51–79 and accompanying text (describing MCA’s vast breadth); *infra* at Part IV.B.

²⁹³ Compare *Snyder*, 2006 WL 539130, at *9 (“Rotnem testified that Aviva — the ‘victim’ — exhibited all of the classic characteristics of an ‘alienated child,’ notwithstanding that Rotnem had not . . . laid eyes on Aviva since [seven years before the asserted abuse]”); and *Hanson v. Spolnik*, 685 N.E.2d 71, 85 (Ind. Ct. App. 1997) (the expert making the PAS diagnosis interviewed neither mother nor child, and “apparently formed his opinions based on notes from Dr. Crane, a therapist who also had never met [the father]. Thus, Dr. Lawlor and the therapist would be unable to determine the extent to which [the mother’s] allegations regarding [the father’s] conduct might be true.”); with *In re Joseph P.*, 2000 Conn. Super. LEXIS 984, at *6 (Conn. Super. Apr. 14, 2000) (“Dr. Jenny did not have complete familiarity with Michael’s medical history prior to March 2000, and thus could not support DCF’s theory that the mother had exaggerated Michael’s symptoms and need for medication for a long period of time. Nonetheless, Dr. Jenny did assist the court by describing how the events of March 2000, when coupled with other factors such as mother’s medical expertise as a licensed professional nurse, her desire to debate medicine with Michael’s doctors, Michael’s status as being chronically ill, and the fact that the father, as a long-distance trucker, was not in the home on a daily basis, all fit the profile of a Munchausen case.”); and *In re G.T.M.*, No. 106,996, 2012 WL 2785942, at *4 (Kan. Sup. Ct. July 6, 2012) (“Due to all of the observations made by hospital staff, Dr. Meyer diagnosed G.T.M. as suffering from medical abuse. She believed that most of G.T.M.’s medical procedures had been unnecessary. . . . Because of the diagnosis, Dr. Meyer did not believe it would be safe for G.T.M. to remain with Mother.”).

²⁹⁴ See *Hanson*, 685 N.E.2d at 85 (“Dr. Garner’s PAS ‘disorder’ is a disturbing,

MCA has one specific advantage over PAS when it comes to clearing the *Daubert* bar: The MCA diagnosis has been generally accepted within the field of pediatrics and, more specifically, within the subspecialty of board-certified child abuse pediatricians, and has been repeatedly discussed in this field's peer-reviewed literature.²⁹⁵ Acceptance within a professional field is a factor *Daubert* cites in favor of scientific admissibility.²⁹⁶ Indeed, courts have repeatedly cited PAS's failure to gain acceptance in their refusal to admit the PAS diagnosis.²⁹⁷ Yet the factor of professional acceptance is intended as a

inflammatory, unscientific and unsubstantiated theory which has no place in our courtrooms.”); *see also Snyder*, 2006 WL 539130, at *8 (“There is insufficient evidence that the description . . . of ‘parental alienation syndrome’ has any scientific basis.”); *Mastrangelo*, 2012 WL 690116, at *9 (finding that “the proffer of Dr. Baker’s testimony regarding the concept of ‘parental alienation syndrome’ does not meet the relevant standards under *Porter*, and is irrelevant to the defendant’s allegations in his instant motions, and is therefore inadmissible”); *Gillespie v. Gillespie*, No. 1849, 2016 WL 1622890, at *12 (Md. Ct. Spec. App. Apr. 25, 2016) (Friedman, J., concurring) (“[I] would caution courts, lawyers, expert witnesses, and litigants not to use the terms ‘parental alienation’ or ‘parental alienation syndrome’ casually, informally, or as if they have a medically or psychologically diagnostic meaning that has not been established.”); *NK v. MK*, No. XX07, 2007 WL 3244980, at *64 (N.Y. App. Div. Oct. 1, 2007) (“This court does not believe that there is a generally accepted diagnostic determination or syndrome known as ‘parental alienation syndrome.’”); *In re Marriage of Wiederholt*, 485 N.W.2d 442, 445 (Wis. 1992) (finding no error in the court’s refusal to accept expert’s opinion on PAS because the expert’s opinion on PAS “was controversial, there is limited research data, and there are uncertain risks.”). *See generally* Carol S. Bruch, *Parental Alienation Syndrome and Parental Alienation: Getting It Wrong in Child Custody Cases*, 35 FAM. L.Q. 527, 539 (2001) (quoting Dr. Paul J. Fink, past president of the American Psychiatric Association: “[PAS] as a scientific theory has been excoriated by legitimate researchers across the nation. Judged solely on [its] merits, [PAS] should be a rather pathetic footnote or an example of poor scientific standards.”).

²⁹⁵ *See, e.g.*, 2013 AAP Report, *supra* note 29; 2007 AAP Report, *supra* note 54; Constance Mash et al., *Development of a Risk-Stratification Tool for Medical Child Abuse in Failure to Thrive*, 128 PEDIATRICS 1467 (Nov. 2011); Greiner et al., *supra* note 30.

²⁹⁶ *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 594 (1993).

²⁹⁷ *See, e.g., Snyder*, 2006 WL 539130, at *8 (“Indeed, as it became clear on re-cross examination, [the expert witness] appears to have only a vague familiarity with how empirical studies in social or psychological fields are designed and for what types of variables such a study must control in order to have any scientific validity, much less the kind of validity that would result in its acceptance within the research or clinical community referenced by that study.”); *Mastrangelo*, 2012 WL 6901161, at *8 (“[T]he concept of ‘parental alienation syndrome’ is not recognized as a disorder by the medical or legal communities and Gardner’s theory and related research have been extensively criticized by legal and mental health scholars for lacking scientific validity and reliability.”); *People v. Fortin*, 706 N.Y.S.2d 611, 614 (N.Y. 2010) (“Based upon the testimony at the hearing, this Court finds that the defendant has not established general acceptance of Parental Alienation Syndrome within the professional

proxy for ensuring that the theory has been reviewed for conformity with scientific principles.²⁹⁸ Acceptance within the subfield of pediatricians who specialize in child abuse, however, is not a solid indication of a thorough scientific vetting given this subfield's notoriously shaky relationship with science.

Child abuse pediatricians have repeatedly overstepped the bounds of science with respect to two other highly-publicized diagnoses. The first involves their staunch support for the diagnosis of "shaken baby syndrome" (SBS).²⁹⁹ Beginning in the 1970s, these doctors and like-minded colleagues contended in expert testimony, lectures to law enforcement and social services personnel, and peer-reviewed articles that a particular triad of diagnostic signs could only be produced through the child having been severely shaken in the period immediately before the signs appeared.³⁰⁰ As with the diagnosis of

community which would provide a foundation for its admission at trial.").

²⁹⁸ *Daubert*, 43 F.3d at 1318 (party proffering expert testimony must "come forward with other objective, verifiable evidence that the testimony is based on 'scientifically valid principles.' One means of showing this is by proof that the research and analysis supporting the proffered conclusions have been subjected to normal scientific scrutiny through peer review and publication.").

²⁹⁹ See generally TUEKHEIMER, *supra* note 204, at 6; Gabaeff, *supra* note 118.

³⁰⁰ For a concise discussion of how this thesis developed, see Gabaeff, *supra* note 118, at 91. For cases involving such testimony, see, e.g., *United States v. Wright*, No. ACM32089, 1998 WL 142432, at *3 (A.F. Ct. Crim. App. Mar. 13, 1998) ("A forensic pathologist, Dr. Robert Kirschner, . . . concluded that the combination of subdural hematoma, cerebral edema, and the retinal hemorrhaging is characteristic of a severely shaken baby"); *Johnson v. Sec'y of Health & Human Services*, No. 95-197V, 1997 WL 368375, at *5 (Fed. Cl. Apr. 29, 1997) ("Drs. Chadwick and Lockman testified quite persuasively on this point, and the medical literature submitted by both sides in this case offers substantial support to their testimony. To summarize, this evidence indicates that when an infant has the particular combination of injuries that Devin had (i.e., subdural hematoma, brain swelling, and retinal hemorrhaging) such injuries are very likely to have been caused by physical trauma—i.e., the head has hit something or been struck or been moved rapidly enough to damage the brain tissue—rather than some other cause such as disease or exposure to a toxic substance"); *Mitchell v. State*, No. CACR 07-472, 2008 Ark. App. LEXIS 98, at *5 (Feb. 6, 2008) ("Physicians at Children's testified that they found evidence of subdural hemorrhaging (bleeding around the brain) and massive cerebral edema (brain swelling), as well as extensive bilateral retinal hemorrhages (bleeding in both eyes). The four treating and consulting physicians agreed that this kind of retinal hemorrhaging occurs almost exclusively in babies who have been shaken. The admitting pediatrician opined that DS's injuries were intentionally inflicted by violent shaking or severe impact."). For peer reviewed literature that makes such claims, see, e.g., American Academy of Pediatricians, Committee on Child Abuse and Neglect, *Shaken Baby Syndrome: Inflicted Cerebral Trauma*, 92 PEDIATRICS 872 (1993) [hereinafter AAP Report on SBS]; M. Elaine Billmire & Patricia A. Myers, *Serious Head Injury in Infants: Accident or Abuse?*, 75 PEDIATRICS 340 (1985); Stephen Lazoritz & Sandra Baldwin, *The Whiplash Shaken*

MCA, this group of pediatricians suggested that the diagnosis was so complicated that their group's own expertise was important for accurate diagnosis.³⁰¹ The diagnostic label of "shaken baby syndrome," as well as expert testimony diagnosing a child with it, turned out to be extremely effective in producing criminal convictions of the parent or caretaker who was caring for the child immediately before the symptoms appeared: Thousands of people were imprisoned (and more continue to be) based on the supposed science.³⁰² According to one estimate, ninety-five percent of those accused were convicted, ninety percent of whom received life sentences.³⁰³

Yet the repeated claims that this triad of symptoms could be produced through shaking and only through shaking immediately before the signs appeared turns out never to have been well tested scientifically,³⁰⁴ and, in fact, to be untrue.³⁰⁵ The triad of signs, it has now been demonstrated, can result from some organic illnesses, as well as from accidental injuries that occurred well before the signs appeared.³⁰⁶ Further, tests by biomechanical engineers have cast doubt

Infant Syndrome: Has Caffey's Syndrome Changed or Have We Changed his Syndrome?, 21 CHILD ABUSE & NEGLECT 1009 (1997).

³⁰¹ Compare AAP Report on SBS, *supra* note 300, at 872 ("Given the initial difficulty of identifying a shaken infant and the variability of the syndrome itself, the physician must be extremely vigilant regarding any brain trauma in infants and be familiar with the radiologic and clinical findings that support the diagnosis of the shaken baby syndrome."), with 2013 AAP Report, *supra* note 29, at 593 ("A physician with expertise in child abuse and fabricated illness in a child may be able to provide a more objective opinion than a physician more closely involved with the family.").

³⁰² See Gabaeff, *supra* note 118, at 92.

³⁰³ See Deborah Tuerkheimer, *The Next Innocence Project: Shaken Baby Syndrome and the Criminal Courts*, 87 WASH. U. L. REV. 1, 5 n.24 (2009) (citing Toni Blake, Jury Consultant, Address at the Forensic Truth Foundation: When Hypothesis and Data Conflict: An Analysis of an Infant Injury Database (May 12-15, 2007)).

³⁰⁴ See Mark Donohoe, *Evidence-Based Medicine and Shaken Baby Syndrome Part I: Literature Review, 1966-1998*, 24 AM. J. FORENSIC MED. PATHOLOGY, 239, 241 (2003) ("[T]he data available in the medical literature by the end of 1998 were inadequate to support any standard case definitions, or any standards for diagnostic assessment. Before 1999, there existed serious data gaps, flaws of logic, inconsistency of case definition, and a serious lack of tests capable of discriminating NAI cases from natural injuries."); *id.* ("The issue of the evidence for SBS appears analogous to an inverted pyramid, with a small database (most of it poor-quality original research, retrospective in nature, and without appropriate control groups) spreading to a broad body of somewhat divergent opinions. One may need reminding that repeated opinions based on poor-quality data cannot improve the quality of evidence.").

³⁰⁵ TUERKHEIMER, *supra* note 204, at 17-25; Gabaeff, *supra* note 118, at 90; Debbie Cenziper, *Shaken Science: A Disputed Diagnosis Imprisons Parents*, WASH. POST (Mar. 20, 2015), <https://www.washingtonpost.com/graphics/investigations/shaken-baby-syndrome/>.

³⁰⁶ See Gabaeff, *supra* note 118, at 95; Cenziper, *supra* note 305.

on the very possibility that simply violently shaking a child could produce enough force to produce one of the signs, bleeding on the brain, at least without causing significant damage to the infant's neck, as well.³⁰⁷ As Justice Ginsburg recounted in a dissent from a recent Supreme Court decision reversing a grant of habeas relief by the Ninth Circuit in an SBS case:

Reason to suspect the [SBS] thesis has grown in the years following [defendant's] 1997 trial. Doubt has increased in the medical community "over whether infants can be fatally injured through shaking alone." *State v. Edmunds*, 2008 WI App. 33, ¶ 15, 308 Wis.2d 374, 385, 746 N.W.2d 590, 596. See, e.g., Donohoe, *Evidence-Based Medicine and Shaken Baby Syndrome, Part I: Literature Review, 1966–1998*, 24 *Am. J. Forensic Med. & Pathology* 239, 241 (2003) (By the end of 1998, it had become apparent that "there was inadequate scientific evidence to come to a firm conclusion on most aspects of causation, diagnosis, treatment, or any other matters pertaining to SBS," and that "the commonly held opinion that the finding of [subdural hemorrhage] and [retinal hemorrhage] in an infant was strong evidence of SBS was unsustainable."); Bandak, *Shaken Baby Syndrome: A Biomechanics Analysis of Injury Mechanisms*, 151 *Forensic Sci. Int'l* 71, 78 (2005) ("Head acceleration and velocity levels commonly reported for SBS generate forces that are far too great for the infant neck to withstand without injury. . . . [A]n SBS diagnosis in an infant . . . without cervical spine or brain stem injury is questionable and other causes of the intracerebral injury must be considered."); . . . Uscinski, *Shaken Baby Syndrome: An Odyssey*, 46 *Neurol. Med. Chir. (Tokyo)* 57, 59 (2006) ("[T]he hypothetical mechanism of manually shaking infants in such a way as to cause intracranial injury is based on a misinterpretation of an experiment done for a different purpose, and contrary to the laws of injury biomechanics as they apply specifically to the infant anatomy."); Leestma, *Case Analysis of Brain-Injured Admittedly Shaken Infants, 54 Cases, 1969–2001*, 26 *Am. J. Forensic Med. & Pathology* 199, 211 (2005) ("[M]ost of the

³⁰⁷ See *Del Prete v. Thompson*, 10 F.Supp.3d 907, 928-30 (N.D. Ill. Jan. 27, 2014) (describing testimony of biomechanical engineer Michael Prange); Cenziper, *supra* note 305 (describing biomechanical testing on force generated by shaking versus short falls).

pathologies in allegedly shaken babies are due to impact injuries to the head and body.”); Squier, *Shaken Baby Syndrome: The Quest for Evidence*, 50 *Developmental Med. & Child Neurology* 10, 13 (2008) (“[H]ead impacts onto carpeted floors and steps from heights in the 1 to 3 feet range result in far greater . . . forces and accelerations than shaking and slamming onto either a sofa or a bed.”).³⁰⁸

The increasing recognition of the weakness of the science has recently led to a rising number of SBS convictions being overturned or commuted by courts or other state officials — often after the defendants have spent many years in prison.³⁰⁹ In the words of one

³⁰⁸ *Cavazos v. Smith*, 132 S.Ct. 2, 10 (2011) (Ginsburg, J., dissenting).

The majority in *Cavazos* did not defend the science underlying the SBS theory, but simply maintained that the court of appeals decision improperly “substituted its judgment for that of a California jury on the question whether the prosecution’s or the defense’s expert witnesses more persuasively explained the cause of a death.” *Id.* at 3 (per curiam).

