Adjudicating Severe Birth Injury Claims in Florida and Virginia: The Experience of a Landmark Experiment in Personal Injury Compensation

Gil Siegal, Michelle M. Mello and David M. Studdert and David M. Studdert

I. INTRODUCTION

Policy debates over medical malpractice in the United States involve a complex amalgam of legal doctrine, public demands to address the problem of medical errors, and the interests of various stakeholder groups. Most parties can agree, however, that the current system for compensating medical injury performs poorly. It falls short of achieving its two main goals: compensation and deterrence. The current system of tort liability is "neither sensitive nor specific in its distribution of compensation:" the vast majority of patients injured by negligent medical care do not receive compensation, yet the system compensates some cases that do not appear to involve negligence.

[†] Gil Siegal is Director of the Center for Health Law and Bioethics, Ono Academic College, Israel and Professor, University of Virginia School of Law.

^{††} Michelle M. Mello is Professor of Law and Public Health, Department of Health Policy and Management, Harvard School of Public Health.

David M. Studdert is Professor and Federation Fellow, Faculty of Law and Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne. This work was funded by a grant from The Robert Wood Johnson Foundation. The authors thank Patricia Moran for excellent research assistance and Tifani Jones and Elizabeth Abernathey for editorial assistance.

¹ See, for example, the debate over defensive medicine described in Office of Technology Assessment, U.S. Congress, Defensive Medicine and Medical Malpractice 1-3 (1994).

Daniel P. Kessler, The Effect of the U.S. Malpractice System: A Review of the Medical Literature 2 (2007) (Unpublished manuscript, available at http://www.pointoflaw.com/pdfs/kessler-malpractice-jced1.pdf).

A. Russell Localio et al., Relation Between Malpractice Claims and Adverse Events Due to Negligence: Results of the Harvard Medical Practice Study III, 325 New Eng. J. Med. 245, 247-49 (1991); David M. Studdert et al., Claims, Errors, and Compensation Payments in Medical Malpractice Litigation, 354 New Eng. J. Med. 2024, 2025, 2028 (2006); David M. Studdert et al., Negligent Care and Malpractice Claiming Behavior in Utah and Colorado, 38 Med. Care 250, 256 (2000).

Sometimes, it awards more in noneconomic damages than seems reasonable to many observers.⁴ Ultimately, tort liability appears to do little to improve health care quality and safety, ⁵ yet it spurs costly defensive medicine. ⁶ Physicians and health care organizations face burdensome insurance and legal costs, leading some to threaten to curtail their services. ⁷ These concerns about the burden of medical injury and the malpractice "crisis" have sharpened calls for reform.

Reform proposals for addressing these problems generally fall into two groups: first, partial modifications of the current system, such as caps on damages and collateral-source offsets; and second, wholesale moves away from the traditional tort system to alternative forums of adjudication, such as alternative dispute resolution ("ADR") and administrative compensation. In this paper, we explore the more radical brand of reform. A number of legal and policy scholars have argued that moving to an administrative compensation system for medical injuries would overcome many of the problems with the current, fault-based medical malpractice system. Such a

⁴ David M. Studdert et al., Are Damages Caps Regressive? A Study of Malpractice Jury Verdicts in California, 23 Health Affairs 54, 55-56 (2004).

⁵ See Michelle M. Mello & Troyen A. Brennan, Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform, 80 Tex. L. Rev. 1595, 1628 (2002) (suggesting that a malpractice system based on findings of negligence cannot function effectively as a quality improvement system). See generally Inst. Med., To Err is Human: Building a Safer Health System (Linda T. Kohn et al. eds., 2000) (describing the extent of safety problems in medical care).

⁶ Ken L. Bassett et al., Defensive Medicine During Hospital Obstetrical Care: A Byproduct of the Technological Age, 51 Soc. Sci. & Med. 523, 523-24 (2000); Daniel P. Kessler & Mark B. McClellan, How Liability Law Affects Medical Productivity, 21 J. Health Econ. 931, 934 (2002); Daniel Kessler & Mark McClellan, Do Doctors Practice Defensive Medicine?, 111 Q. J. Econ. 353, 353-54 (1996); David M. Studdert et al., Defensive Medicine Among High-Risk Specialist Physicians in a Volatile Malpractice Environment, 293 JAMA 2609, 2609-10 (2005).

⁷ Michelle M. Mello et al., Effects of a Malpractice Crisis on Specialist Supply and Access to Care, 242 Annals Surgery 621, 626 (2005).

The term "crisis" has been widely used to refer to repeated, unusually large increases in professional liability insurance premiums and shrinking options for coverage in many markets across the country. See, e.g., Michelle M. Mello et al., The New Medical Malpractice Crisis, 348 New Eng. J. Med. 2281, 2281 (2003).

⁹ See Frank A. Sloan et al., Effects of Tort Reforms on the Value of Closed Medical Malpractice Claims: A Microanalysis, 14 J. Health Pol. Pol'y & L. 663, 664 (1989) (outlining a number of reform strategies, such as placing barriers and alternatives to suits, limiting claims and increasing the cost of litigation). For a more detailed categorization and exposition of suggested reforms, see David M. Studdert et al., Medical Malpractice, 350 New Eng. J. Med. 283, 287-288 (2004).

¹⁰ See, e.g., John J. Fraser Jr. & the Committee on Medical Liability, Technical Report: Alternative Dispute Resolution in Medical Malpractice, 107 Pediatrics 602, 603-605 (2001); Elizabeth Rolph et al., Arbitration Agreements in Health Care: Myths and Reality, 60 LAW & CONTEMP. PROBS. 153, 153-154 (Spring 1997).

¹¹ See, e.g., Randall R. Bovjberg, Beyond Tort Reform: Fixing Real Problems, 3 Ind. Health L. Rev. 3, 24-25 (2006). Administrative compensation proposals have also been called "no-fault" proposals. See generally Jill Horowitz and Troyen A. Brennan, No-Fault Compensation for Medical Injury: A Case Study, 14 Health Affairs 165 (1995). This term is somewhat inapt, however, in that most such proposals do not contemplate compensation on the basis of strict liability. For that reason, we do not use the term here.