³⁰⁹ One of the most well-publicized such SBS decisions is *Del Prete v. Thompson*, 10 F.Supp.3d 907, 909 (D. Ill. 2014), in which the District Court for the District of Illinois granted habeas corpus relief to a woman who had been convicted of murder nine years before for the death of a child in her care. The judge in that case concluded that the testimony of two child abuse pediatricians, Carole Jenny and Emalee Flaherty, both currently leaders in the MCA movement, was not based on sound scientific principles. *Id.* at 954-58. Also in 2014, a New York judge overturned the murder conviction of a 55-year-old babysitter who had spent more than a decade in prison, on the ground “that a significant and legitimate debate in the medical community has developed in the past 13 years, over whether young children can be fatally injured by means of shaking.” *People v. Bailey*, 999 N.Y.S.2d 713, 726 (N.Y. 2014). Two weeks later, a Texas judge recommended a new trial for a man sentenced to 35 years in 2000 on an SBS conviction based on an agreement between the district attorney and the defense attorney that “the science that formed the basis of the conviction is now known to be unsound.” Cenziper, *supra* note 305; see also *State v. Edmunds*, 746 N.W.2d 590, 592 (Wis. 2008).

In the months during which this article was in production, several state actors in the criminal justice system have recognized how seriously disputed the science underlying SBS cases is. See, e.g., *Commonwealth v. Millien*, 50 N.E.3d 808, 820 (Mass. June 3, 2016) (Massachusetts Supreme Court granted new trial because of ineffective assistance of counsel for failure to present an expert to contest prosecution’s medical evidence regarding SBS, who “could have cited to numerous scientific studies supporting the view that shaking alone cannot produce injuries of the type and severity suffered by [the decedent]”); *Reprieve for death row inmate convicted of killing daughter*, 2, CBS NEWS (June 7, 2016, <http://www.cbsnews.com/news/reprieve-for-texas-death-row-inmate-convicted-of-killing-daughter/>) (“Attorneys who contended ‘junk science’ was used to send a father to death row for killing his 2-year-old daughter 14 years ago have won a reprieve blocking the Texas inmate’s execution set for next week.”); Peter Schworm, *Another Finding of Shaken Baby Death in Middlesex is Revised*, BOSTON GLOBE (Dec. 21, 2015), <https://www.bostonglobe.com/>

judge who recently granted *habeas* relief ten years after a conviction, the expert opinions on SBS presented at trial were, it turns out, “more an article of faith than a proposition of science.”³¹⁰ The expert on child abuse who had testified at that trial, it should be noted, was Dr. Emalee Flaherty — the author of the 2013 American Academy of Pediatrics Clinical Report on MCA.³¹¹ Further, Carole Jenny, the originator of the MCA diagnosis, testified as an expert witness against granting relief at the *habeas* hearing. In the district judge’s words, Dr. Jenny’s testimony revealed (albeit with reluctance), “that the evidence basis for the proposition that shaking alone can cause injuries of the type at issue here is arguably non-scientific.”³¹²

Yet instead of seeking to incorporate the emerging science into their diagnoses, child abuse pediatricians have largely doubled down on their claims. While now acknowledging that the triad of symptoms can sometimes be produced by causes other than shaking, these pediatricians continue to assert without scientific proof that these symptoms are typically associated with inflicted injury, and generally refuse even to acknowledge the underlying scientific controversy with such claims.³¹³ Instead, they have sought to discredit those who

metro/2015/12/21/medical-examiner-office-drops-shaken-baby-syndrome-cause-death-for-infant/i4LWNacn9hfF713Cc5Ps4M/story.html (“For the third time in just over a year, the state medical examiner’s office has stepped back from a finding of shaken baby syndrome in a Middlesex County murder case [T]he medical examiner . . . revised her conclusion that the infant died from shaking, citing her ‘experience and review of medical literature on an ongoing basis.’”).

³¹⁰ See *Del Prete*, 10 F.Supp.3d at 957 n.10; 2013 AAP Report, *supra* note 29.

³¹¹ See 2013 AAP Report, *supra* note 29.

³¹² *Del Prete*, 10 F.Supp.3d at 954.

³¹³ As this law review article went into publication, a newly-released study from the journal *Pediatrics* repeats the same unproved contention that has been made by child abuse pediatricians during the last decades, despite the considerable evidence casting doubt on it: “Abusive head trauma (AHT) is the leading cause of death from traumatic brain injury in infants and the leading cause of death from physical abuse in the United States.” Rachel Berger et al., *Validation of the Pittsburgh Infant Brain Injury Score for Abusive Head Trauma*, 138 PEDIATRICS 1, 2 (July 2016). This study uses the same flawed retrospective comparison measures used in most SBS literature, in which cases are treated as confirmed for SBS if physicians believe they are definite, which means that the results of the research will be skewed if the original diagnostic measures are skewed. See *id.* at 2-3.

Further, the American Academy of Pediatrics website on Shaken Baby Syndrome, now called “Abusive Head Trauma,” still states that “[t]he existence of AHT in infants and young children is a settled scientific fact. The scientific support for the diagnosis of AHT comes from over 40 years of research in a broad array of clinical and basic science disciplines, including pediatrics, neurosciences, ophthalmology, orthopaedics, radiology, pathology, epidemiology, and biomechanics.” *Abusive Head Trauma (Shaken Baby Syndrome)*, AM. ACAD. OF PEDIATRICS, <https://www.aap.org/en-us/about-the-aap/aap-press->

publish research contrary to the SBS hypothesis,³¹⁴ and have questioned the integrity of actors in the justice system who reach conclusions contrary to their views.³¹⁵

Pediatricians specializing in child abuse were also instrumental to the satanic sex abuse panic of the late 1980s and the 1990s, in which innocent adults were falsely arrested and convicted for conducting ritual sex abuse of children under the most improbable of circumstances.³¹⁶ During this time, pediatricians, including MCA founder Carole Jenny, lent legitimacy to the view that satanic cults were sexually assaulting children in day care for ritualistic reasons despite the absence of robust evidence.³¹⁷ Only after other experts

room/aap-press-room-media-center/Pages/Abusive-Head-Trauma-Fact-Sheet.aspx (last visited July 10, 2016); see also Policy Statement, Cindy Christian et al., Committee on Child Abuse and Neglect, *Policy Statement: Abusive Head Trauma in Infants and Children*, 123 PEDIATRICS 1409, 1409 (2009) (“Although shaking an infant has the potential to cause neurologic injury, blunt impact or a combination of shaking and blunt impact cause injury as well.”). Cf. Gabaeff, *supra* note 118, at 93 (literature by child abuse pediatricians is “specifically designed to be used in court to counter” research that undercuts the SBS hypothesis, rather than serve as an independent inquiry into the SBS hypothesis; pediatric journals “then refus[e] to publish valid critiques” of these studies).

³¹⁴ See, e.g., Christopher S. Greeley, *A Wolf in Evidence Clothing: Denialism in Child Abuse Pediatrics*, AAP GRAND ROUNDS 24 (2011), <http://aapgrandrounds.aappublications.org/content/26/2/24.full-text.pdf>. (“What is going on here [with physicians seeking to discredit the SBS hypothesis]? How could presumably sophisticated professionals reach conclusions at odds with clear and convincing evidence? In one word: denialism.”).

³¹⁵ See Patricia Wen, *Pediatricians Call On Governor For Review Of Shaken Baby Cases*, BOSTON GLOBE (May 4, 2016), <https://www.bostonglobe.com/metro/2016/05/04/pediatricians-call-governor-for-review-shaken-babycases/qc5frqP8R49scPFWICKM0N/story.html> (Massachusetts pediatricians seek governor’s review of the state medical examiner’s office, after it changed its determination on three infant deaths involving SBS symptoms from “homicide” to “undetermined cause.” Pediatricians contend that “these extraordinary and alarming events call into question both the capacity and independence of our medical examiner’s office”).

³¹⁶ Radley Balko, *The Ongoing Legacy of the Great Satanic Sex Abuse Panic*, WASH. POST (May 26, 2015), <https://www.washingtonpost.com/news/the-watch/wp/2015/05/26/the-ongoing-legacy-of-the-great-satanic-sex-abuse-panic/>; *Remaining Charges Dropped in ‘Little Rascals’ Abuse Case*, WASH. POST (May 24, 1997), <https://www.washingtonpost.com/archive/politics/1997/05/24/remaining-charges-dropped-in-little-rascals-abuse-case/e4ef9e58-f680-4820-a57c-cededd66ed30/>; Linda Rodriguez McRobbie, *The Real Victims of Satanic Ritual Abuse: The Dangers Were Imaginary, But the Consequences Were Not*, SLATE (Jan. 7, 2014), http://www.slate.com/articles/health_and_science/medical_examiner/2014/01/fran_and_dan_keller_freed_two_of_the_last_victims_of_satanic_ritual_abuse.html.

³¹⁷ For example, Carole Jenny, the pediatrician who conceptualized the theory of MCA, co-edited THE APSAC HANDBOOK ON CHILD MALTREATMENT (John Briere et al. eds., 1996). That book contained a chapter on ritualistic abuse, authored by Susan Kelley, a pediatric nurse instrumental in several convictions of daycare workers for

debunked the notion of satanic sex abuse cults and their ability to win cases in court collapsed did these pediatricians stop supporting such charges.³¹⁸ Courts are still exonerating defendants convicted of satanic sex abuse and reversing the miscarriages of justice created by the acceptance of these spurious, nonscientific views.³¹⁹

B. *The Reliability of the Process of Diagnosing Medical Child Abuse in Particular Cases*

The problems with establishing the scientific validity of the general MCA diagnosis pale next to the problems with establishing the reliability of an MCA diagnosis reached in any particular case. To clear the *Daubert* bar, each logical link in an expert's determination must be scrutinized for its scientific soundness.³²⁰ In making this evaluation, courts must consider “[w]hether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion,” and “whether the expert has adequately accounted for obvious alternative explanations.”³²¹ In most cases in which MCA is diagnosed,

ritualistic abuse. See Susan J. Kelley, *Ritualistic Abuse of Children* at 90, *supra*. That chapter notes that ritualistic abuse is “one of the more controversial areas in the field of child maltreatment,” *id.* at 90. Yet it observes that the similarities in allegations between cases — *i.e.*, the fact that so many reports involved killing animals, killing humans, or use of excrement — “suggests that one of many possible viewpoints to be considered and further explored is that these children were indeed abused in brutal and bizarre fashions.” *Id.* at 97. It then states “[a]lthough the allegations in ritualistic abuse cases are not always believable, it does not follow that the entirety of what children report is false. . . . [P]rofessionals should not lose sight of the needs of these traumatized children and their families.” *Id.* at 98. The research recounted in that chapter includes several cases of ritual abuse later determined to be false. See also Charles F. Johnson, *Symbolic Scarring and Tattooing: Unusual Manifestations of Child Abuse*, 33 *CLINICAL PEDIATRICS* 46, 48 (1994) (“The skepticism of some physicians about the existence of cults will weaken their ability to recognize children’s stories that suggest experience in a cult ritual.”). See generally Susan Goldsmith, *The Syndrome* (2015) (documentary on SBS, which describes pediatricians’ role in the satanic sex abuse panic).

³¹⁸ See Goldsmith, *supra* note 317.

³¹⁹ See Balko, *supra* note 316; see also *Remaining Charges Dropped in ‘Little Rascals’ Abuse Case*, *supra* note 316 (describing how prosecutors dropped charges against two defendants serving life sentences for satanic sex abuse after cases “fell apart”).

³²⁰ See *Amorgianos v. Amtrak*, 303 F.3d 256, 267 (2d Cir. 2002) (“To warrant admissibility, . . . it is critical that an expert’s analysis be reliable at every step.”); *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 745 (3d Cir. 1994) (“[A]ny step that renders the analysis unreliable under the *Daubert* factors renders the expert’s testimony inadmissible.”).

³²¹ FED. R. EVID. 702 advisory committee’s note (2000 amends.). Expert testimony must be excluded from the trial if it does not “fit” the facts of the case well enough,

however, little in physicians' training or in the diagnostic protocol for MCA enables them reliably to distinguish MCA from complex medical conditions. Furthermore, the vagueness of the MCA diagnostic protocol means the doctor's subjective opinion, rather than the protocol itself, is generally determinative. This makes the MCA determination unreliable because it would not be replicable in the hands of a different doctor. In the Supreme Court's words, "Nothing 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."³²²

This section explores the gaps in the procedures used to diagnose MCA in particular cases. Subsection 1 as a preliminary matter describes the procedures MCA-charge proponents have laid out to diagnose MCA. Subsection 2 shows that these procedures have never been tested to ensure that they are reliable. In the absence of such testing, subsection 3 demonstrates that several of the criteria used to diagnose MCA have, in medical testing terms, "low specificity," meaning that they are likely to produce a high rate of "false positive" diagnoses of MCA.³²³ Admittedly the notion of a "false positive" diagnosis of MCA is somewhat incoherent given that the definition of MCA is so broad that virtually any action taken by a parent that relates to the child's medical care could warrant diagnosis.³²⁴ For the purposes of this section, I construe the MCA diagnosis as confined to parental actions regarding health care that might properly be deemed child abuse by a court, involving the conscious and significant

that is, when "a large analytical leap must be made between the facts and the opinion." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 147 (1997); *see also* *State v. Sanchez-Alfonso*, 293 P.3d 1011, 1020-21 (Or. 2012) ("Neither is it enough that 'a lot' of literature exists on the subject or that the expert . . . conducts a differential diagnosis." Instead, the expert must explain "the scientific basis for the steps that he or she takes in that process.").

³²² *Gen. Elec. Co. v. Joiner*, 522 U.S. at 146.

³²³ In medical diagnosis, test "sensitivity" relates to the test's ability to identify correctly those with a given condition. Thus, if a test identifies eighty percent of people who have a given condition but fails to identify the remaining twenty percent of the condition, its sensitivity rate is eighty percent. "Specificity," by contrast, relates to the test's ability to identify correctly those without a given condition. Thus, if a test correctly identifies eighty percent of people who do not have a given condition, but incorrectly identifies the remaining twenty percent as having the condition, its specificity rate is eighty percent. A test with low specificity will be a test that identifies a high rate of persons with a condition who do not actually have the condition, in other words, it will have a high rate of "false positive" results. *See* Douglas G. Altman & J. Martin Bland, *Diagnostic Tests 2: Predictive Values*, 309 *BMJ* 102, 102 (July 9, 1994).

³²⁴ *See supra* notes 58–82 and accompanying text.

misrepresentation or fabrication of a child's symptoms³²⁵ — essentially the same behavior that prompted the movement to identify MSBP, and to which MCA-charge proponents refer when they seek to justify such charges.³²⁶ Subsections 4 and 5 make the case that two features of the overall MCA diagnostic process — the subjective nature of the diagnostic criteria, and the low base rate of true MSBP behavior in the population — likely contribute to doctors reaching more “false positive” results than correct identifications of abuse. Finally, subsection 6 presents a case study that shows how the MCA diagnostic procedures readily yield the wrong result.

1. The Diagnostic Protocol for Medical Child Abuse

The most authoritative set of diagnostic procedures for MCA is set out in a 2013 clinical report from the American Academy of Pediatrics Committee on Child Abuse and Neglect, which was co-written by Dr. Emalee Flaherty and Dr. Harriet MacMillan.³²⁷ That Report first provides a table containing twelve indicators that, it states, “should cause the pediatrician to consider fabricated illness in the child.”³²⁸

³²⁵ See *supra* Part III.B.2.

³²⁶ See *supra* notes 83–94 and accompanying text.

³²⁷ See 2013 AAP Report, *supra* note 29. That Report refers to the diagnosis as “Caregiver-Fabricated Illness” rather than MCA, but states that this term is an “alternative name[,]” for MCA. *Id.* at 590. Caregiver-Fabricated Illness is arguably framed somewhat more narrowly than MCA insofar as it requires either falsification or induction of a child's symptoms. *Id.* at 591. Dr. Jenny and Dr. Roesler's definition of MCA leaves open the possibility that a parent who simply seeks medical care that their child does not need, even without fabricating or inducing symptoms, could have committed MCA. See *supra* notes 65–72 (discussing the vagueness of the use of the term “instigation”).

³²⁸ 2013 AAP Report, *supra* note 29, at 593 tbl. 2. The indicators are:

- Diagnosis does not match the objective findings.
- Signs or symptoms are bizarre.
- Caregiver or suspected offender does not express relief or pleasure when told that child is improving or that child does not have a particular illness.
- Inconsistent histories of symptoms from different observers.
- Caregiver insists on invasive or painful procedures and hospitalization.
- Caregiver's behavior does not match expressed distress or report of symptoms (e.g. unusually calm).
- Signs and symptoms begin only in the presence of 1 caregiver.
- Sibling has or had an unusual or unexplained illness or death.
- Sensitivity to multiple environmental substances or medicines.
- Failure of the child's illness to respond to its normal treatments or unusual intolerance to those treatments.

Almost all of these indicators are relatively nonspecific, meaning that while they might be present in the case of abuse, they might also be present in cases of genuine illness, particularly in children with unusual diseases. For example, a child with a rare, undiagnosed disease might have “signs or symptoms [considered] bizarre.” The child’s caregiver would likely “not express relief or pleasure when told . . . that the child does not have a particular illness” if the child’s actual medical condition still remained undiagnosed. The child might not, if the illness was misdiagnosed, “respond to . . . normal treatments.” A child with a genetic illness might have a sibling with “an unusual or unexplained illness or death.” And so forth. The nonspecificity of these indicators increases the likelihood that children who are considered for MCA will actually have undiagnosed diseases rather than be victims of MSBP-type behavior.

The presence of an unspecified number of these twelve indicators, according to the AAP Report, means that the case warrants investigation for the presence of MCA, but does not, in itself, justify an MCA diagnosis. Yet little detail is offered to guide physicians in the process of winnowing down cases with these indicators to accurately diagnose MCA’s presence. The Report’s diagnostic section begins with the statement that a “multidisciplinary evaluation” is important, but does not explain how such a multidisciplinary evaluation might proceed.³²⁹ Instead, it suggests the diagnostic process be put in the hands of a child abuse pediatrician,³³⁰ and centered around the review of the child’s medical records.³³¹ This review, the Report directs, should be used to compile a chart that lists each of the child’s medical contacts, which symptoms were observed by medical personnel or objectively confirmed, the medical provider’s conclusions and diagnoses, and the efficacy of any treatment.³³² The child’s treating

-
- Caregiver publicly solicits sympathy or donations or benefits because of the child’s rare illness.
 - Extensive unusual history in the caregiver or caregiver’s family; caregiver’s history of somatization disorders.

³²⁹ 2013 AAP Report, *supra* note 29, at 593.

³³⁰ 2007 AAP Report, *supra* note 54, at 1029 (“a pediatrician with experience and expertise in child abuse [should] consult on the case, if not lead the team”).

³³¹ *Id.* (declaring a complete review of the medical record to be “imperative;” without it, “identification of the condition as fabricated may be missed.”). Dr. Jenny and Dr. Roesler also put the medical record review at the center of their diagnostic process: “The task of the child abuse professional is to review the entire treatment history of the child and the child’s family to look for patterns of inappropriate behavior.” ROESLER & JENNY, *supra* note 12, at 177.

³³² 2013 AAP Report, *supra* note 29, at 594. The report says that a review of

doctors should be contacted, not for their diagnostic impressions, but rather to discuss whether they have any concerns about possible fabrication of illness not reflected in their records.³³³ The Report notes, in a single sentence that at the same time that the MCA diagnosis is being considered, the pediatrician should “simultaneously search[] for other medical explanations for the illness, . . . such as cyclic vomiting or mitochondrial disease.”³³⁴ However, the protocol provides no guidance regarding how a pediatrician might reliably distinguish MCA from these other diagnoses. Notwithstanding this brief nod to other explanations, the Report announces that MCA “is not a diagnosis of exclusion,” so that alternative diagnoses do not need to be ruled out definitively in order to diagnose maltreatment.³³⁵

The diagnostic criteria that the Report directs doctors to use are also vague and nonspecific.³³⁶ The Report states simply that the medical records chart should be used to test the parent’s claims “for each symptom and sign. An important overall issue to consider is whether the medical history provided by the caregiver matches the history in the medical record and whether the diagnosis matched the diagnosis made by the physician.”³³⁷ The Report then counsels the doctor investigating MCA to consider if the chart reveals one or more of the following:

medical records should also be performed for the child’s siblings. *Id.*; ROESLER & JENNY, *supra* note 12, at 177.

³³³ 2013 AAP Report, *supra* note 29, at 593.

³³⁴ *Id.* at 594. Dr. Jenny and Dr. Roesler dispatch the issue of genuine medical diagnoses being mistaken for MCA similarly quickly, despite evaluating many cases in a records-only review without meeting the parent or evaluating the child. See ROESLER & JENNY, *supra* note 12, at 138, 152-53 (“[W]e feel confident that by carefully reviewing the medical care received by children, we can distinguish which children have been subjected to medical child abuse and which have not.”).

³³⁵ 2013 AAP Report, *supra* note 29, at 594.

³³⁶ The same is true for the criteria set out for MCA by Dr. Jenny and Dr. Roesler. See ROESLER & JENNY, *supra* note 12, at 141 (“In reviewing the case material to determine if the children met criteria for medical child abuse we asked 2 questions: Has the child experienced unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker? Was the harm or potential harm to the child sufficient to warrant consideration for protection? To answer the first question we looked at the medical care the child received, the supporting evidence that would indicate whether the care was necessary, and whether a caretaker initiated the care. We noted evidence for the caretaker exaggerating existing symptoms, fabricating symptoms, or inducing symptoms in the child. To answer the second question we used a commonsense approach frequently referred to as ‘what would a reasonable person conclude.’”).

³³⁷ 2013 AAP Report, *supra* note 29, at 593.

1) the use of multiple medical facilities; 2) excessive and/or inappropriate pattern of use of medical services, including medications, tests, hospitalizations, and surgeries; 3) a pattern of missed appointments or the parent discharging the child against medical advice; and 4) the parent's misrepresentation of the opinions of physicians about the child's condition to other physicians."³³⁸

Finally, the Report discusses the pluses and minuses of the use of both covert video surveillance and separating the child from the caregiver for diagnostic purposes, though it recommends neither.³³⁹

The MCA diagnostic criteria can be usefully contrasted with the diagnostic guidelines for strep discussed earlier,³⁴⁰ in order to understand how far they fall short of reliable scientific standards. The strep guidelines have been tested to determine error rates for each diagnostic indicator.³⁴¹ For example, these guidelines indicate that one-fourth of all children who have acute sore throats will test positively for the strep bacteria.³⁴² The guidelines also set out how likely a specific set of signs and symptoms are to predict strep: for example, they specify that the presence of three indicators — the absence of a cough, swollen cervical lymph nodes, and a temperature of 100.4 degrees or higher — in a nine-year-old child with a sore throat correctly predicts the presence of strep only about one-half of the time.³⁴³ The guidelines then use the tested error rates of these clinical measures to suggest how doctors should proceed. For example, since a young adult presenting with an acute sore throat with no other indicators has a 1–2.5% chance of having strep, the guidelines recommend no further testing or treatment. In contrast, a young adult presenting with four clinical indicators has a chance of strep of 51% or higher; accordingly, the guidelines suggest immediate treatment with antibiotics even before results are received from a laboratory strep test. In cases with three indicators, the guidelines recommend testing with a more accurate screening test.³⁴⁴ Nothing like this occurs in the AAP's diagnostic protocol for MCA.

³³⁸ *Id.* at 593.

³³⁹ *See id.* at 594-595.

³⁴⁰ *See supra* note 191 and accompanying text.

³⁴¹ Choby, *supra* note 200, at 384 tbl.1 (setting out sensitivity and specificity rates).

³⁴² *Id.* at 383.

³⁴³ *Id.* at fig.1.

³⁴⁴ *Id.*

We should not, of course, expect the same level of clarity in MCA diagnostic procedures that we expect from diagnostic procedures for strep. Assessing the reliability of different diagnostic criteria for strep was relatively easy given that a highly accurate test for strep exists. Ascertaining the reliability of various diagnostic criteria in the MCA context is much harder given that, except in rare cases such as where lab results show poisoning, or covert video evidence that shows a mother suffocating a child, there are no specific tests for diagnosing MCA — no x-rays, no blood tests, no CT-scans — whose positive results will confirm its presence, and whose negative results will exclude a diagnosis.³⁴⁵

Nevertheless, those who seek to use MCA diagnoses in court must still show that the diagnostic process is reliable. This is a weighty burden for MCA-charge proponents to carry given that, outside of the few cases in which lab tests show poisoning or video evidence of suffocation, most cases will present with far less robust evidence of abuse.³⁴⁶ However, the danger of relying on weaker evidence, such as conflicts between the mother's account of the child's medical history and a doctor's account, is that innocent parents will be wrongly identified as having committed MCA. The question then is to what extent the diagnostic protocol for MCA, in the absence of such strong evidence, produces reliable results. Unfortunately, we cannot answer that question because the reliability of the diagnostic protocol for MCA has never been tested.

2. The Absence of Testing to Establish the Reliability of the Medical Child Abuse Diagnostic Protocol

The best way to determine the accuracy of a diagnostic protocol is to test it empirically. Indeed, the Supreme Court has stated that one important factor a court must assess to ensure reliability is the “known or potential error rate” of the technique.³⁴⁷ Yet while MCA proponents assert that they can reliably distinguish MCA cases from cases of genuine medical illnesses,³⁴⁸ and that empirical research supports their

³⁴⁵ See generally MART, *supra* note 37, at 45-46.

³⁴⁶ See also *id.* at 48-49 (distinguishing robust indicators of MSBP from weaker indicators).

³⁴⁷ *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 589, 580 (1993).

³⁴⁸ See, e.g., ROESLER & JENNY, *supra* note 12, at 152-53; Emalee Flaherty, Letter to the Editor, *When Doctors Accuse Parents of Medical Child Abuse*, N.Y. TIMES (July 18, 2015), <http://www.nytimes.com/2015/07/19/opinion/sunday/when-doctors-accuse-parents-of-medical-child-abuse.html?> (describing “the painstaking work of pediatricians who carefully evaluate alternative medical explanations for symptoms”).

determinations,³⁴⁹ the MCA diagnostic protocol has never been tested empirically. We therefore simply cannot know its error rate — and neither can accusing doctors.

An adequate test of the MCA diagnostic protocol would require examining the results reached by the physicians who apply it to determine what percent of the diagnoses were correct. Such a test would also ascertain the reliability of each of the diagnostic indicators, including, for example, whether a child diagnosed with MCA on evidence that the parent exaggerated the child's symptoms and took the child to multiple medical facilities truly did not have a genuine medical condition. Yet no empirical study has ever sought to test how accurate the results of the MCA diagnostic process are.

In the few empirical research studies relating to MCA that have been conducted, which are often cited by MCA-charge proponents, researchers examined something different.³⁵⁰ These were retrospective studies that considered the medical records of a group of children who were previously screened for particular symptoms or medical conditions. In these studies, the researchers compared the children who were subsequently diagnosed with MCA with those who were eventually diagnosed with a genuine medical condition to determine whether the two groups could be distinguished based on particular, ascertainable characteristics.³⁵¹

Even leaving aside the significant methodological flaws of some of these studies, which treat as MCA cases all those diagnosed with it, without requiring confirmation that the diagnosis was correct³⁵² — the

³⁴⁹ See Eli Sprecher, Letter to the Editor, *When Doctors Accuse Parents of Medical Child Abuse*, N.Y. TIMES (July 18, 2015), <http://www.nytimes.com/2015/07/19/opinion/sunday/when-doctors-accuse-parents-of-medical-child-abuse.html>.

³⁵⁰ See, e.g., Greiner et al., *supra* note 30; Mash et al., *supra* note 295.

³⁵¹ See Greiner et al., *supra* note 30 (comparing children admitted for apnea, vomiting/diarrhea, and seizures who were eventually diagnosed with MCA with children who were not); Mash et al., *supra* note 295, at 1467-72 (comparing cases of failure to thrive in which children were reported by the hospital for suspected MCA with other cases in which failure to thrive was diagnosed).

³⁵² Some of these empirical studies are so flawed methodologically that they should not be relied on for any purpose. This is certainly true for the Mash study, *supra* note 295, which treated as cases confirmed for MCA those cases “referred to the Child Advocacy Committee” of Cleveland Clinic or “reported to the Department of Child and Family Services . . . as a possible case of MCA.” *Id.* at 1467. The study made no attempt to confirm that suspected cases of MCA truly involved MCA. Comparing these cases with the control group therefore at best isolates the characteristics that the Cleveland Clinic doctors believed were suspicious for MCA — an excellent example of the tautological reasoning underlying much MCA research.

point of this research was to identify specific characteristics that distinguish MCA cases from cases of genuine illnesses for the purpose of developing future screening devices for those illnesses.³⁵³ These studies have little to say about the error rate of existing MCA diagnostic procedures.³⁵⁴

3. The Reliability of Individual Diagnostic Criteria

Not only is the overall diagnostic protocol for MCA untested, we have little information about the reliability of the individual criteria of the diagnostic protocol.³⁵⁵ We do not know, for example, whether the

Particularly interesting on the issue of whether the cases identified as MCA were correctly classified is the fact that those mothers categorized as MCA reported more preterm birth and labor complications than the control group. These differences suggest that the children categorized as MCA may actually have had more complex medical issues than the control group, and were therefore wrongly classified. Yet the authors of the Mash study, in a particularly imaginative section, studiously avoided considering that possibility. Instead, they suggested that the higher rates of reports of preterm birth and labor complications alternatively may be due to: (1) MCA mothers' reports having exaggerated pregnancy-related complications; (2) the mothers' preterm deliveries having interfered with these mothers' early bonding with the child, and the mothers having learned to enjoy the attention that having a sick child can bring, causing them subsequently to be more likely to commit MCA at higher rates than the control group; or (3) most creatively, "caretakers of MCA children [may have] self-induced prenatal complications or preterm delivery." *Id.* at 1471.

³⁵³ See, e.g., Greiner et al., *supra* note 30 (seeking to develop preliminary screening instrument to distinguish children at risk for MCA from otherwise normal children hospitalized for the evaluation of three common pediatric conditions — apnea, vomiting/diarrhea, and seizures). The findings of such studies cannot properly be generalized beyond the specific medical condition compared to MCA. For example, since the Mash study, *supra* note 295, some pediatricians have incorrectly claimed that a patient's evaluation for mitochondrial disease or reports of multi-organ involvement should be treated as a red flag for MCA, since that study found that more than half of MCA cases in the study had been evaluated for mitochondrial disease. *Id.* at 1472. Even leaving aside its methodological flaws, *see supra* note 352, that study considered only children evaluated for failure to thrive. The same differences the study found between MCA and control group cases may not manifest outside of the failure to thrive cases. If, for example, a study compared children evaluated for mitochondrial disease who were diagnosed with MCA with children who were eventually diagnosed as having mitochondrial disease, we would expect no such difference to appear.

³⁵⁴ See, e.g., Greiner et al., *supra* note 30, at 42 ("We believe this preliminary screening tool would be best used for hospitalized children who have apnea, chronic vomiting/diarrhea, or seizures of unknown etiology not responsive to standard medical care. A positive screening result using this tool is neither diagnostic of MCA nor the basis for a referral to children's services."); Mash et al., *supra* note 295, at 1472 ("this tool might be useful in determining which children are in need of more comprehensive evaluation for MCA").