¹² See, e.g., Randall R. Bovbjerg & Frank A. Sloan, No-Fault for Medical Injury: Theory and Evidence, 67 U. Cin. L. Rev. 53, 120 (1998) (arguing that a no-fault system is preferable so long as the primary purpose of the legal system is taken to be compensating injured

system would use a non-judicial process, specialized adjudicators, and neutral medical experts to award limited compensation to injured patients based on a standard that is broader than negligence.¹³ It would jettison negligence as the decisive standard for compensation due to concerns about the inherent uncertainty of the concept ¹⁴ as well as worries that negligence judgments stigmatize health care providers in a way that adversely affects the care environment and physician participation in patient safety initiatives.¹⁵

In the last few years, proponents of administrative compensation have called for demonstration projects to test such a system, ¹⁶ and federal legislation has been introduced to support such experiments. ¹⁷ In particular, we and others have been involved in developing proposals for "health courts," administrative tribunals that would award compensation on the basis of the avoidability of the injury, neutral medical expert opinion, and *ex ante* decision guidelines. ¹⁸

The "avoidability" standard is broader than negligence, but narrower than strict liability; it awards compensation to all claimants whose injuries could have been avoided in a well-designed system of care, regardless of whether the injury was a result of treatment that fell below the customary standard of care. ¹⁹ The concept of a well-designed system of care acknowledges resource

parties); Michelle M. Mello et al., "Health Courts" and Accountability for Patient Safety, 84 MILBANK Q. 459, 468-71 (2006) (cataloging the advantages of an administrative compensation system over the traditional tort system); David M. Studdert et al., Can the United States Afford a "No-Fault" System of Compensation for Medical Injury?, 60 LAW & CONTEMP. PROBS. 1, 31-34 (1997) (arguing that affordable no-fault models are available that would compensate a larger proportion of medically injured patients); Paul C. Weiler, The Case for No-Fault Medical Liability, 52 Md. L. Rev. 908, 910 (1993) (arguing that administrative compensation systems avoids the disruptive effects of litigation).

Mello et al., supra note 12, at 460-68; Common Good, Windows of Opportunity: State-Based Ideas for Improving Medical Injury Compensation and Enhancing Patient Safety (2006), available at http://cgood.org/assets/attachments/Windows_of_opportunity_web.pdf.

On the difficulties in demarcating the boundaries of reasonable medical practice, see Inst. of Med., *supra* note 5, at 132-55. *See also* U.S. Dep't Health & Human Serv., Confronting the New Health Care Crisis: Improving Health Care Quality and Lowering Costs By Fixing Our Medical Liability System 4-7 (2002), *available at* http://aspe.hhs.gov/daltcp/reports/litrefm.pdf (discussing the impact of malpractice litigation on health care quality and patient safety).

Mello et al., *supra* note 12, at 474.

We count ourselves among these proponents. See Mello et al., supra note 12; David M. Studdert & Troyen A. Brennan, Toward A Workable Model of "No-Fault" Compensation for Medical Injury in the United States, 27 Am. J. L. & Med. 225 (2001).

In the House of Representatives, Representative Mac Thornberry (R-TX) introduced legislation to test new model health care tribunals at the state level. Medical Liability Procedural Reform Act of 2005, H.R. 1546, 109th Cong. (2005). In the Senate, Senators Max Baucus (D-MT) and Michael Enzi (R-WY) introduced a bill to facilitate state level experimentation with several alternatives to current medical malpractice litigation. Fair and Reliable Medical Justice Act, S. 1337, 109th Cong. (2005).

¹⁸ Mello et al, *supra* note 12, at 460-68; Common Good, *supra* note 13, at 1.

As described by a legal adviser of the Swedish Patient Insurance Association, "[t]he standard of care used in this assessment is that of an experienced specialist or other experienced professional in the field concerned. The treating physician's actual qualifications, expertise and experience, thus do not enter into this assessment. The specialist standard applies even where no experienced specialist was present during the treatment. If a nerve injury occurs in a hip operation, for example, the standard used is how an experienced orthopedist would have acted." Carl Espersson, Commentary, *The Patient Injury Act - A*

constraints. An optimal system would not, for example, require that every hospital, no matter how small, invest in the most expensive equipment or keep an extensive roster of physician specialists on duty at all times. Nevertheless, the avoidability standard could result in liability in some situations in which hospitals could have improved their systems at reasonable cost, but opted not to—even where such decisions were common among their peer institutions. Proponents of the avoidability standard argue that a move away from negligence would result in more expeditious claims processing, a decrease in the adversarial nature of the process, and avoidance of the stigma of substandard care that chills dialogue and investigation into medical errors.²⁰ It would also broaden injured patients' access to compensation. Medical injury compensation systems in the Nordic countries utilize an avoidability standard,²¹ but invocation of these examples is often met with criticism that the experiences of small, foreign countries with extensive layers of social insurance do not shed much light on the feasibility of a compensation system based on an alternative standard in the U.S.²²

While the health courts proposal contemplates a wholesale shift of medical injuries from tort to administrative compensation, other proposals have targeted birth injuries, which are a major source of high-cost malpractice claims. Indeed, interest in such "carve out" programs appears to be gaining momentum. In the past year, for example, Colorado's Senate Health and Human Services Committee chair has voiced interest in this model, ²³ the Medical Society of the State of New York has proposed the creation of a statewide fund to compensate birth-related neurological injuries, ²⁴ and legislation has been introduced in both houses of the Maryland legislature to establish a Task Force on Administrative Compensation for Birth-Related Neurological Injury.²⁵ The South Carolina Medical Malpractice and Liability

Comment, available at http://www.pff.se/upload/pat_eng_A2.pdf. See also Allen B. Kachalia et al., Beyond Negligence: Avoidability and Medical Injury Compensation, 66 Soc. Sci. & Med. 387, 388 (2008).