³⁵⁵ For a discussion of the diagnostic criteria set out in the 2013 AAP Report, see

criteria for identifying MCA are truly accurate descriptors of children who have been abused medically (in other words, the “sensitivity” of the criteria). And even assuming they are accurate descriptors of this group, we do not know whether and to what extent these factors do *not* describe children who are genuinely sick with genuine illnesses (in other words, the “specificity” of the criteria).³⁵⁶ For example, while the 2013 AAP Report cites use of multiple medical facilities as a diagnostic criterion of MCA,³⁵⁷ no testing indicates that sorting children based on their use of multiple medical facilities can accurately distinguish between children who have mitochondrial disease and children who are medically abused. Given this absence of empirical testing, we simply cannot know the error rates of these indicators to diagnose MCA.

The absence of testing that establishes the accuracy of the diagnostic criteria used to identify MCA should, in itself, warrant excluding diagnoses made based on these criteria. Furthermore, existing research from outside of the MCA context strongly suggests that the diagnostic criteria used to distinguish MCA from genuine medical conditions will produce unreliable results. This subsection demonstrates how this research undermines the reliability of the individual criteria set out in the MCA diagnostic protocol.

a. Discrepancies between the parent’s account and the child’s medical records

The evidence that the AAP Report places the most weight on, and which generally constitutes the key evidence of abuse in MCA proceedings, are discrepancies in the medical record between the parent’s account of the child’s medical history and the child’s actual medical record. In the Report’s words, “[a]n important overall issue to consider is whether the medical history provided by the caregiver matches the history in the medical record and whether the diagnosis reported by the caregiver matches the diagnosis made by the physicians.”³⁵⁸

Yet a large body of research shows that ordinary parents outside of the MCA context routinely misstate their child’s medical condition. For example, one survey of parents who took children to the

supra notes 327–39 and accompanying text.

³⁵⁶ See *supra* note 323 for testing terminology.

³⁵⁷ 2013 AAP Report, *supra* note 29, at 593.

³⁵⁸ *Id.*; see also ROESLER & JENNY, *supra* note 12, at 180 (“Information provided by the parent to various medical personnel as reflected in the medical record becomes the basis of determining whether the parent initiated unnecessary or harmful treatment.”).

emergency room found that 91.5 percent of parents stated that their child's immunizations were up-to-date, when only 66 percent of children were truly current in these vaccinations. That study warned physicians to "use caution in making clinical decisions based on the history given by a caregiver."³⁵⁹ Another study found that ordinary mothers interviewed often provided information inconsistent with their children's medical records regarding length of pregnancy and neonatal problems; only half recalled the birth weight accurately. The study concluded that mothers' accounts of objective data are "not necessarily accurate," and that "less objective data may be recalled even less accurately."³⁶⁰ Another study showed that three weeks after their child's birth, mothers' accounts differed from medical records twenty-two percent of the time regarding whether their child was jaundiced, ten percent of the time regarding whether an electronic fetal monitor had been used, and eleven percent regarding whether they had had a tear of the perineum.³⁶¹ Research regarding medical histories provided by a family member of a patient also shows significant rates of error.³⁶²

Further, reviews of medical records outside of the MCA context demonstrate they are riddled with errors and omissions that could produce conflicts with a parent's accurate account. In one recent study, only about fifty percent of the diagnoses made by a patient's doctors were documented on the problem list (the section in which a physician lists the patient's diagnoses, as well as other problems, to which other physicians refer when treating the same patient); correct documentation rates ranged from 4.7 percent of diagnoses for renal failure to 78.5 percent for breast cancer.³⁶³ Another study demonstrated that 84 percent of all notes physicians enter directly into electronic medical record systems had at least one documentation

³⁵⁹ Edwin R. Williams et al., *Immunization Histories Given by Adult Caregivers Accompanying Children 3–36 Months to the Emergency Department*, 23 PEDIATRIC EMERGENCY CARE 285, 285 (2007).

³⁶⁰ R. Kim Oates & Douglas Forrest, *Reliability of Mothers' Reports of Birth Data*, 20 J. PAEDIATRICS & CHILD HEALTH 185, 185 (1984).

³⁶¹ See Daphne Hewson & Adrienne Bennett, *Childbirth Research Data: Medical Records or Women's Reports?*, 125 AM. J. EPIDEMIOLOGY 484, 487 tbl.3 (1987).

³⁶² One study that asked family members of cancer patients to report their family's cancer history found that seventeen percent of reports were inaccurate. Richard R. Love, *The Accuracy of Patient Reports of a Family History of Cancer*, 38 J. CHRONIC DISEASES 289, 290 (1985).

³⁶³ See Adam Wright et al., *A Method and Knowledge Base for Automated Inference of Patient Problems from Structured Data in an Electronic Medical Record*, 18 J. AM. MED. INFO. ASS'N 859, 865 tbl.2 (2011).

error, with an average of 7.8 errors per patient chart.³⁶⁴ A study comparing parental reports with medical records regarding children's febrile seizures concluded that some of the considerable discrepancies between these two sets of reports are "more likely to reflect underreporting by [the medical records] than overreporting by [parents]."³⁶⁵ Another study investigating surgeons' accuracy in recording patients' symptoms found that surgeons "often failed to document patients' pain as well as symptoms outside of the median nerve distribution."³⁶⁶ Finally, a study of patients hospitalized with heart attacks concluded that "[c]linicians may be recording those symptoms that support the [heart attack] diagnosis and not those perceived to be less relevant. Findings suggest that the medical record is an inaccurate and inadequate source of information about patients' actual experience of [heart attack] symptoms."³⁶⁷

What all this shows is that, in a great number of ordinary cases outside of the MCA context, there will be significant discrepancies between the parent's account of the child's medical condition and the medical records. Presumably such discrepancies would be even more likely to arise with a child who had a complicated medical condition with an extensive medical history. Using discrepancies in medical history as the key evidence of MCA is therefore likely to result in high numbers of diagnoses of ordinary parents whose children are simply and genuinely sick.

b. Absence of objective medical evidence of child's symptoms

Another important diagnostic criterion that physicians use to diagnose MCA is whether medical personnel or objective medical evidence support the caregiver's account of the child's signs and symptoms. Yet this too cannot reliably distinguish a child who has been abused medically from a child with a genuine medical condition.³⁶⁸ There are many reasons other than a parent's fabrication

³⁶⁴ See Charlene R. Weir & Jonathan R. Nebeker, *Critical Issues in an Electronic Documentation System*, AM. MED. INFO. ASS'N ANN. SYMP. PROC. ARCHIVE 786, 787 (2007).

³⁶⁵ Bradley K. Ackerson et al., *Agreement Between Medical Record and Parent Report for Evaluation of Childhood Febrile Seizures*, 31 VACCINE 2904, 2907 (2013).

³⁶⁶ Ryan Calfee et al., *Surgeon Bias in the Medical Record*, 32 ORTHOPEDICS 732, 732 (2009).

³⁶⁷ Holli A. DeVon et al., *Is the Medical Record an Accurate Reflection of Patients' Symptoms During Acute Myocardial Infarction*, 26 W. J. NURSING RES. 547, 547 (2004).

³⁶⁸ 2013 AAP Report, *supra* note 29, at 593 (directing that evaluating physician consider "reported signs/ symptoms as stated by the caregiver, objective observations

for the absence of objective confirmation of the child's signs and symptoms. First, a symptom is, by definition, a phenomenon that cannot be tested for, but is instead experienced subjectively by the individual affected by the disease.³⁶⁹ Thus there will be no test to confirm that a child experiences many symptoms, such as pain. Second, many symptoms and signs of genuine medical conditions are intermittent. These include cyclic vomiting, seizures, syncope (fainting), and apnea.³⁷⁰ Third, current medical staffing practices mean that medical personnel will not be in the room at least most of the time, even when children are in the hospital, meaning that even episodic events that occur in the hospital may not be observed.³⁷¹ Using objective proof of symptoms as a diagnostic net to catch child abusers is therefore likely to result in the misdiagnosis of many children who are simply sick with genuine medical conditions.

c. Use of multiple medical facilities/ discharge against medical advice

Taking "use of multiple medical facilities" as a diagnostic criterion also cannot adequately sort cases in which the parent is deliberately or consciously overtreating a child from cases in which a child has a complex medical condition. The Shire Rare Disease Impact Report found that patients with a rare disease on average had to visit eight separate physicians before the patient received a correct diagnosis.³⁷² These physicians might often be at different institutions.

documented by the physician. . . , and other comments or observations. The veracity of the claims made by the caregiver can then be assessed for each symptom and sign.").

³⁶⁹ See *Symptom*, DORLAND'S ILLUSTRATED MEDICAL DICTIONARY (31st ed. 2007).

³⁷⁰ See David C. Good, *Episodic Neurological Symptoms*, in CLINICAL METHODS 271 (H. Kenneth Walker et al. eds., 3d ed. 1990) (discussing diagnosis of an array of intermittent neurological symptoms, including fainting, migraines, seizures, visual disturbances, numbness, weakness, speech disturbances, and alterations of consciousness); Thangam Venkatesan et al., *Cyclic Vomiting Syndrome Clinical Presentation*, MEDSCAPE (last updated Sept. 3, 2015), <http://emedicine.medscape.com/article/933135-clinical> (syndrome "characterized by recurrent, discrete, stereotypical episodes of rapid-fire vomiting between varying periods of completely normal health").

³⁷¹ See, e.g., Perri Morgan et al., *Time Spent with Patients by Physicians, Nurse Practitioners, and Physician Assistants in Community Health Services*, 2 HEALTHCARE 232, 232-237 (2014) (on average, nurse spends 20 minutes with patient); Danielle Ofri, *The Doctor Will See Your Electronic Medical Record Now*, SLATE (Aug. 5, 2013, 12:27 PM), http://www.slate.com/blogs/future_tense/2013/08/05/study_reveals_doctors_are_spending_even_less_time_with_patients.html ("medical interns spent 40 percent of their day with a computer compared with 12 percent of their day with actual living, breathing patients").

³⁷² SHIRE, *supra* note 96, at 10.

A similar issue results from using the criterion that a child has a pattern of being discharged against medical advice. While this factor may be present in high numbers of children who are medically abused, it may also be common in children with hard to diagnose conditions. Assuming these cases are misdiagnosed for significant periods of time — a fair bet given that the Shire Rare Disease Impact Report shows that the average length of time it took a patient with a rare disease to get an accurate diagnosis was 7.6 years³⁷³ — the parent of such a child may repeatedly discharge the child against medical advice, given that the parent knows or suspects that the diagnosis is wrong. This is particularly likely to be the case where the doctor suspects MCA and seeks to withdraw medical care. In this case, a parent who knows that their child is genuinely ill and wants them to receive proper medical care may try to extricate the child from such a situation. In this respect, this criterion is effectively tautologous: it uses the fact that someone has been suspected of abuse as a factor to weigh in favor of determining they have committed MCA.³⁷⁴

d. Pediatrician determines child's genuine medical diagnoses

Yet another key source of unreliability comes from child abuse pediatricians determining whether the child has genuine medical diagnoses. The AAP Report states that the evaluating pediatrician must “simultaneously search[] for other medical explanations” while investigating the possibility of MCA.³⁷⁵ The protocol set out by the AAP Report, however, contains insufficient safeguards on the process by which a physician excludes a child having genuine medical diagnoses.

To begin with, although courts have generally treated medical experts' conclusions reached by the process of “differential diagnosis” as reliable,³⁷⁶ recent evidence suggests this process generally is far less reliable than was once believed. One recent, well-regarded study estimated that more than twelve million Americans — approximately

³⁷³ See *id.*

³⁷⁴ Cf. MART, *supra* note 37, at 38-42 (describing problem of recursive validation in MSBP literature).

³⁷⁵ 2013 AAP Report, *supra* note 29, at 594.

³⁷⁶ See, e.g., *Best v. Lowe's Home Ctr.*, 563 F.3d 171, 178-180 (6th Cir. 2009) (according deference to standard process of differential diagnosis); *Futrell v. Commonwealth*, 471 S.W.3d 258, 283-84 (Ky. 2015) (“This Court, as have many others, has recognized differential diagnosis as a ‘widely-used technique in the medical community to identify and isolate causes of disease and death,’ and, when properly performed, as ‘a reliable method of ascertaining medical causation.’”).

one out of every twenty patients — experience a diagnostic error each year, a number equal to the combined populations of New York and Los Angeles.³⁷⁷ A 2015 report published by the Institute of Medicine stated that almost everyone in the U.S. “will experience at least one diagnostic error in their lifetime, sometimes with devastating consequence.”³⁷⁸ Similarly, a review of studies assessing diagnostic error rates for specific conditions revealed a rate of incorrect diagnoses between two percent and sixty-nine percent, depending on the condition, with many of the diagnostic error rates hovering at or above fifty percent.³⁷⁹ The authors concluded that “the frequency of diagnostic error is disappointingly high. This is true for both relatively benign conditions and disorders where rapid and accurate diagnosis is essential, such as myocardial infarction, pulmonary embolism, and dissecting or ruptured aortic aneurysms.”³⁸⁰

When it comes to diagnosing children, the diagnostic process is likely even less reliable.³⁸¹ As the Institute of Medicine recognizes, children can be particularly challenging to diagnose because they often cannot provide an accurate medical history.³⁸² One writer explains that “adults who have been healthy know their bodies well enough to easily tell when they’re ill. . . . And even if [children] do recognize that they’re feeling off, they may very well lack the vocabulary to accurately communicate what’s happening.”³⁸³ The result is that pediatricians, when they are sued for malpractice, are sued for misdiagnosis far more often than any other group of doctors.³⁸⁴ Further adding to the complexity of diagnosing children, rare diseases themselves are more

³⁷⁷ See Helene Epstein, *Why It’s So Easy for Doctors to Misdiagnose Kids*, ATLANTIC (Nov. 17, 2015), <http://www.theatlantic.com/health/archive/2015/11/why-its-so-easy-for-doctors-to-misdiagnose-kids/416112/> (citing Hardeep Singh et al., *The Frequency of Diagnostic Errors in Outpatient Care: Estimations from Three Large Observational Studies Involving US Adult Populations*, 23 *BMJ QUALITY & SAFETY* 727, 731 (2014)).

³⁷⁸ INST. OF MED., *IMPROVING DIAGNOSIS IN HEALTH CARE* 19 (Erin P. Balogh, Bryan T. Miller, and John R. Ball eds. 2015) <http://www.nationalacademies.org/hmd/Reports/2015/Improving-Diagnosis-in-Healthcare.aspx> [hereinafter *IMPROVING DIAGNOSIS*].

³⁷⁹ Eta S. Berner & Mark L. Graber, *Overconfidence as a Cause of Diagnostic Error in Medicine*, 121 *AM. J. MED.* S2, S4 tbl. 1 (2008).

³⁸⁰ *Id.* at S3.

³⁸¹ See Epstein, *supra* note 377.

³⁸² See *IMPROVING DIAGNOSIS*, *supra* note 378, at 37.

³⁸³ See Epstein, *supra* note 377.

³⁸⁴ See *id.*; David B. Troxel, *Diagnostic Error in Medical Practice by Specialty*, DR.’S ADVOC. (2014), <http://www.thedoctors.com/KnowledgeCenter/Publications/TheDoctorsAdvocate/Diagnostic-Error-in-Medical-Practice-by-Specialty> (reporting that 61% of suits against pediatricians are for diagnostic errors, the largest of any medical field reported).

common in children than adults: approximately fifty percent of those affected by rare diseases are children.³⁸⁵

Several features of the process used to identify MCA make it even more error-prone than the standard pediatric diagnostic process. To begin with, because of children's difficulty in recognizing and communicating symptoms, outside of the MCA context, physicians generally put significant weight on parents' accounts of the child's medical history to supplement the physical examination and test results.³⁸⁶ Attempting to diagnose the child without relying on information from the parent's account, as the MCA diagnostic process dictates, means that an important source of information for the child is excluded from the diagnostic process.³⁸⁷

Further, children with conditions that are easy to diagnose will probably be diagnosed quickly, and likely never be suspected of suffering MCA. The children remaining will, assuming they are genuinely sick, likely have conditions that are more difficult to diagnose. Yet these conditions will be those most susceptible to diagnostic error. For example, the Shire Rare Disease Impact Report shows that a typical patient with a rare disease will receive on average two to three misdiagnoses before receiving a correct diagnosis.³⁸⁸ And this is in normal circumstances, in which diagnosis of these conditions can take into account the child's symptoms and medical history as described by the parent. Excluding this important data makes an already challenging process even more fraught with error.

The standard process for diagnosing MCA is also less reliable than other diagnostic processes because of the central role it accords child abuse pediatricians.³⁸⁹ Courts recognized MSBP to be a diagnosis of exclusion,³⁹⁰ which properly accorded diagnostic deference to experts

³⁸⁵ *Rare Diseases: Facts and Statistics*, GLOBAL GENES, <https://globalgenes.org/rare-diseases-facts-statistics/> (last visited July 14, 2016).

³⁸⁶ See Epstein, *supra* note 377.

³⁸⁷ The Institute of Medicine's study seeking to reduce diagnostic errors stresses the importance of taking an accurate medical history. To do so, in the case of children, it states, "it may be necessary to include family members or caregivers in the history-taking process. See IMPROVING DIAGNOSIS, *supra* note 378, at 37.

³⁸⁸ See SHIRE, *supra* note 96, at 6.

³⁸⁹ See 2007 AAP Report, *supra* note 54, at 1029 ("Whenever possible, have a pediatrician with experience and expertise in child abuse consult on the case, if not lead the team."); Greiner et al., *supra* note 30, at 42 ("Having a lower threshold to include MCA in the differential diagnosis with an earlier consultation with a child abuse pediatrician or multidisciplinary team may limit unnecessary medical procedures and decrease the risk of morbidity and mortality.").

³⁹⁰ See *Delaware v. McMullen*, 900 A.2d 103, 108, 119 (Del. Super. Ct. 2006).

in the diagnostic fields related to the child's putative symptoms. Yet MCA-charge proponents assert that MCA is not a diagnosis of exclusion,³⁹¹ suggesting that child abuse pediatricians' diagnosis of MCA should be given at least equal weight with a specialist's conclusion that the child has an organic medical condition. Indeed, the AAP's diagnostic protocol does not require that the child abuse pediatrician even consult the child's existing specialists, or other specialists in the field of the child's alleged symptoms, to get their diagnostic impressions regarding whether the child has genuine medical diagnoses.³⁹² Yet child abuse pediatricians certainly have far less diagnostic expertise with many complicated conditions than do medical experts in those fields, and studies demonstrate that specialists in a particular field have lower rates of error in diagnosing illnesses in their field than do non-experts.³⁹³ There are approximately 7,000 rare diseases,³⁹⁴ so no one doctor is able to diagnose all of them. The odds are far better for a specialist, who only needs to be knowledgeable in the diagnoses relevant to his or her specialty, than for a generalist.

³⁹¹ 2007 AAP Report, *supra* note 54, at 1028 ("Child abuse is not a diagnosis of exclusion. On the contrary, when a clinician suspects that a disease has been falsified, this hypothesis must be pursued vigorously and the diagnosis must be confirmed if the child is to be spared further harm."); 2013 AAP Report, *supra* note 29, at 594 ("Fabricated illness in a child, like other forms of child maltreatment, is not a diagnosis of exclusion.").

³⁹² The 2013 Report states that the child's physicians should be contacted only "to discuss whether they have any concerns about possible fabrication of illness." 2013 AAP Report, *supra* note 29, at 593. As a matter of practice, child abuse pediatricians often fail to consult the child's specialists, and continue to assert diagnoses of MCA despite conflicting diagnoses by specialists. See, e.g., Meagan Flynn, *Defense Claims Rare Undiagnosed Disease, Not Child Abuse, Made Woman's Daughter Sick*, HOUSTON PRESS, Sept. 22, 2015 (in Katie Ripstra case, state medical experts, none of whom were mitochondrial disease specialists, continued to diagnose MCA despite mitochondrial disease specialist diagnosing mitochondrial disease); Swidey & Wen, *Medical Collision*, *supra* note 2 (in Justina Pelletier's case, BCH diagnoses MCA despite Tufts' metabolic specialists' diagnosis of mitochondrial disease); Liz Klimas, *One of the Best Hospitals in the Country Is Accused of Doing One of the Worst Things Imaginable to Families—Again*, BLAZE, Dec. 16, 2013, <http://www.theblaze.com/stories/2013/12/16/campaign-of-terror-one-of-the-best-hospitals-in-the-country-is-accused-of-doing-one-of-the-worst-things-imaginable-to-families-again/> (in Hilliard's son's case, diagnosis of MCA made despite diagnoses by specialists of autism and mitochondrial disease).

³⁹³ See Martin T. Donohoe, *Comparing Generalist and Specialty Care*, 158 ARCHIVES INTERNAL MED. 1596, 1596 (1998) ("Specialists, due to their advanced education and training, possess in-depth, expert understanding of a limited number of diseases within their respective domains and are qualified to perform many diagnostic and therapeutic procedures not in the repertoire of generalists.").

³⁹⁴ *Rare Diseases: Facts and Statistics*, *supra* note 385.

Do child abuse pediatricians have greater insight in detecting abuse by medical care than other doctors, even if they are not better at eliminating genuine medical diagnoses? Given the absence of any empirical testing that confirms the validity of medical child abuse diagnoses, we have no way to be sure. Yet given the fact that few cases involving MCA will present strong evidence of such abuse, and given how vague and nonspecific the criteria for MCA are, a doctor evaluating a child for MCA will generally have to proceed by eliminating genuine medical diagnoses to reach a reliable determination.³⁹⁵ Specialists in the field of the child's asserted symptoms will therefore likely be more accurate diagnosticians of MCA than will pediatricians who specialize in child abuse.

Further, child abuse pediatricians may be especially prone to error precisely because of their supposed expertise in diagnosing MCA, given that the validity of their past decisions is unknown. Dr. Eta S. Berner and Dr. Mark L. Graber have observed that where feedback is absent or minimal, overconfidence by the physician can be a significant source of diagnostic error.³⁹⁶ The absence of any feedback loop about the accuracy of past diagnoses means that child abuse pediatricians' expertise in diagnosing MCA may not make their diagnoses more reliable, since they may simply be making the same mistakes over and over without correction.³⁹⁷

Indeed, the recent history of child abuse pediatricians' testimony with respect to Shaken Baby Syndrome — in which child abuse pediatricians routinely and confidently testified that a particular triad of symptoms could only result from intentional shaking although convincing evidence now shows that these symptoms can result from accidents or organic illnesses and indeed may not result from shaking — suggests that these pediatricians have already demonstrated the

³⁹⁵ The author owes this point to Dr. Mark Graber, an expert in medical diagnosis, who contributed to this article. For Dr. Graber's biography, credentials, and other contributions to this article, see prefatory note †.

³⁹⁶ Berner & Graber, *supra* note 379, at S10 (“[F]eedback that is delayed or absent may not be recognized for what it is, and the perception that ‘misdiagnosis is not a big problem’ remains unchallenged. That is, in the absence of information that the diagnosis is wrong, it is assumed to be correct”).

³⁹⁷ I owe this argument to Katherine Judson and Keith Findley's excellent brief in a Shaken Baby Syndrome case. See Defendant's First Motion in Limine to Exclude False and Unreliable Expert Testimony, *Wisconsin v. Hartje*, Circuit Court Branch 2 (Sept. 14, 2015) (citing Gordon D. Schiff, *Minimizing Diagnostic Error: The Importance of Follow-up and Feedback*, 121 AM. J. MED. S38, S38 (2008) (explaining that the absence of feedback undermines reliability because the diagnostic system cannot “calibrate its output or determine if the desired goal is achieved. . . . [Such a system] cannot engage in learning.”)).

overconfidence that can come from the absence of a feedback loop.³⁹⁸ Just as experts in detecting witches in early Salem may have been experienced — but wrong at — detecting witches, if pediatricians have been relying on criteria that are inadequate predictors of MCA, their expertise will contribute to less reliable rather than more reliable results. As subsections 4 and 5 suggest, this possibility is likely: the vague and nonspecific nature of the diagnostic criteria in concert with the low incidence of MCA have probably led to significant numbers of false positive results.³⁹⁹

e. Pediatrician's judgment on overtreatment

To add still further to the unreliability of the MCA diagnosis when compared to standard medical diagnoses, the diagnosis of MCA includes an assessment that the medical treatment that the child received was “unnecessary,”⁴⁰⁰ a judgment that is exceedingly variable. In a national study, when patients received second opinions from other doctors, 37.4 percent of these opinions recommended changes in the treatment ordered by a first doctor.⁴⁰¹ Following this criterion would therefore leave the parents of close to four of every ten sick children vulnerable to child abuse charges simply for following one doctor's opinion over another.

f. Use of profile evidence

Finally, child abuse pediatricians sometimes seek to bolster their diagnoses of MCA with the claim that the parent fits the supposed behavioral profile of an MCA parent.⁴⁰² The 2013 AAP Report cites

³⁹⁸ See *id.* (citing Berner & Graber, *supra* note 379); see also *supra* notes 299–315 and accompanying text.

³⁹⁹ See *infra* pp. 301–06.

⁴⁰⁰ ROESLER & JENNY, *supra* note 12, at 141; 2013 AAP Report, *supra* note 29, at 593.

⁴⁰¹ Ashley N.D. Meyer et al., *Evaluation of Outcomes from a National Patient-Initiated Second-Opinion Program*, 128 AM. J. MED. 1138, 1138 (2015).

⁴⁰² See, e.g., *In re Joseph P.*, 2000 Conn. Super. LEXIS 984, at *6 (Apr. 14 2000) (state's medical expert, Dr. Carole Jenny, testified that “mother's medical expertise as a licensed professional nurse, her desire to debate medicine with [her son's] doctors, . . . and the fact that the father, as a long-distance trucker, was not in the home on a daily basis, all fit the profile of a Munchausen case”); *In re Adoption of Keefe*, 733 N.E.2d 1075, 1080 (Mass. App. Ct. 2000) (testimony that “(1) that perpetrators of MSBP typically are the children's mothers; (2) that they often are health care professionals themselves; and (3) that the father in MSBP cases is often emotionally or physically absent”); Klimas, *supra* note 392 (basing MCA diagnosis in part on mother's medical background); see also Illinois Department of Children and Family, Procedures, *supra* note 138, at 2 (providing a list of “characteristics” that are

several of these profile items in its table of “indicators” for MCA,⁴⁰³ and others in the body of the Report.⁴⁰⁴ These include “caregivers who (1) appear to need or thrive on attention from physicians, (2) insist that the child cannot cope without the parent’s ongoing attention, [and] (3) are either directly involved in professions related to health care or at least are very knowledgeable medically.”⁴⁰⁵ These characteristics, as well as others cited elsewhere in MCA literature,⁴⁰⁶ were culled from case studies of mothers whom physicians had diagnosed with MSBP, most of which were not independently confirmed, and were simply passed on wholesale to the new MCA diagnosis.⁴⁰⁷ While the 2013 AAP Report presents these profile items

“common” in persons that commit MCA, which includes being a mother, having medical training, having a “shallow” spousal relationship, and “a tendency toward self-dramatization”).

⁴⁰³ See 2013 AAP Report, *supra* note 29, at 593 tbl.2.

⁴⁰⁴ *Id.* at 592.

⁴⁰⁵ *Id.* The Report also states that a caregiver who “resists reassurance that the child is healthy,” or who “perseverates about borderline abnormal results of no clinical relevance,” or who “refutes the validity of normal results” should be considered suspect. *Id.* at 593.

⁴⁰⁶ See, e.g., MICH. TASK FORCE REP., *supra* note 31, at 3 (listing a number of “indicators” of MCA, including “highly attentive parent/caretaker is unusually reluctant to leave his/her child’s side;” “A parent/caretaker appears to thrive on the attention given to the child’s lack of response to medical treatment;” “A parent/caretaker appears to be abnormally calm in the face of complications in the child’s medical course;” “A parent/caretaker is not relieved or reassured when presented with negative test results and resists having the child discharged from the hospital;” “The parent/caretaker may work in health care or have unusually detailed medical knowledge.”).

⁴⁰⁷ Compare, e.g., MART, *supra* note 37, at 48-56 (features of MSBP profile), with MICH. TASK FORCE REP., *supra* note 31, at 3 (“warning signs” of medical child abuse). A New York family court summarized this profile as follows in an older MSBP case:

The profile testified to suggests that an MS[B]P parent (in 98% of the cases it is a mother) is articulate and bright, and possesses a high degree of medical knowledge and/or fascination with medical details and hospital gossip, and seems to enjoy the hospital environment. Normally the mother . . . is highly supportive and/or encouraging of the physician and medical staff. She is a highly attendant [sic] parent who is reluctant to leave her child’s side The suspected parent may be a health care professional, have a nursing degree or nursing training (statistics quoted suggest that 30-50% of MS[B]P mothers studied were nurses) They tend to be highly manipulative and use their persuasive abilities to ally themselves with medical staff; often to the point where the medical personnel will come to their defense when the accusation of MS[B]P is made. The inconsistencies in their stories also increase when confronted.

Matter of Aaron S., 625 N.Y.S.2d 786, 788 (N.Y. Fam. Ct. 1993), *aff’d*, *In re Suffolk*

only as “indicators” that should prompt consideration of a MCA diagnosis, rather than as diagnostic criteria⁴⁰⁸ — presumably because the MCA diagnosis is assigned to the child rather than the parent — medical experts nevertheless continue to rely on these profiles to substantiate MCA diagnoses.⁴⁰⁹

No good empirical evidence, however, establishes that conformity with the MCA profile reliably predicts MCA or even MSBP behavior.⁴¹⁰ To the contrary, the little empirical research that has been performed rejects the predictive power of such profiles. For example, a 2000 study by David Hall and colleagues concluded that such a profile “is not sensitive enough for diagnosis.”⁴¹¹ In the authors’ words,

Although many of the families fit the usual stereotypes of MSBP, such as enthusiasm for medical testing, and emotionally or physically distant father, and unusual closeness to the medical staff, these were not uniformly observed, and we were unable to predict the certainty of diagnosis using these factors.⁴¹²

That study found that to the extent that some characteristics of the profile somewhat accurately described MSBP mothers (in testing terms, the characteristics’ “sensitivity”) — for example, twelve of twenty-three mothers seemed to the medical staff to be unusually knowledgeable⁴¹³ — these characteristics were still prevalent enough in non-MSBP mothers that they could not accurately distinguish the two groups (in testing terms, the characteristics’ “specificity”).⁴¹⁴ A 2013 study by Mary Greiner and her colleagues that sought to develop an early screening instrument for MCA also failed to find two standard profile items to accurately characterize MCA mothers — their being

Cty. Dept. of Social Servs., 626 N.Y.S.2d 227 (N.Y. App. Div. 1995).

⁴⁰⁸ See *supra* note 328.

⁴⁰⁹ 2013 AAP Report, *supra* note 29, at 592.

⁴¹⁰ In fact, despite continuing to use such profiles in court, *see, e.g., supra* note 402, MCA-charge proponents have acknowledged that they lack empirical support. *See ROESLER & JENNY, supra* note 12, at 33 (“As helpful as it would be to have a profile procedure we could use for screening, efforts made to date do not even begin to address the complexity of the problem.”); *see also* MART, *supra* note 37, at 48-57 (decimating the reliability of the profile in MSBP cases).

⁴¹¹ David E. Hall et al., *Evaluation of Covert Video Surveillance in the Diagnosis of Munchausen Syndrome by Proxy: Lessons from 41 Cases*, 105 PEDIATRICS 1305, 1310 (2000).

⁴¹² *Id.* at 1308.

⁴¹³ *Id.* at 1309.