 $^{^{20}}$ $\it See, e.g.,$ Kachalia et al., $\it supra$ note 19, at 400; Mello et al., $\it supra$ note 12, at 466, 472-74, 487.

See also R.G. Jorstad, The Norwegian System of Compensation to Patients, 21 Med. Law 681, 681-83 (2002); Kachalia et al., supra note 19, at 388-91; David M. Studdert & Troyen A. Brennan, No-Fault Compensation for Medical Injuries: The Prospect for Error Prevention, 286 JAMA 217, 219-20 (2001). For detailed expositions of these programs, see generally Common Good, Administrative Approaches to Compensating for Medical Injuries: National and International Perspectives (Oct. 31, 2005) (transcript available at http://commongood.org/assets/attachments/Transcript_--_October_31st_Event.pdf).

²² See Marie Bismark & Ron Paterson, UpDate: International Report: No-Fault Compensation in New Zealand: Harmonizing Injury Compensation, Provider Accountability, and Patient Safety, 25 Health Aff. 278, 281 (2006) (discussing New Zealand's public health and welfare systems); Studdert & Brennan, supra note 21, at 219 (mentioning differences between taxation and health care systems in the United States and Sweden, Finland, Denmark, and New Zealand).

Bob Hagedorn, Speakout: New Zealand's Approach Points the Way on Medical Liability, Rocky Mountain News, Mar. 22, 2008, http://www.rockymountainnews.com/news/2008/mar/22/speakout-new-zealands-approach-points-the-way-on/.

²⁴ James M. Odato & Cathleen Crowley, *Doctors Rally for a Remedy*, Times-Union (Albany), Mar. 5, 2008, at A3.

²⁵ S.B. 730, 425th Gen. Assem., Reg. Sess. (Md. 2008); H.B. 1124, 425th Gen. Assem., Reg. Sess. (Md. 2008).

Limits Study Committee recently concluded that the state should consider developing a birth injury program.²⁶

The touted benefits of administrative compensation, whether through "health courts" or "carve out" programs, include: more equitable, rapid, and reliable resolution of claims; a significant reduction in claims processing costs: better overall system cost control; an improved climate for open discussion and reporting of medical errors: and greater incentives for physicians and health care organizations to make health care safer. ²⁷ Critics have raised several questions about administrative compensation programs, including whether workable compensation criteria could be crafted once the system is untethered from the negligence standard. ²⁸ Critics also wonder about procedural aspects of claim adjudication—for example, who is an appropriate decision maker, what role would medical experts have, and what procedural rights would claimants have. ²⁹

To gain insight into how these issues have played out in previous experiments with administrative compensation for medical injury in the U.S., we studied two existing programs: The Florida Neurological Injury Compensation Association ("NICA") and the Virginia Birth-Related Injury Compensation Program ("BIP").³⁰ These programs carve out a category of adverse events within a defined clinical area (obstetrics and neonatology) that carry a rebuttable presumption of compensability. Compensation is awarded based on the nature of the outcome and a finding that the outcome is causally linked to the birth process (rather than on the basis of a finding or negligence or avoidability). Unless certain conditions are met, patients who experience these events while under the care of providers who participate in the systems must seek compensation through a non-judicial process.

This approach resembles that of prominent proposals for administrative compensation demonstration projects; although, a key difference is that Florida and Virginia do not apply the avoidability standard. It has been proposed that lists of "accelerated compensation events" ("ACEs") be developed in select clinical areas based on expert deliberation about common adverse events that are always or usually avoidable.³¹ Much of the previous

SOUTH CAROLINA STUDY COMMITTEE ON MEDICAL MALPRACTICE AND LIABILITY LIMITS, MEDICAL MALPRACTICE AND LIABILITY LIMITS STUDY COMMITTEE REPORT, S. 1469, 117th Sess. (2008) (reviewing the views of various stakeholders and concluding that the stakeholders should meet to determine the design of a birth injury program for the state).

Studdert & Brennan, supra note 16, at 229.

Other criticisms have included concerns relating to the potential cost impacts of broadening eligibility for medical injury compensation, possible adverse effects on deterrence, constitutional problems, and fairness to patients. See, e.g., Kessler, supra note 2, at 19-23. See generally Maxwell J. Mehlman & Dale A Nance, Medical Injustice: The Case Against Health Courts (2007).

²⁹ See Kessler, supra note 2, at 18; Phillip G. Peters, Jr., Health Courts?, 88 B.U. L. Rev. 227, 238-39, 243-44 (2008).

³⁰ See The Florida Birth-Related Neurological Injury Compensation Association, http://www.nica.com (last visited Nov. 11, 2008); Virginia Birth-Related Neurological Injury Compensation Program, http://www.vabirthinjury.com (last visited Nov. 11, 2008).

See, e.g., Mello et al., supra note 12, at 467-69; Lawrence R. Tancredi & Randall R. Bovbjerg, Rethinking Responsibility For Patient Injury: Accelerated-Compensation Events, a Malpractice and Quality Reform Ripe For a Test, 54 Law & Contemp. Probs. 147, 148 (1991). See generally American College of Physicians, Beyond MICRA: New Ideas For Liability Reform, 122 Annals of Internal Med. 466 (1995).

literature has focused on the possibilities for development of ACEs in obstetrics and neonatology. These are clinical areas in which a variety of problems with the current tort system have been well-documented, including the burden of awards, problems in the liability insurance market, the catastrophic severity of injuries, and the negative impact on clinical practice (for example, defensive medicine, declining access to care, and professional discontent).³²

Proponents of ACEs-based compensation systems argue that combining an avoidability standard with an administrative compensation process holds promise not only for expanding the availability of compensation, reducing overhead costs, and making the overall cost of the medical liability system more predictable, but also for reinforcing the system's deterrence function by incentivizing providers to move towards optimal systems of care. ³³ The aspirations of the founders of the Florida and Virginia systems were somewhat more limited—in particular, improving deterrence was not a major aim. However, these systems hold promise for achieving many of the same objectives.