⁴¹⁴ *Id.* at 1308-09

unwilling to leave their child's bedside, and their being "overfriendly" with medical personnel.⁴¹⁵

In the absence of empirical confirmation of the predictive power of the profile, no one can say for certain whether a parent's resemblance to the profile reliably indicates they are a medical abuser. Such a result would be unlikely, however, since a large number of profile elements describe many if not most parents of children with the kinds of medically-complex conditions most likely to be mistaken for MSBP.⁴¹⁶ To take one example, probably many parents of such sick children can speak with considerable knowledge about their child's medical condition. In addition, many such parents, if they believed that their child was improperly diagnosed (which could easily be the case, given it takes on average 7.6 years to get a correct diagnosis of rare diseases),⁴¹⁷ would likely insist on more medical tests and procedures and get angry when his or her demands were not met — two other standard features of the MCA profile. Furthermore, based on Bureau of Labor Statistics, a full 9.6 million women currently work in medical jobs.⁴¹⁸ Presumably significantly more women have some type of medical training. What this means is that even if these profile characteristics had been shown to accurately describe MSBP/MCA mothers, which is not the case, such a profile would likely be useless for distinguishing these parents from parents of genuinely sick children because it also describes so many of the latter group.⁴¹⁹

Moreover, given the large number of items in the profile⁴²⁰ — many of which contradict other profile items — and experts' tendency to pick and choose particular elements from the profile that support them, it is hard to imagine a case in which some features of the profile could not be used to support an MCA diagnosis.⁴²¹ In psychologist Loren Pankratz's words, "If the mother appears calm or distressed,

⁴¹⁵ Greiner et al., *supra* note 30, at 42.

⁴¹⁶ See MART, *supra* note 37 at 32–33; Talbot, *supra* note 36, at 66–67.

⁴¹⁷ See SHIRE, *supra* note 96.

⁴¹⁸ See *Labor Force Statistics from the Current Population Survey*, BUREAU OF LABOR STATISTICS, <http://www.bls.gov/cps/cpsaat11.htm> (last visited Sept. 26, 2016) (calculated from "healthcare practitioners and technical occupations," and "healthcare support occupations").

⁴¹⁹ As Eric Mart stated of the MSBP profile: "We do not know, and neither do the authors, the extent to which parents of genuinely ill children become overprotective, develop close relationships with physicians or nurses, exhibit interest in their children's illnesses and treatment, or have psychopathology or histories of abuse." MART, *supra* note 37, at 50.

⁴²⁰ For examples of some profile elements, see *supra* note 402.

⁴²¹ See Pankratz, *MSBP Label*, *supra* note 46, at 90–91.

charming or hostile, distant or overinvolved, either appearance can be described as characteristic of mothers with MSBP. All of this makes conclusions reached about the profile's application subjective, vulnerable to confirmation bias on the part of a suspicious doctor, and essentially nonfalsifiable."⁴²² Yet a test that yields no verifiable right and wrong results is not admissible under *Daubert*.

4. The Vagueness of the Diagnostic Criteria

The MCA diagnostic scheme is unreliable not only due to the lack of specificity of its diagnostic criteria (meaning that these criteria are likely to identify many parents who do not merit the MCA label), but also because of the vagueness of these criteria.⁴²³ Most MCA criteria are described in a manner that requires a subjective determination on the part of the medical expert. For example, the protocol does not give clear guidelines for determining what constitutes "excessive and/or inappropriate pattern of use of medical services"; neither does it define how many missed appointments constitutes a "pattern." Furthermore, unlike the diagnostic guidelines for illnesses such as strep,⁴²⁴ the MCA diagnostic guidelines do not specify how many diagnostic criteria should be present for the expert to diagnose MCA.

The same is true of the characteristics of the MCA personality profile. MCA proponents have not set a standard for determining the intensity and frequency needed to satisfy any individual profile factor, nor how many profile characteristics must be present to consider MCA. For example, although the "enmeshment" of mother and child is often cited as a profile factor, no guidelines distinguish between behaviors that constitute "enmeshment" and other behaviors, and no measurable guidelines exist for determining the extent of enmeshment behaviors demonstrated — a particular problem given that most mothers of sick children will show some measure of attachment behavior.⁴²⁵

Further, determining that some of the diagnostic criteria are met will turn on a doctor's *conclusions* about whether the child's medical condition is genuine or has been fabricated or exaggerated, and are therefore based on circular reasoning. Essentially the doctor declares

⁴²² *Id.* at 91; see also MART, *supra* note 37, at 41.

⁴²³ The same is true for the diagnostic criteria laid out by Dr. Roesler and Dr. Jenny. See ROESLER & JENNY, *supra* note 12, at 141-45.

⁴²⁴ See *supra* notes 340-344 and accompanying text.

⁴²⁵ See generally MART, *supra* note 37, at 41-42 (discussing the challenges in measuring enmeshment in part due to the vagueness of the definition).

they are met simply because he or she believes they are met. For example, determining whether the child had an “excessive and/or inappropriate pattern of utilization, including procedures, medications, tests, hospitalizations, and surgeries,”⁴²⁶ turns on the doctor’s assessment of whether the child’s medical diagnoses have been fabricated or exaggerated. If the accusing pediatrician decides that the child has no genuine medical diagnoses, then, ipso facto, she will conclude that the child has an excessive and inappropriate pattern of utilizing medical services.

Experts in the causes of medical misdiagnosis have demonstrated that such vague diagnostic criteria can lead to inaccurate determinations through allowing the physician’s own biases and heuristics (mental shortcuts) to enter into the diagnostic determination.⁴²⁷ They show, for example, that the “availability heuristic” can bias physicians’ determinations based on their experience with past cases.⁴²⁸ Further, the “anchoring heuristic” can lead physicians to rely on their initial diagnostic impressions, and to dismiss subsequent relevant information to the contrary.⁴²⁹ Given that a high percentage of MCA evaluations are performed by child abuse pediatricians, who by virtue of their specialty are likely to be focused on abuse, MCA diagnoses are particularly vulnerable to such biases. Indeed, Dr. Loren Pankratz has reported precisely such biased diagnostic determinations by the charging physicians in the context of MSBP determinations.⁴³⁰ The possibility that such subtle biases may lead to false positive diagnoses should be taken particularly seriously in the context of MCA, because of its far-reaching consequences for both the parent and the child, including the fact that such a diagnosis is likely to limit opportunities for the child to be correctly diagnosed in the future.⁴³¹

⁴²⁶ 2013 AAP Report, *supra* note 29, at 593.

⁴²⁷ See IMPROVING DIAGNOSIS, *supra* note 378, at 218-29 (describing ways in which biases and heuristics can lead to misdiagnosis and strategies to reduce harmful effects of these devices).

⁴²⁸ *Id.* at 57, T.2.2.; see Pat Croskerry, *Achieving Quality in Clinical Decision Making: Cognitive Strategies and Detection of Bias*, 9 ACAD. EMERGENCY MED. 1184, 1186-87 (2002); H.G. Schmidt, S. Marnede, K. van den Berge, T. van Gog, J.L. van Saase & R.M. Rikers, *Exposure to Media Information About a Disease Can Cause Doctors to Misdiagnose Similar-Looking Clinical Cases*, 89 ACAD. MED. 285, 285 (2014).

⁴²⁹ Croskerry, *supra* note 428, at 1186-87.

⁴³⁰ See Pankratz, *Separation Test*, *supra* note 47, at 313-15.

⁴³¹ Indeed, even a report of suspected MCA can lead to far-reaching, even fatal, consequences for the child. For example in *Nash v. Cleveland Clinic Foundation*, No. 101389, 2015 WL 1593158 (Ohio Ct. App. April 9, 2015), a child placed since infancy

5. The Low Base Rate of Medical Child Abuse

The nonspecificity and vagueness of the MCA diagnostic criteria, in combination with the low base rate of MCA in the population, make it more likely that any individual diagnosis of MCA will be a “false positive” rather than a “true positive” identification. This result is predicted by Bayes’s Theorem, a mathematical formula that predicts the accuracy of a medical test used to screen for conditions that are present in a particular rate in a given population.⁴³² As epidemiologists have long recognized, Bayes’s Theorem establishes that the accuracy of a positive test result for a given condition is determined not only by the accuracy rate of the test itself, but also by the rate that the condition appears in the population screened (called the “base rate”). For example, assume that a flu test correctly identifies every person that has flu (one hundred percent sensitivity), but also incorrectly identifies 1 in 10 people tested who do not have flu (ninety percent specificity, since the test will correctly exclude ninety percent of persons who do not have flu). If we assume that 1 in every 2 persons tested for flu in the doctor’s office truly has flu, out of 100 patients tested, all 50 patients who truly have the flu will be identified correctly as having it, and 5 patients out of the 50 who do not have the flu will be identified incorrectly as having the flu (the ten percent false positive rate). The chance that a positive diagnosis is correct is therefore 50 out of 55, or ninety-one percent.

Yet, what if there are a number of other conditions that look like flu, so that doctors use the same flu test on patients whose likelihood of having flu is far lower than in the first example? Say the base rate is

with a foster mother was removed on suspicion that the foster mother was exaggerating the child’s medical issues because of MSBP. The child died months later at another foster care placement as a result of the child’s (genuine) medical issues. Other cases in which children died after being removed from medical care on suspicion that a parent had induced or exaggerated their condition include Debra Reid’s nine-year-old son, Jonathan, who died of an asthma attack after he was removed from his mother’s care because she repeatedly took him to the emergency room to be treated for asthma. See Garrett Therolf, *Payment Weighed in Foster Care Death*, L.A. TIMES (July 29, 2002), <http://articles.latimes.com/2002/jul/29/local/me-settle29>. In addition, psychologist Loren Pankratz reported that another child in his practice died after being removed from his parents, and that his death was “the direct result of not believing the seriousness of the children’s medical condition.” Pankratz, *Separation Test*, *supra* note 47, at 312; Email from Loren Pankratz to author (July 30, 2016, 3:02 PM) (copy on file with author).

⁴³² See also J.M. Wood, *Weighing Evidence in Sexual Abuse Evaluations: An Introduction to Bayes’s Theorem*, 1 CHILD MALTREATMENT 25 (1996). See generally MART, *supra* note 37, at 42-47 (excellent discussion of the base rate problem and Bayes’s theorem in screening for MSBP).

that 10 in 100 people tested actually have the flu. In this case, assuming that the reliability of the test remains the same, for every 100 patients tested, all 10 patients who have the flu will be correctly identified (the one hundred percent sensitivity), and, given the ten percent false positive rate, 9 patients of the remaining 90 patients who do not have flu will be incorrectly identified (false positives), for a total of 19 positive tests. Therefore, of the people who receive a positive test result in this situation, only ten out of nineteen, or fifty-three percent, will be true positives.⁴³³

So how does the protocol for diagnosing MCA stack up when considering the base rate issue? There has never been a good empirical study of the rate of MCA in the general population, but even MCA-charge proponents concede that it is quite rare. The figures they usually supply put the base rate at approximately 0.5 to 2.0 per 100,000 children younger than sixteen years.⁴³⁴ As I noted earlier, these rates are likely too high.⁴³⁵ Yet accepting them for hypothetical purposes, these incidence rates can be compared with the rates of rare diseases that might be mistaken with MCA to roughly estimate the base rate of the pool of children who would likely be screened for MCA. Mitochondrial disease falls in this category of conditions, since the disease often involves several different organ systems, therefore causing the child to be seen by a number of different specialists; the science on it is still emerging and the diagnostic criteria are complicated; it can involve intermittent symptoms such as cyclic vomiting; it is a genetic illness that often runs in families; and several of the symptoms, like pain, nausea, fatigue and dizziness, cannot be proved by objective means. Recent literature shows that the prevalence of mitochondrial disease is roughly 1 in 4,300 (23 in 100,000), although some physicians assert that mitochondrial disease is as common as 1 in 2,000 (50 in 100,000).⁴³⁶ This makes a child more

⁴³³ See generally MART, *supra* note 37, at 42-47 (explaining problem of applying Bayes' Theorem to situations in which the base rate of the phenomenon being tested for is low).

⁴³⁴ See, e.g., 2013 AAP Report, *supra* note 29, at 592.

⁴³⁵ The 2.0 per 100,000 figure from a New Zealand study should be taken with a number of grains of salt for the reasons specified at *supra* note 115. If physicians reporting suspected MSBP arrived at far more false positive than true positive diagnoses, which is likely given the nonspecificity of the diagnostic criteria for MSBP, this study tells us nothing about the actual rate of MSBP behavior in New Zealand, let alone the United States.

⁴³⁶ See Gráinne S. Gorman et al., *Prevalence of Nuclear and Mitochondrial DNA Mutations Related to Adult Mitochondrial Disease*, 77 ANNALS NEUROLOGY 753, 753 (2015).

than 11 times more likely to have mitochondrial disease than to be suffering from MCA, even using MCA proponents' higher unproven estimates of MCA prevalence. If we also consider the incidence of a few other diseases that might be confused with MCA along with mitochondrial disease,⁴³⁷ including eosinophilic esophagitis (11 cases per 100,000),⁴³⁸ and Ehlers-Danlos Syndrome (1 in 20,000 or 5 in 100,000),⁴³⁹ we easily arrive at a rate of 39 per 100,000 children whose conditions could be mistaken for MCA. And these are only some of the diseases that may be confused with MCA.

Now let us treat the group of children whose conditions are suspicious enough to be evaluated for MCA as the base group, since children who appear healthy are unlikely to be evaluated for MCA. Assuming, based on the rates laid out above that the ratio between rare diseases and MCA in this group is roughly nineteen to one (taking the thirty-nine children with rare diseases that could be confused with MCA compared to the two children who have MCA) it is easy to see how a diagnosis of MCA is associated with a high rate of error. While we do not know the actual sensitivity and specificity rates of the MCA diagnostic process, even if the test perfectly diagnoses MCA where it is present (one hundred percent sensitivity), and properly excludes ninety percent of those who do not have it (ninety percent specificity) the test would, at this ratio of thirty-nine children screened with rare diseases to two children with MCA, result in diagnosing almost two false positive cases of MCA for every real case of MCA diagnosed. Even under these optimistic assumptions about the test's sensitivity, specificity, and the base rate of the screened population, these results would make the test effectively useless. However, given the vagueness of the MCA criteria and lack of evidence of their diagnostic accuracy, the specificity of the test is likely considerably lower than ninety percent. Furthermore, the proportion of children with rare diseases is also likely higher than these calculations, given our base rate estimate included only a few of the many diseases potentially confused for MCA. Therefore, applying the MCA test to this population likely

⁴³⁷ The diseases listed are a few of the many that advocacy groups for families with rare diseases contend have been confused with MCA. See *supra* notes 126–130 and accompanying text.

⁴³⁸ A. A. N. Syed et al., *The Rising Incidence of Eosinophilic Oesophagitis Is Associated with Increasing Biopsy Rates*, 36 ALIMENTARY PHARMACOLOGY & THERAPEUTICS 950 (2012), <http://www.medscape.com/viewarticle/773586>.

⁴³⁹ Fransiska Malfait et al., *Clinical and Genetic Aspects of Ehlers-Danlos Syndrome, Classic Type*, 12 GENETICS MED. 597, 597 (2010).

produces even more grossly inaccurate results.⁴⁴⁰ Further, given the dire consequences of a false positive diagnosis for the child and family, the diagnostic test is truly dangerous.

C. *The Medical Child Abuse Diagnostic Process and Good Medical Practice*

The MCA diagnostic process not only fails to clear the bar of scientific validity, it also fails to comport with good medical practice.⁴⁴¹ Dr. Mark Graber, a national pioneer in efforts to reduce diagnostic errors in medicine, including through founding the Society to Improve Diagnosis in Medicine and the journal *Diagnosis*, points to three aspects of the MCA diagnostic process that depart from good medical practice.⁴⁴²

1. The absence of methodically chosen indicators

The 2013 American Academy of Pediatrics Report on MCA simply sets out a long list of indicators that, it states, “should cause the pediatrician to consider fabricated illness.”⁴⁴³ The Academy does not provide any citations to support these indicators.⁴⁴⁴ In addition, these indicators were not chosen methodically in a data-driven process, have not been empirically validated as indicators for MCA, and are not weighted in a manner that allows the evaluating physician to assess when these indicators rise to the level to warrant consideration of MCA.⁴⁴⁵

These indicators can be usefully contrasted with those recently selected for early intervention for rheumatoid arthritis in a collaboration between the American College of Rheumatology and the

⁴⁴⁰ *Accord* MART, *supra* note 37, at 76 (making the same point about MSBP criteria).