We studied the eligibility criteria and claims-determination process in the existing programs in Florida and Virginia in order to extract lessons for the design of compensation criteria and claim adjudication processes in proposed demonstration projects of administrative compensation aimed at a broader range of medical injuries. This article unfolds as follows. Part II summarizes the two programs, by outlining eligibility criteria, modes of operation, and benefits awarded. In Part III, we describe the methodology we used in a key informant interview study of the Florida and Virginia schemes. In Parts IV and V, we present the major findings regarding eligibility criteria in the two programs. Finally, Part VI discusses the implications of these findings for designing a broader medical injury compensation scheme in the U.S.

II. BACKGROUND

A. Origin and Design of the Florida and Virginia Programs

Virginia and Florida both established their birth injury compensation programs in the late 1980s, in the wake of malpractice insurance crises that hit the field of obstetrics hard. At that time, obstetrician-gynecologists who delivered babies in these states paid annual liability insurance premiums that were among the highest in the country (*the* highest, in Florida's case), and they were sued often.³⁴

The ultimate aim of the programs was to relocate claims for compensation pertaining to infants with severe neurological impairments from courts of general jurisdiction to standalone administrative compensation programs, thus providing physicians and hospitals immunity from malpractice

³² See, e.g., Alastair MacLennan et al., Who Will Deliver Our Grandchildren? Implications of Cerebral Palsy Litigation, 294 JAMA 1688, 1688-89 (2005).

³³ See Tancredi, supra note 31, at 154-55.

Frank A. Sloan et al., Suing for Malpractice 8-9 (1993).

lawsuits.³⁵ Birth-related injuries were singled out for this special treatment because their associated litigation was common, expensive, and widely believed to have a destabilizing influence on the malpractice system as a whole. There was also growing concern among policymakers about the future availability of liability insurance (if insurers and underwriters exited the market) and obstetric services (if fed up obstetricians ceased performing deliveries).³⁶

Participation in the programs is voluntary for obstetrician-gynecologists. If a family elects to receive treatment from a participating provider after receiving notice of the provider's participation, their choice of venue for pursuing a claim for compensation for birth-related injury is restricted. If the alleged injury falls within the statutory eligibility criteria for the birth injury program, the opportunity for tort litigation is foreclosed.³⁷

There are some important differences in the design and effects of the schemes across the two states. First, in Florida, there has been a strong incentive to escape NICA's jurisdiction and pursue remedies in the tort system for claims that families and their attorneys believe have strong chances of success as negligence actions. No cap on malpractice awards existed there until 2003, when a complicated sliding scale for non-economic damages was introduced. Thus, in Florida, considerably larger awards have been potentially available from juries in birth-related injury litigation. How the sliding scale will impact claiming behavior under NICA is unclear at this stage.

This incentive has not arisen in Virginia, or at least not to the same degree, since Virginia adopted a total cap on damages in malpractice litigation in 1992. The cap rises annually, and at the time of writing, is approaching \$2

Despite their shared heritage, there are some important differences in the structure of the two programs, and they have diverged in other ways over time. This paper addresses differences that are relevant to understanding the operation of the programs' compensation criteria; more general and detailed accounts of the programs' respective features are available elsewhere. See, e.g., Randall R. Bovbjerg et al., Administrative Performance of "No-Fault" Compensation for Medical Injury, 60 LAW & CONTEMP. PROBS. 71, 71 (Spring 1997); Sloan, supra note 9, at 681. See generally Richard A. Epstein, Market and Regulatory Approaches to Medical Malpractice: The Virginia Obstetrical No-Fault Statute, 74 VA. L. REV. 1451 (1988); Jeffrey O'Connell, Pragmatic Constraints on Market Approaches: A Response to Professor Epstein, 74 VA. L. REV. 1475 (1988); Sandra J. Morris, Note, Will Tort Reform Combat the Medical Malpractice Insurance Availability and Affordability Problems That Virginia's Physicians Are Facing?, 44 WASH. & LEE L. REV. 1463 (1987); David M. Studdert et al., The Jury Is Still In: Florida's Birth-Related Neurological Injury Compensation Plan After a Decade, 25 J. Health Pol. Pol'y & L. 499 (2000).

³⁶ See Bovberg, supra note 35, at 74, 76.

See, e.g., Virginia Birth-Related Neurological Injury Compensation Program; exclusive remedy; exception, Va. Code Ann. § 38.2-5002 (2007) ("[t]he rights and remedies herein granted to an infant on account of a birth-related neurological injury shall exclude all other rights and remedies of such infant, his personal representative, parents, dependents or next of kin, at common law or otherwise arising out of or related to a medical malpractice claim with respect to such injury to the infant, including any claims by the infant's personal representative, parents, dependents or next of kin that, by substantive law, are derivative of the medical malpractice claim with respect to the infant's injury, including but not limited to claims of emotional distress proximately related to the infant's injury.").

³⁸ See Fla. Stat. § 766.118 (2007 & Supp. 2008).

million.³⁹ Because the total amount available under the cap is similar to what is available through the state's birth injury program, there is little to be gained by seeking to avoid BIP's jurisdiction. On the contrary, since the BIP eligibility standard is in some respects more permissive, establishing eligibility for compensation may prove more difficult in tort.

Second, differences in the financial soundness of the two programs have affected the environment for claims going forward. A 2002 report found major problems with BIP's solvency, which stemmed mainly from future liabilities—compensation streams running into the future on accepted claims which had essentially become unfunded liabilities. NICA, on the other hand, appears to be in a stable fiscal position. ⁴¹

1. The Virginia Birth-Related Neurological Injury Compensation Program ("BIP")

The major features of the enabling statutes for the Florida and Virginia programs are presented in Table 1. BIP is administered by the state's Workers' Compensation Commission ("WCC"), whose main purpose is to administer the Workers' Compensation Act and the Criminal Injuries Compensation Fund. ⁴² The WCC receives claimants' applications and rules on eligibility through a two-tiered hearing process. ⁴³ The WCC distributes copies

³⁹ VA. CODE ANN. § 8.01-581.15 (2007). Cases arising before August 1, 1999 are subject to a \$1 million damage cap. For cases arising between August 1, 1999 and June 30, 2000 the damage cap is \$1.5 million. For cases arising after June 30, 2000, the cap increases progressively over time to \$2 million after June 30, 2008. *Id.* In 2003, Florida enacted a cap on non-economic damages over forceful objections from the trial bar and others. *See generally* Carly N. Kelly & Michelle M. Mello, *Are Medical Malpractice Damages Caps Constitutional? An Overview of State Litigation*, 33 J.L. Med. & Ethics 515 (2005).

See Joint Legislative Audit & Review Comm'n, Review of the Virginia Birth-Related Neurological Injury Compensation Program 49-50 (2003) (hereinafter "JLARC"), http://jlarc.state.va.us/Reports/Rpt284.pdf.

See Fla. Office of Program Policy Analysis & Gov't Accountability, NICA Eligibility Requirements Could Be Expanded, But the Costs Would Increase Significantly 3-5 (2004) (hereinafter "OPPAGA"), http://www.oppaga.state.fl.us/reports/pdf/0404rpt.pdf.

See Va. Code Ann. § 38.2-5003 (2007). "The claimant must provide the following information: the name and address of the legal representative and the basis for his representation of the injured infant; the name and address of the injured infant; the name and address of any physician providing obstetrical services who was present at the birth and the name and address of the hospital at which the birth occurred; a description of the disability for which claim is made; the time and place where the birth-related neurological injury occurred; a brief statement of the facts and circumstances surrounding the birth-related neurological injury and giving rise to the claim; all available relevant medical records relating to the person who allegedly suffered a birth-related neurological injury, and an identification of any unavailable records known to the claimant and the reasons for their unavailability; appropriate assessments, evaluations, and prognoses and such other records and documents as are reasonably necessary for the determination of the amount of compensation to be paid to, or on behalf of, the injured infant on account of a birth-related neurological injury; documentation of expenses and services incurred to date, which indicates whether such expenses and services have been paid for, and if so, by whom; and documentation of any applicable private or governmental source of services or reimbursement relative to the alleged impairments." VA. CODE ANN. § 38.2-5004 (2007). The program is required to respond to the petition within 70 days of the filing date at the WCC. See § 38.2-5008(C) and 5004(D).

⁴³ The process was described in detail by the State Joint Legislative Audit & Review Commission in 2003. *See JLARC*, *supra* note 40, at 77-80.

of the application to program officials, participating physicians and the hospital involved, the Board of Medicine, the Department of Health, and a panel of medical experts. The panel, which consists of three neutral medical experts, is required to issue a report and nonbinding recommendation in all cases⁴⁴ regarding whether the claimant's injury meets the relevant clinical criteria. At a hearing,⁴⁵ the Chief Deputy Commissioner considers the panel's recommendation and determines whether claims meet the broader set of prescribed eligibility criteria. Either the claimant or the program may appeal this determination to the full Workers' Compensation Commission (three Commissioners selected by the Virginia General Assembly), and from there to the Court of Appeals, where cases are placed on a docket allowing expedited review.

BIP is financed through annual assessments levied on participating obstetrician-gynecologists, midwives, hospitals, and, when required to maintain the program's actuarial position, liability insurers and non-participating physicians. The program provides three categories of benefits to claimants. First, health care costs are compensated, provided they are reasonable and are for medically necessary services. Items typically covered include hospital services, residential and custodial care, medical equipment, and travel to receive care. These expenditures are reimbursed, not awarded in a fixed, pre-determined lump sum. BIP acts as the payer of last resort, BIP acts as the payer of last resort,

In the past, the WCC entered children into the program without any further proceedings if the program indicated in its thirty-day response to the WCC that the child met the definition in the act. *Id.* at 78. If the program indicated that the child did not meet the definition in the act, the WCC would obtain a medical panel report and hold a hearing. *Id.*

The parties required to be at the hearing are the claimant and the program. See JLARC, supra note 40, at 78 (citing § 38.2-5006(B)). In practice, the WCC also allows the participating physician or hospital to be a party to the hearing. See JLARC, supra note 40, at 78.

The fee for obstetrician-gynecologists and midwives was \$5,300 in 2007, increasing by \$100 each year thereafter, to a maximum of \$5,500 per year. The fee for hospitals is \$50 per live birth annually, with a 2007 maximum of \$180,000 that increases by \$10,000 each year thereafter, to a maximum of \$200,000 in any twelve-month period. The fee for nonparticipating physicians was \$280 in 2007, increasing by \$10 each year thereafter to a maximum of \$300 per year. Recently passed legislation raises the 2009 provider contribution to \$5,600, with a further increase of \$300 to be levied in 2010 and an annual increase of \$100 thereafter, to a maximum of \$6,200. The hospital contribution will increase by \$2.50 per live birth beginning in 2009, rising to a maximum of \$55 per live birth. VA. CODE ANN. § 38.2-5020 (2007 & Supp. 2008). The constitutionality of assessing non-participating physicians was unsuccessfully challenged in King v. Va. Birth-Related Neurological Injury Compensation Program, 410 S.E.2d 656, 660-63 (Va. 1991). The fee for liability insurers was \$12,701,764 for program year 2007, and is set by statute at one-fourth of one percent of net direct liability premiums written in Virginia as determined by the State Corporation Commission. See RICHARD A. LINO, OLIVER WYMAN ACTUARIAL CONSULTING, INC., VIRGINIA BIRTH-RELATED NEUROLOGICAL INJURY COMPENSATION PROGRAM: 2007 ANNUAL REPORT INCLUDING Program YEARS PROJECTIONS FOR 2007-2009 http://www.vabirthinjury.com/documents/2007SCCActuarialReport.pdf.