⁴⁴¹ Although most courts have declared that the scientific validity of a medical diagnosis must be established for it to be admissible, a few have refused to apply scientific gatekeeping standards on the ground that medicine is as much an art as a science. *See, e.g., State v. McMullen*, 900 A.2d 103, 106 (Del. Super. Ct. 2006). Instead, the court must determine that the diagnosis in question “is deemed a reliable method to reach a diagnosis in the medical community.” *Id.* at 117-18. This section demonstrates that the MCA diagnosis does not clear the test for reliability in the medical community.

⁴⁴² Dr. Graber contributed to this section. *See supra* prefatory note †, for Dr. Graber’s credentials.

⁴⁴³ 2013 AAP Report, *supra* note 29, at 593, tbl. 2. Twelve indicators are listed in Table 2 of the Report. *Id.* at 593. The text of the AAP Report adds two other indicators. *Id.* at 593.

⁴⁴⁴ *Id.*

⁴⁴⁵ *Id.*

European League Against Rheumatism Collaborative Initiative.⁴⁴⁶ The rheumatoid arthritis indicators were selected and validated in a three-phase data-driven process. In the first phase, the working group used data from more than 3,000 patients to identify which variables in past cases had been determined to warrant early intervention, and provided precise estimates of the sensitivity and specificity of these variables, and their relative weights. In the second phase, an expert panel of twenty-four rheumatologists used the first phase data to reach a consensus regarding indicators and the relative weight that should be assigned to each. This analysis enabled each patient to be scored on a scale of 0 to 100 with respect to likelihood of developing the condition. Finally, at the third phase, the group refined the scoring system and determined the cutoff point for intervention.⁴⁴⁷

In contrast to the MCA indicators, the indicators ultimately selected for rheumatoid arthritis were solidly derived from abundant empirical evidence. Further, in contrast to the list of twelve broadly-worded MCA indicators that leave a lot to the evaluating doctor's subjective determination (e.g., the caregiver is "unusually calm"), all the terms used in the rheumatoid arthritis indicators are carefully defined to ensure the criteria can be applied reliably.⁴⁴⁸ In addition, in contrast to the blanket list of indicators set out for MCA, the rheumatoid arthritis indicators are appropriately weighted to yield a specific threshold for classification. A definitive classification of rheumatoid arthritis, according to the guidelines, requires 6 or more points, derived from consideration of active arthritis (2-10 large joints = 1 point, 1-3 small joints = 2 points, 4-10 small joints = 3 points, > 10 joints = 5 points), presence of rheumatoid factor (2 points for low titer, 3 points for high titer), an elevated sedimentation rate (1 point), and chronic duration of symptoms (1 point).⁴⁴⁹ Such a system of weighting indicators to assure an appropriate cutoff would seem particularly important given that many of the MCA indicators are not robust indicators of MCA, in the sense they would also likely describe many parents of children with still-undiagnosed diseases. For example, in many cases of children who have not yet been properly diagnosed, the child's current diagnosis would "not match the objective findings," and the parent

⁴⁴⁶ Aletaha et al., 2010 *Rheumatoid Arthritis Classification Criteria: An American College of Rheumatology/European League Against Rheumatism Collaborative Initiative*, 62 *ARTHRITIS & RHEUMATISM* 2569 (2010).

⁴⁴⁷ *Id.* at 2579.

⁴⁴⁸ *Id.* at 2576-77.

⁴⁴⁹ *Id.* at 2574.

would “not express relief or pleasure when told that the child . . . does not have a particular illness”).⁴⁵⁰

As the rheumatoid arthritis indicators show, and as with many other diagnoses,⁴⁵¹ good medical practice requires that indicators be drawn from a careful review of studies that contain large numbers of patients confirmed to have the condition, be tested to ensure validity, and be set out in a manner that ensures reliability in application. In contrast, the indicators for MCA are not evidence-based, have not been validated, leave their application to the evaluating doctor’s subjective judgment, and are listed without any direction regarding the extent to which any single indicator or combination of indicators should prompt consideration of the MCA diagnosis.

2. The threshold of certainty for action on the diagnosis

Second, given the potential for false positive diagnoses of MCA and the extensive negative consequences that such a false positive diagnosis can have on the child’s wellbeing (stemming both from their removal from their parent and the cessation of medical treatment), the threshold for acting on the MCA diagnosis has been set too low. Standard evidence-based medical practice envisions a continuum of certainty for every disease being diagnosed, ranging from virtual certainty that the disease is *not* present to complete certainty that it is present.⁴⁵² Because complete certainty is unattainable in medical practice, the goal of diagnosis is to determine where on this continuum of certainty the patient’s condition is located, and whether this point exceeds a threshold value at which most practitioners would, or would not, recommend treatment.⁴⁵³

Generally, as illustrated in Figure 1, the starting point for estimating the likelihood of a disease is its base rate in the population. The patient’s position on the continuum is then adjusted by the results of

⁴⁵⁰ 2013 AAP Report, *supra* note 29, at 593 (discussing in Table 2 the “Indicators of Possible Fabricated Illness in a Child”).

⁴⁵¹ See, e.g., Marieke Perry et al., *Development and Validation of Quality Indicators for Dementia Diagnosis and Management in a Primary Setting*, 58 J. AM. GERIATRICS SOC’Y 557 (2010) (developing indicators for geriatric diagnoses); S.C. Shiboski, *American College of Rheumatology Classification Criteria for Sjögren’s Syndrome: A Data-Driven, Expert Consensus Approach in the SICCA Cohort*, 64 ARTHRITIS CARE RES. 475 (2012) (developing indicators for Sjogren’s syndrome).

⁴⁵² See Jerome P. Kassirer, *Our Stubborn Quest for Diagnostic Certainty*, 320 NEW ENG. J. MED. 1489 (1989).

⁴⁵³ See RICHARD GROSS, MAKING MEDICAL DECISIONS 43 (Am. Coll. of Physicians, 1st ed. 1999).

diagnostic tests conducted on the patient, each of which has known test characteristics, which allow the diagnosing doctor to move up or down the probability scale depending on whether the test result is positive or negative.⁴⁵⁴ The action threshold — the point on the continuum at which the practitioner should take action — has been defined as the point of likelihood of disease, “above which the treatment will, on average, provide more improvement than harm, and below which the treatment will cause more harm than improvement.”⁴⁵⁵

Although numeric thresholds are not agreed-upon for many diseases, there is general agreement on the relative location of the action threshold, which depends on both the disease in question and the treatment being considered.⁴⁵⁶ For diseases where the treatment is relatively benign and inexpensive, the treatment threshold may be quite low.⁴⁵⁷ For example, antibiotics are often prescribed for patients suspected of having a urinary tract infection, even without a definitive test (urine culture) to confirm the diagnosis.⁴⁵⁸ In contrast, when the treatment is expensive or toxic, for example chemotherapy for cancer, the treatment threshold is extremely high, typically requiring tissue diagnosis from a biopsy, before treatment is started.⁴⁵⁹

⁴⁵⁴ *Id.* at 45.

⁴⁵⁵ *Id.* at 43.

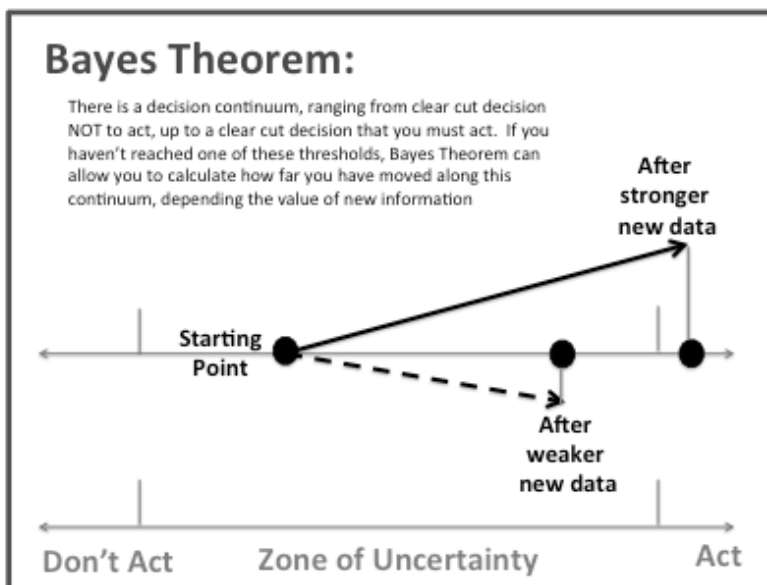
⁴⁵⁶ Stephen G. Pauker & Richard I. Kopelman, *How Sure Is Sure Enough?*, 326 *NEW ENG. J. MED.* 688, 690-91 (1992).

⁴⁵⁷ *Id.*

⁴⁵⁸ See Warren J. McIsaac et al., *Validation of a Decision Aid to Assist Physicians in Reducing Unnecessary Antibiotic Drug Use for Acute Cystitis*, 167 *ARCH. INTERN. MED.* 2201, 2203 (2007).

⁴⁵⁹ See generally GROSS, *supra* note 453, at 41-42 (discussing the threshold adjustments based on various factors).

Figure 1.



In the case of MCA, problems exist at each stage of this calculus that militates against taking action on the diagnosis. First, no good empirical evidence establishes the base rate of MCA (or even MSBP) in the population.⁴⁶⁰ Second, the diagnostic tests for MCA do not allow doctors to adjust the initial estimate of probability with any confidence because these tests have not been empirically tested for reliability.⁴⁶¹ Further, in most cases, the diagnostic tests likely provide only weak evidence for the MCA diagnosis.⁴⁶² The evaluating doctor therefore cannot know how much the test results should alter the initial estimate of disease probability, and should have little confidence in most cases that the disease probability should change much from the estimate of base rate. Third, and finally, the treatment that must be factored into the decision on action — removing the child from his or her parent — certainly qualifies as expensive and toxic to the child's wellbeing, given what we know about the importance of the attachment between parent and child.⁴⁶³ Furthermore, insofar as the

⁴⁶⁰ See *supra* notes 115, 435.

⁴⁶¹ See *supra* notes 348–54.

⁴⁶² See *supra* Part IV.B.3.

⁴⁶³ As stated by an expert witness in *Nicholson v. Williams*, “The attachment

treatment may remove the child from necessary medical care, it may be deadly if the diagnosis is a false positive.⁴⁶⁴ And yet the treatment threshold is not only poorly defined, it is not positioned at an appropriately high level, commensurate with the risks of harm associated with these actions.

3. Due diligence in pursuing alternative diagnoses

Third and finally, the diagnostic process set out in the 2013 AAP Report does not provide for adequate due diligence in eliminating alternative diagnoses. Because MCA has no diagnostic tests that can confirm the condition, and because the diagnostic criteria used to diagnose the condition are so nonspecific, in many cases involving suspected MCA, the diagnosis will have to proceed by excluding other diagnoses. Yet there are a host of other conditions and circumstances that might be causative, many of which involve congenital or rare diseases, or unusual circumstances, all of which need due consideration.⁴⁶⁵ Very few front line clinicians have appropriate expertise to even know about these conditions, let alone appropriately exclude them.⁴⁶⁶ Individuals with expertise in MCA would also, quite typically, not have the relevant experience in these other subspecialty fields. The correct diagnosis would therefore depend on these children being evaluated by clinicians with expertise and experience in recognizing all of the competing entities, and there are many.⁴⁶⁷ By placing the MCA diagnosis in the hands of a general or child abuse pediatrician rather than a specialist in the field of the child's symptoms, and not even mandating consultation with such an

between a parent and child forms the basis of who we are as humans and the continuity of that attachment is essential to a child's natural development." Nicholson v. Williams, 203 F. Supp. 2d 153, 199 (E.D.N.Y. 2002) (quoting the testimony of Dr. Peter Wolf), *vacated in part and remanded by Nicholson v. Scopetta*, 116 Fed. Appx. 313 (2d Cir. 2004). A child's separation from a parent during a medical crisis is likely to be particularly traumatic to a child. I lay out in detail the considerable advantages of a child protection system that adopts a less adversarial approach toward parents, and that acts to protect children within their families so that they are not removed from their parents, in my book MAXINE EICHNER, *THE SUPPORTIVE STATE* 117-25 (2010).

⁴⁶⁴ See *supra* note 431 (listing cases in which MCA or MSBP suspicions led to child's death).

⁴⁶⁵ See, e.g., *supra* notes 436-39 and accompanying text (describing conditions that could be confused with MCA).

⁴⁶⁶ See *supra* notes 393-94 and accompanying text.

⁴⁶⁷ See *supra* notes 393-94 and accompanying text.

expert,⁴⁶⁸ the AAP's diagnostic protocol diverges from good medical practice.

D. Case Study of the Unreliability of the Medical Child Abuse Diagnostic Process

One recent case, a 2015 Pennsylvania child abuse proceeding, demonstrates how the MCA diagnostic process can easily lead to a false positive diagnosis. At an earlier hearing in the case, the state's medical expert, Adelaide Eichman, a child abuse pediatrician who had recently completed her residency, had testified to her diagnosis of MCA based on conflicts between the child's medical records and the mother's account.⁴⁶⁹ Based on Dr. Eichman's testimony, and despite the fact that the child had, even by the child abuse pediatrician's own account, significant medical issues, the court removed custody from the mother and placed the child with her grandmother. At the current hearing, the mother sought unsupervised visitation with her child.⁴⁷⁰ Dr. Eichman objected on the grounds that the mother continued to "misrepresent symptoms and diagnoses," based on the pediatrician's medical record review, in which she detected conflicts between the mother's account and medical records.⁴⁷¹ First, Dr. Eichman testified that the mother had lied by stating that an ophthalmologist asked that the child be seen by a "genetic doctor," noting that "[t]hat [referral] was not documented in the eye doctor's notes."⁴⁷² Second, Dr. Eichman reported that the "mother told people the child had autism, which was not true. She's [also] told people that she has a seizure disorder which is not true . . ."⁴⁷³ Dr. Eichman declared that these discrepancies established a continuing pattern of "intentionally misleading doctors," which presented a significant continuing risk to the child.⁴⁷⁴

In many cases such as this there would be no witnesses available to contradict the evaluating pediatrician's testimony. This mother was more fortunate: At the time the mother had lost custody, a judge had

⁴⁶⁸ See 2013 AAP Report, *supra* note 29, at 593-94.

⁴⁶⁹ Transcript of Review Hearing at 12-13, *In re G.M.*, No. 329-2014 (Penn. Dep't Hum. Servs.) (July 9, 2014) [hereinafter July 9, 2014 Hearing]; Child Abuse Appeal of D.H., Nov. 19, 2015, *supra* note 121, at 100-01.

⁴⁷⁰ July 9, 2014 Hearing, *supra* note 470, at 7.

⁴⁷¹ *Id.* at 14.

⁴⁷² *Id.*

⁴⁷³ *Id.* at 21.