Among other things, this mechanism allows accurate compensation, is sensitive to actual life span, assures that funds are directed to the claimant's care and welfare, and provides a lasting financial security to eligible claimants. *See JLARC, supra* note 40, at 6. It does entail chronic dependency on the program, a heavy load of bureaucracy, and everlasting room for arguments between the program and the claimants' families regarding the breadth of "necessary medical care."

JLARC, supra note 40, at 6. A recent amendment in Florida added infants who receive an award from NICA to the Children's Medical Services (CMS) program; it requires

covering any losses for which the claimant is not eligible for reimbursement from public or private insurance programs. Second, the program compensates lost earnings of the injured party in installments from the age of eighteen until age sixty-five.⁴⁹ Third, the program reimburses reasonable expenses incurred in connection with the filing of a claim, including attorney fees.⁵⁰ An exception to these general rules applies to eligible claims in which the infant died within 180 days of birth: in such cases, a single lump-sum payment of up to \$100,000 may be awarded.⁵¹

Eligibility for BIP compensation is contingent on establishing the following: (1) an injury to the brain or spinal cord; (2) occurring to a live infant; (3) caused by the deprivation of oxygen or mechanical injury; (4) occurring in the course of labor, delivery, or resuscitation necessitated by a deprivation of oxygen or mechanical injury that occurred in the course of labor or delivery; (5) occurring in a hospital; (6) which renders the infant permanently developmentally disabled in motor skills (or, for infants sufficiently developed to be cognitively evaluated, cognitively disabled); and (7) the disability causes the infant to be permanently in need of assistance with all activities of daily living (see Table 2). BIP excludes disability or death caused by a genetic or congenital abnormality, degenerative neurological disease, or maternal substance abuse.⁵²

As of December 2007, BIP has received 192 claims, of which 134 (70%) were accepted (see Table 3). The program has paid a total of about \$74 million dollars to claimants since its inception.

NICA to provide reimbursement to CMS for services and makes the reimbursement eligible for federal matching funds. See Fla. Stat. § 391.029(c) (2007).

See VA. CODE ANN. § 38.2-5009(3) (2007); JLARC, supra note 40, at 6.

"Birth-related neurological injury" means injury to the brain or spinal cord of an infant caused by the deprivation of oxygen or mechanical injury occurring in the course of labor, delivery or resuscitation necessitated by a deprivation of oxygen or mechanical injury that occurred in the course of labor or delivery, in a hospital which renders the infant permanently motorically disabled and (i) developmentally disabled or (ii) for infants sufficiently developed to be cognitively evaluated, cognitively disabled. In order to constitute a "birth-related neurological injury" within the meaning of this chapter, such disability shall cause the infant to be permanently in need of assistance in all activities of daily living. This definition shall apply to live births only and shall not include disability or death caused by genetic or congenital abnormality, degenerative neurological disease, or maternal substance abuse. The definition provided here shall apply retroactively to any child born on and after January 1, 1988, who suffers from an injury to the brain or spinal cord caused by the deprivation of oxygen or mechanical injury occurring in the course of labor, delivery or resuscitation in the immediate post-delivery period in a hospital.

VA. CODE ANN. § 38.2-5001 (2007) (emphasis added).

 $^{^{49}}$ See Va. Code Ann. § 38.2-5009(2) (2007 & Supp. 2008). This is not the case in Florida. See Fla. Stat. § 766.31 (2007).

This award has been available only since 2003. The amount to be awarded is within the Commissioners' discretion. Prior to making an award, the Commission conducts a hearing for the purpose of determining whether such an award is appropriate and, if so, the proper amount and how it should be paid. At the hearing, the Commission hears evidence pertaining to sorrow, mental anguish, solace, grief associated with the death of the infant, and other material factors. Va. Code Ann. § 38.2-5009.1 (2007).

 $^{^{52}}$ Va. Code Ann. \S 38.2-5014 (2007). The Virginia statute defines eligible injuries as follows:

The Florida Neurological Injury Compensation Association ("NICA")

NICA's general structure (see Table 1) was heavily influenced by recommendations from an expert panel convened in 1986.53 The claims process has been described as follows:54

All claims for compensation are filed with the Division of Administrative Hearings (DOAH) and are reviewed by NICA for compensability. NICA collects relevant documentation relating to the claimant's petition, conducts a medical records review, and facilitates the examination of the child by medical experts. After medical experts have reviewed the infant's medical records and other documentation, NICA determines whether a claim should be accepted or rejected and sends its determination to DOAH for approval. A DOAH administrative law judge ["ALJ"] determines the compensability of disputed claims after an evidentiary hearing. Once a claim is approved as payable by the DOAH administrative law judge, NICA begins paying program benefits.

NICA is financed through a system of assessments that is very similar to Virginia's BIP. NICA was initially funded with a \$20 million appropriation from the state legislature, with an additional \$20 million available to be used to maintain the actuarial soundness of the program if required.⁵⁵ Currently, the program is funded through a combination of annual assessments from participating and non-participating physicians, participating midwives, and hospitals in amounts similar to those collected in Virginia (\$5,000 annually, \$250 annually, \$2,500 annually, and \$50 per live birth annually, respectively).⁵⁶ The NICA statute also authorizes assessments on liability insurers of up to 0.25% of prior-year net direct premiums written if these funds are needed to restore the actuarial soundness of the program.⁵⁷ No such assessments have been required to date.58

The program meets the costs of all necessary and reasonable medical expenses for eligible infants, including training, residential and custodial care, special equipment, and facilities, but not including amounts paid or payable by private insurance or other sources (see Table 1). These expenses are paid over the lifetime of the child. Compensation also includes a one-time award to the infant's parents or legal guardians, not to exceed \$100,000, and a \$10,000 death benefit. 59 In addition, NICA will pay for some expenses associated with filing a claim, including reasonable attorney's fees, although representation by an attorney is not required to file a claim.⁶⁰

See Governor's Select Task Force on Healthcare Professional Liability Insurance, Report and Recommendations 303 (Jan. 29, 2003) (unpublished report) (on file with authors) (citing the Academic Task Force for Review of the Insurance and Tort Systems, Medical Malpractice Recommendation (Nov. 6, 1987) as the first to propose a nofault compensation plan for birth-related injuries).

OPPAGA, supra note 41, at 2.

Id. at 3.

Id. at 3-4.

Id.

Id.

Id. at 2.

NICA's eligibility criteria are virtually identical to BIP's, with the following exceptions: the live infant's birth weight must be at least 2,500 grams (5.5 pounds);⁶¹ the oxygen deprivation or mechanical injury may occur in the course of labor, delivery, or resuscitation in the *immediate postdelivery period*; and the infant should be rendered permanently *and substantially* mentally *and* physically impaired (see Table 2).⁶² Caseload and payment data are presented in Table 3.

B. Previous Evaluations

A number of previous studies and evaluations of the programs have addressed questions about the origins of the Florida and Virginia programs, various aspects of their operation, and challenges to their legality and viability. These studies have also evaluated the performance of the programs in containing administrative costs, satisfying consumers, and preempting litigation. No studies, however, have examined effects on the quality of care or health outcomes.

Certain weaknesses in the programs are evident, most of which can be traced back to original design features. We address these in detail below. Overall, however, the academic evaluations, together with more recent official investigations, have found that the programs have largely achieved their principal objectives—namely, acting as a stabilizing influence on the obstetrics tort environment, improving efficiency and speed of adjudication of claims, and responding to the needs of injured children and their families. Specifically, the reports found that, relative to the tort system, the programs have shortened the time from claim filing to compensation and lowered overhead costs and attorneys' fees. They have also had high rates of physician participation and have decreased the number of high-cost malpractice claims brought in tort. Finally, they have resulted in lower malpractice insurance premiums for obstetrician-gynecologists, even those who do not participate in the programs.

In the case of a multiple gestation, the applicable requirement is a live infant weighing at least 2,000 grams (4.4. pounds). *Id.* This restriction is meant to exclude premature babies, for whom neurologic injuries are more prevalent and may be primarily the result of prematurity rather than the obstetrician's care. *See id.* at 7.

The Florida statute states that:

[&]quot;Birth-related neurological injury" means injury to the brain or spinal cord of a live infant weighing at least 2,500 grams (5.5. pounds) for a single gestation or, in the case of a multiple gestation, a live infant weighing at least 2,000 grams (4.4. pounds) at birth caused by oxygen deprivation or mechanical injury occurring in the course of labor, delivery, or resuscitation in the immediate postdelivery period in a hospital, which renders the infant permanently and substantially mentally and physically impaired. This definition shall apply to live births only and shall not include disability or death caused by genetic or congenital abnormality.

FLA. STAT. § 766.302 (2007) (conversions added).

 $^{^{63}}$ See Bovbjerg et al., supra note 35; Studdert et al., supra note 35; OPPAGA, supra note 41; JLARC, supra note 40.

⁶⁴ *Id*.

⁶⁵ Bovbjerg et al., *supra* note 35, at 93.

⁶⁶ See JLARC, supra note 40, at 33.

⁶⁷ See id. at 36.

Evaluations to date have tended toward broad assessments of the programs in relation to those principal objectives. The nub of the programs' innovation, however—non-negligence-based compensation criteria and the process used to apply them—has received relatively little attention. This article focuses on both the programs' criteria and the process through which they are applied. We consider the following questions: Which criteria are used to distinguish compensable from noncompensable injuries? Who decides eligibility? How is eligibility decided? And how well have these standards and processes worked? The experiences of the Florida and Virginia programs matter because these programs stand, nearly twenty years after their introduction, as the country's most radical and enduring experiments with administrative compensation for medical injury. As such, they tend to be referenced as the primary models for current policy proposals for birth injury funds.

III. STUDY METHODOLOGY

We conducted a series of key informant interviews from December 2004 through June 2005 in order to investigate how the statutory compensation criteria for BIP and NICA have been interpreted and applied. The majority of the interviews were conducted during site visits to the headquarters of the programs in Tallahassee and Richmond. A total of seventeen interviews were completed. The interviewees consisted of the director of each program (n=2) and senior staff (n=2); medical experts who work with and advise the programs (n=4); attorneys involved in the programs or litigation related to the programs (n=3); obstetrics-gynecology practitioners and a hospital administrator (n=3); a journalist (n=1); and insurance experts (n=2).

We followed an interview script that contained a core set of questions posed to every interviewee and additional questions targeted to each interviewee's expertise. Core questions elicited information about current interpretations of the compensation criteria and how interpretations have changed over time; particular terms and criteria that have proved difficult to interpret; statutory presumptions; the use of guidelines and other decision-making tools; and the perceived performance of the criteria in terms of ease of applicability, comprehensiveness, scientific validity, and fairness.

Interviews lasted one hour on average (range 45 to 75 minutes). Most (14/17, 82%) were conducted in person; the rest were done by telephone. Interviews were tape-recorded and transcribed in full for content analysis. During the analysis and write-up, we obtained follow-up information from several interviewees via telephone and email.

In addition to the interview data, we conducted comprehensive reviews of (1) case law regarding NICA/BIP eligibility criteria using Lexis-Nexis and Westlaw; (2) reports and position papers on the programs from government and private sources; and (3) relevant legal and medico-legal literature.

⁶⁸ Bovbjerg et al., *supra* note 35, at 70.

IV. FINDINGS: THE ELIGIBILITY CRITERIA IN ACTION

A. REALPOLITIK OF COMPENSATION DETERMINATIONS

The most important of the programs' foundational objectives (noted above) was to help stabilize the malpractice litigation environment in the respective states. This was to be achieved by effectively wresting disputes over severe birth-related neurological injury, traditionally a tinderbox for medicolegal activity, from the courts. In pursuing this goal, the programs have had to confront complex questions about the etiology of birth-related neurologic injuries.