⁴⁷⁴ *Id.* at 15.

allowed the mother to attend her daughter's doctors' appointments on the condition that she be supervised during these visits.⁴⁷⁵ A representative from the nonprofit hired by the county to supervise the mother during the child's doctors' visits testified later in the hearing: "One of the things [Dr. Eichman] specifically said and cited was that the [mother] said that the [child] has a diagnosis of autism and that she does not. That's not the case. . . . Dr. Hartman did evaluate [the child] and he did give her a diagnosis of autism. That's absolutely one hundred [percent] true."⁴⁷⁶ That witness also testified that the "eye doctor did . . . tell the mother that she needed to make an appointment with a geneticist to find out if there was a genetic basis for the child's glaucoma. We were at the appointment and we heard those things."⁴⁷⁷ After this witness, the grandmother asked to speak to the judge about the child's supposedly imaginary seizures and stated, "I just want to say on the record that I have seen [the child] turn blue."⁴⁷⁸

Following this, an unusually tenacious social services caseworker testified that after "extensively review[ing] the child's entire medical records, thousands of pages," and talking to her supervisors and the doctors involved in the case, including the child abuse pediatrician, she had found "discrepancies with the [child abuse pediatrician's] report. . . . [W]e haven't found any evidence that [the mother] has intentionally done anything aside from taking this child to the emergency room."⁴⁷⁹

At a later hearing in which the same child abuse pediatrician continued to claim that the mother was exhibiting MCA behaviors by setting up medical appointments not requested by the child's existing doctors, again based on her review of medical records, the following exchanges took place between Dr. Eichman and the attorney for the mother:

Q. Now, [the representative hired by the county to accompany the mother to medical appointments] works with mom, and she goes to all the appointments with mom, and she testified that it was the verbal referral of the ENT doctor to take G. to the allergy appointment

⁴⁷⁵ *Id.* at 60.

⁴⁷⁶ *Id.* at 59.

⁴⁷⁷ *Id.* at 60-61.

⁴⁷⁸ *Id.* at 93.

⁴⁷⁹ *Id.* at 82-83.

- A. . . . It is not documented in the medical record that the child should go to allergy and immunology.
- Q. . . . Is it possible you don't have the full story because you weren't actually at that appointment, and you're relying solely on the records?
- A. I guess it is possible that they did not document it.
- Q. We have had testimony [that] . . . the dentist advised a cardiology consult before the child be put under anesthesia. And that was the primary purpose of this visit Is it possible that that aspect of the intent and purpose of this visit is true . . . ?
- A. I'm going by the documentation of our cardiologist who is a trained pediatrician and trained board certified cardiologist. So I don't know if you're implying that the physician's documentation is lax or that they missed the entire point, but I do not feel comfortable saying that — agreeing with that statement that the physician missed the entire point of the visit [in his documentation notes].⁴⁸⁰

The mother's attorney finally asked, given that this mother had been deprived of custody of her child for months, as well as had to go through one legal proceeding after another, because of inaccuracies in the medical records that were not the mother's fault: "Doctor, does it trouble you at all, that you're making and offering opinions about what this child should and shouldn't have treatment-wise when you don't have all the facts?" The response from the child abuse pediatrician was, "I do not feel troubled."⁴⁸¹

V. THE PROPER LEGAL TREATMENT OF CHILD ABUSE CASES INVOLVING MEDICAL CARE

A legal system that protects parents' rights to make decisions in their children's interest, yet that still safeguards children from the rare, twisted parent who uses health care to harm the child, would be premised on two core tenets: First, parents have a constitutional right to make health care decisions for their children in the absence of abuse — defined according to law rather than the MCA standards constructed by doctors — or neglect. Second, in cases in which child abuse through

⁴⁸⁰ Child Abuse Appeal of D.H., Nov. 19, 2015, *supra* note 121, at 207-11.

⁴⁸¹ *Id.* at 206.

medical care is legitimately charged, the expansive MCA diagnosis has no proper place; instead, the standard rules regarding child abuse and neglect entirely suffice to deal with these situations. I discuss each tenet in turn.

A. *Parents' Constitutional Right to Make Health Care Decisions for Their Child Absent Legally-Defined Abuse or Neglect*

Going forward, child protection officials and courts must take account of the breadth of parents' constitutional right to make health care decisions for their children. This means that physicians should report abuse through medical care only when the parent's actions violate legal standards of child abuse, rather than the far broader MCA standards constructed by physicians. Under these legal standards, a parent's choosing between care plans when two doctors disagree over a child's course of treatment is not abuse — it is a parent's constitutional right. Further, it is a parent's constitutional right to continue to seek physicians' opinions without state intervention if the parent believes that the child has an as-yet undiagnosed disease, even if the child's current doctors disagree.

Existing child abuse doctrine, as described above, requires that the parent's actions demonstrate, at the least, recklessness to qualify as abuse,⁴⁸² as well as that the action has imposed a substantial risk of harm on the child.⁴⁸³ Applying this standard to the range of parental behavior involving medical care yields only a small spectrum of actions that rise to abuse. These are the same actions that originally gave rise to concerns about MSBP — when the parent either intentionally induces symptoms in the child or makes conscious and material misrepresentations about the child's symptoms or medical history to medical personnel. Most medical conflicts between a child's doctor and his or her parents will not give rise to reasonable suspicions of this sort of behavior, and are therefore not properly reported by doctors. Further, the sort of minor misstatements and exaggerations commonly made by parents about their child's condition will also not give rise to reasonable suspicions that justify reporting.

To ensure that parents' rights are protected once a report is made, child protection officials should no longer simply accept the reporting doctor's opinion that child abuse has occurred. The state must instead investigate to ascertain whether there are credible grounds to believe

⁴⁸² See *supra* Part III.B.2.

⁴⁸³ See *supra* Part III.B.2.

that the parent has either induced symptoms in the child or made intentional and material misrepresentations about the child's symptoms or medical history to medical personnel. The reporting doctor in this situation should not be treated as a neutral evaluator, but instead an actor seeking to impose his or her own course of action on the child.⁴⁸⁴ The state's investigation of the abuse report must therefore include consulting with the child's treating physicians as well as, when necessary, with a medical expert in the field of the child's claimed symptoms (rather than MCA) from a different institution than the reporting doctor's.⁴⁸⁵ To the extent that disagreement remains over whether the parent's account of the child's symptoms is genuine, child protection officials should also be required to consult those professionals — home nurses, therapists, teachers — who routinely have contact with the child. In situations in which a specialist in the field of the child's claimed symptoms disagrees with a non-specialist, abuse through medical care should be treated as a diagnosis of exclusion, and due regard should be given to the specialist's expertise.

What about those cases in which a parent does not have the blameworthy intent that rises to the level of abuse, but is still engaging in conduct that places the child at significant risk? At least two categories of cases fit this bill: 1) the "hypochondriasis by proxy" parent who unintentionally but pervasively overstates her child's medical symptoms, thereby creating a significant risk of overtreatment; and 2) the parent who in good faith pursues medical care that is truly beyond the bounds of orthodox medical care. Both of these cases are appropriately treated under traditional medical neglect standards. Although most past medical neglect cases have targeted a parent's undertreatment rather than overtreatment of a child, this law has occasionally addressed parents who, without intending harm, seek treatment that might cause injury to the child.⁴⁸⁶ In such cases, as with other cases of medical neglect, courts should craft state intervention narrowly to ensure the child's medical wellbeing while still maintaining the parent-child relationship.⁴⁸⁷ Further, when it comes to

⁴⁸⁴ This guideline was originally suggested by medical ethicist Jessica Shriver. See Jessica Shriver, *Ethical Analysis of the Justina Pelletier Case* (May 2016) (unpublished M.S. thesis, Albany Medical College) (on file with author).

⁴⁸⁵ *Id.*

⁴⁸⁶ See *Custody of a Minor*, 393 N.E.2d 836 (Mass. 1979) (denying parents' right to give child laetrile in addition to chemotherapy ordered by doctors).

⁴⁸⁷ See, e.g., *In re Ivey*, 319 So.2d 53 (Fl. App. 1975) (holding that trial court had authority to enter order allowing physician to issue treatment to two infants); *Custody*

parents who pursue unorthodox medical care, consistent with medical neglect law, the state may intervene only if the care provider is not licensed as a doctor or, alternatively, if a licensed doctor's actions have been "totally rejected by all responsible medical authority."⁴⁸⁸

Outside of this narrow range of abuse and neglect cases, decisions about medical care should be the parent's, not the doctor's or the state's. The simple fact that a parent is being a forceful advocate for diagnosis or treatment of the child is not a sufficient ground for coercive intervention, whether a doctor agrees or disagrees with the parent. Furthermore, the fact that a parent convinces some other doctor to deliver medical care with which the evaluating doctor disagrees is not sufficient for coercive intervention so long as the parent does not materially misrepresent the child's medical condition to the other doctor.

This means that in those cases in which physicians simply disagree, or the parent wants to seek another opinion, a physician may no longer use the state to coerce the parent to accept his or her diagnosis or medical plan. Instead, the physician must seek to *persuade* the parents to follow his or her preferred plan of action by educating them, listening to them, and resolving the matter in a non-adversarial manner. Some hospitals have made at least a start on developing such a collaborative model to resolve disputes between parents and doctors, although this model is too often framed as a structure for investigating suspicions of MCA.⁴⁸⁹ It would be far better to recognize that disputes between parents and doctors over treatment rarely involve abuse, that parents and doctors will sometimes, perhaps often, disagree without malignant motives underlying such views, and to seek to resolve such disputes collaboratively.

Not only is persuasion the only constitutional option for doctors to press their will when parents disagree, absent abuse or neglect, it is

of a Minor, 393 N.E.2d 836 (parents' custody of the child was restricted only to the extent necessary to ensure medical supervision consistent with the order).

⁴⁸⁸ *In re Hofbauer*, 393 N.E.2d 1009, 1014 (N.Y. 1979); see also *Custody of a Minor*, 393 N.E.2d 836 (allowing state intervention because of absence of controversy among doctors that the treatment sought by parents would aid child); *In re Storar*, 420 N.E.2d 64, 73 (N.Y. 1981) ("Of course it is not for the courts to determine the most 'effective' treatment when the parents have chosen among reasonable alternatives."); *id.* at 69, n.3 (specifying that "as a matter of public policy a medical facility generally has no responsibility or right to supervise or interfere with the course of treatments recommended by the patient's private physician, even when the patient is incapable of consent due to age").

⁴⁸⁹ See, e.g., Allison, *supra* note 27, at 225 (describing Child Advocacy Committee of the Cleveland Clinic Foundation).

also the route most likely to further the child's best interests. Including the parents in discussion from early on in the process, rather than springing an accusation of MCA on them,⁴⁹⁰ means that the people who know the child best can contribute relevant information, therefore reducing the possibility of error in the child's care. Further, considerable empirical evidence demonstrates that children suffer significant emotional harm when they are removed from their parents and taken into the foster care system — even when the foster care is optimal, which it rarely is in fact.⁴⁹¹ To the extent that parents are well meaning but misguided or unreasonable, the least harmful option — and the only option without large emotional costs for the child — will be one that seeks to bring the parent along while still leaving the child in their care.

Finally, persuasion rather than coercion is the route that best comports with doctors' ethical obligations. The doctor-patient relationship is established with a child only when a parent or guardian seeks treatment from a doctor. Absent the parent's actions a doctor has no power to initiate a relationship with a child. Indeed, at common law, a physician who rendered treatment to a child without the parent's consent could be held liable for battery.⁴⁹² Once a parent engages a doctor, the physicians' obligation is to pursue the child's wellbeing in accordance with the parent's wishes.⁴⁹³ Further, absent abuse or neglect, the parent may reject the treatment and may, in his or her discretion, seek to hire another doctor. A doctor who seeks to stop a parent from choosing other medical care in order to impose his or her own views of the optimal course of treatment, absent legally-defined abuse or neglect, violates the legal and ethical norms that govern the doctor-patient relationship.⁴⁹⁴

⁴⁹⁰ As Loren Pankratz notes, this is the way most processes investigating the parent for MCA/MSBP behavior proceed. Pankratz, *Separation Test*, *supra* note 47, at 308 (“All of this investigation is usually done behind the back of the mother until the surprise accusation.”); *see also* Morley, *supra* note 71, at 529 (“the mother briefly saw the consultant during the children's illnesses and he did not take time to sit down and talk with her until he came with a social worker to say she was accused of Munchausen syndrome by proxy. This is indefensible.”).

⁴⁹¹ *See supra* note 463.

⁴⁹² *See* Michelle Oberman, *Mothers and Doctors' Orders: Unmasking the Doctor's Fiduciary Role in Maternal-Fetal Conflicts*, 94 NW. U. L. REV. 451, 472 n.83 (2000).

⁴⁹³ As one legal commentator put it: “The general rule, applicable in almost all situations, is that a parent is free to sort among alternatives and elect the course of treatment based on his or her assessment of the child's best interests.” Alicia Ouellette, *Shaping Parental Authority over Children's Bodies*, 85 IND. L.J. 955, 966-67 (2010).

⁴⁹⁴ *Cf.* Obermann, *supra* note 492, at 500-01 (arguing that doctors who generate conflicts with pregnant women, often framed as “maternal-fetal conflicts,” breach the

The system described here may produce errors — parents will certainly sometimes make the wrong decisions when it comes to getting their children medical care. Yet this nation's enduring experience teaches that placing the decision-making power with parents rather than the state or doctors is still the best system to safeguard children's welfare.

B. Exclusion of Medical Child Abuse Diagnoses from Legal Proceedings for Child Abuse

When medical abuse cases are tried in court, the issue of whether the parent has committed abuse must be removed from the medical expert and instead decided by the trier of fact. Medical experts may still testify to the genuine medical diagnoses (thus excluding MCA, MSBP, or their equivalents) that they believe the child possesses or does not possess. They may also testify regarding whether, given these diagnoses, the child received unnecessary medical care. Finally, medical personnel may testify as fact witnesses regarding their personal knowledge of abuse in the case — for example stating that they saw the parent pour an unknown substance into the child's feeding tube, or that the parent lied about some symptom of the child to them. Physicians may not, however, offer an expert opinion about whether this behavior constitutes child abuse. Neither may they diagnose a parent with MCA or MSBP, or even discuss these diagnoses generally in court. The state's burden is to prove that abusive conduct occurred in the particular case at bar. It may not evade this burden by presenting a supposed medical diagnosis that dresses up the expert's personal opinion in scientific terminology.

This approach comports with the approach established by the Supreme Court of Queensland, Australia, discussed earlier, which found error in the admission of testimony regarding MSBP in a child abuse case.⁴⁹⁵ The Court held that the probative nature of this evidence was overshadowed by the danger of prejudice.⁴⁹⁶ It further held the testimony inadmissible because it demonstrated “the propensity, not of the accused but of other people, to engage in similar

doctor-patient relationship).

⁴⁹⁵ *R v LM* [2004] QCA 192 (4 June 2004) (Austl.), <http://www.austlii.edu.au/au/cases/qld/QCA/2004/192.html>. A Justice from the England and Wales High Court followed suit in *A County Council v. A Mother*, [2005] EWHC (Fam) 31 (Eng.), <http://www.bailii.org/ew/cases/EWHC/Fam/2005/31.html>. See also *supra* notes 258–65 and accompanying text.

⁴⁹⁶ *R v LM* [2004] QCA 192 ¶ 68.

unlawful behaviour.”⁴⁹⁷ Subsequently, a Justice of the England and Wales High Court reached a similar conclusion in a concurring opinion.⁴⁹⁸ MSBP evidence, the Justice stated, “in any individual case is as likely to be evidence of mere propensity which would be inadmissible at the fact finding stage For my part, I would consign the label MSBP to the history books.”⁴⁹⁹

CONCLUSION

Children must certainly be protected from the rare parent who uses the health-care system to abuse them. Yet the substantial numbers of children who suffer genuine medical problems each year need loving parents by their sides. Our legal system has long recognized that the framework that best supports children’s well-being is one that protects children from a narrow range of actions deemed abusive, but otherwise zealously safeguards parents’ decision-making rights. The theory of medical child abuse, conceptualized by doctors, adopted by child protection officials, and supported by courts, upends this longstanding framework. That theory puts a vast array of health care decisions properly left to parents in the hands of medical experts too certain that they know what is right for other people’s children. It is past time that courts reject this new conceptual construction and evaluate these concepts under longstanding doctrines of abuse and neglect. Returning to these concepts would restore parents’ constitutional rights to make their children’s health-care decisions, safeguard the welfare of sick children who are better served in their parents’ care than in the state’s, and still protect children from the rare, blameworthy parent committing genuine child abuse through medical care.

⁴⁹⁷ *Id.* ¶ 66.

⁴⁹⁸ *See supra* note 495.

⁴⁹⁹ *A County Council*, [2005] EWHC (Fam) 31, [178].