The causality of these injuries is highly controversial. The best epidemiologic evidence suggests that approximately eighty to ninety percent of cases of cerebral palsy are attributable to prenatal or genetic cases, rather than poor perinatal management or oxygen deprivation during birth. ⁶⁹ Determining which ten to twenty percent of cases are birth-related is a difficult enterprise. Thus, the fact that the programs' fundamental jurisdictional parameters are not clearly delineated presents an ongoing challenge in applying the compensation criteria (particularly the medical criteria). These parameters must be defined, case-by-case, in contested and uncertain scientific space.

This challenge was not invisible to the programs' architects. Indeed, one of the reasons birth injury is such a disruptive force in malpractice liability insurance markets, apart from the very severe injury involved, is the uncertainty surrounding causality. In retrospect, however, it is apparent that no one anticipated the reverberations that the causal complexities at the root of the inquiry would create. Dropping provider negligence as a precondition to obtaining compensation trimmed much of the passion play around these disputes and sidestepped the usual battle of the experts. Yet, as long as determination of causal factors remains part of the compensation criteria, pivotal uncertainties persist.

This problem is compounded by certain program design choices. Claims which do not meet the compensation criteria are released back into the tort system, should the claimants and their attorneys choose to pursue them. Hence, it was recognized early on that rigid adherence to a scientific standard of proof, with the burden of proving causality resting with claimants, would likely reduce eligible claims quite dramatically, and seriously undermine the programs' ability to meet their objective of preempting tort claims. In other

Epidemiological studies suggest that in about 90% of cases intrapartum hypoxia could not be the cause of cerebral palsy and that in the remaining 10% intrapartum signs compatible with damaging hypoxia may have had antenatal or intrapartum origins. These studies show that a large proportion of cases are associated with maternal and antenatal factors such as prematurity, intrauterine growth restriction, intrauterine infection, fetal coagulation disorders, multiple pregnancy, antepartum hemorrhage, breech presentation, and chromosomal or congenital anomalies.

Alastair MacLennan, A Template For Defining a Causal Relation Between Acute Intrapartum Events and Cerebral Palsy: International Consensus Statement, 319 Brit. Med. J. 1054, 1055 (1999). See also MacLennan et al., supra note 32, at 1688.

 $^{^{69}\,}$ The International Cerebral Palsy Task Force has issued a consensus statement stating:

words, displacement of high-cost birth injury tort claims would not be possible unless the programs mimicked, to some degree, the courts' receptivity (*over*-receptivity in the eyes of many medical experts) to these claims.

The programs have tackled this tension pragmatically. In practice, when the claimant can show that oxygen deprivation, on the balance of probabilities, appears to have occurred during labor, and that the infant has a poor neurologic outcome, the programs allow a rebuttable presumption that the outcome is linked to the providers' actions. There is a fairly liberal interpretation of causality. The effect is to give claimants the benefit of the doubt in the substantial number of claims that fall within a "gray zone" of eligibility.

With those realpolitik considerations as background, we proceed to specific challenges and issues of interpretation that have arisen in relation to the compensation criteria, both medical and procedural.

B. APPLICATION OF MEDICAL CRITERIA

Applying BIP and NICA's clinical criteria for compensation has posed several practical challenges. We review each of these criteria in turn.

1. "Injury to Brain or Spinal Cord"

The main issue that arises in applying this criterion, informants noted, is that injury to an infant's spinal cord, without accompanying brain impairment, does not satisfy the requirement of cognitive disability. Accordingly, any such claim is ineligible for compensation. The exclusion is particularly salient because of Erb's palsy, a condition characterized by damage to the brachial plexus, a network of nerves running from the spine that controls movement and sensation in the upper limbs. Injury to the brachial plexus during birth typically occurs when the baby's shoulder is caught during vaginal delivery, a complication known as shoulder dystocia, and force is required to release it.

Erb's palsy limits the use of arms, hands, and fingers, sometimes quite significantly. It is relatively common, with a prevalence of 1 case per 1000 births.⁷² Thus, it was not surprising that the programs have received many claims for Erb's-palsy-type conditions over the years, especially early on in the programs. Most have been rejected because cognitive impairment could not be demonstrated.

A number of interviewees felt that such injuries should be covered and that excluding them because of their exclusively physical impact made little sense, from a clinical or equitable perspective. Including them, however, would clearly require alteration to the statutory criteria allowing mental and physical impairment as alternative rather than dual requirements. Such a change could encounter constitutional hurdles, as we discuss below.

The proof of th

⁷¹ *Id*

⁷² Suneet P. Chauhan et. al., *Brachial Plexus Injury: A 23-Year Experience from a Tertiary Center*, 192 Am. J. of Obstetrics and Gynecology 1795, 1797 (2005).

2. "Caused by Oxygen Deprivation"

Establishing a causal relationship between oxygen deprivation and an infant's impairment has proved to be a major point of contention in Virginia⁷³ and, to a lesser extent, in Florida. To a considerable extent, as noted earlier, this difficulty is driven by the underlying scientific uncertainty surrounding the etiology of cerebral palsy. Compensation schemes, however, face special challenges. They are confronted with the need to make binary decisions about individual cases. Epidemiological evidence of a probabilistic nature, derived at the population level, becomes background information.

Most interviewees disliked the term "oxygen deprivation." They found it too vague and crude, and not sufficiently sensitive to the complexities and uncertainties in establishing a causal link to injury.⁷⁴ Brain hypoxia (shortage of oxygen to the brain) can result in a variety of adverse clinical events, only some of which are linked to provider behavior.⁷⁵ Several medical interviewees stated that the more precise term "hypoxic ischemic encephalopathy" would be preferable because it denotes both an etiology and a timeframe for the injury and has recognizable hallmarks in neuroimaging.

The main difficulty in applying the oxygen-deprivation criterion in Virginia stems from the fact that the medical community currently determines oxygen deprivation by an amalgam of circumstantial evidence. No single indicator has proven sufficient to date. Rather, the entire clinical picture is examined to determine the evidence for oxygen deprivation as the cause of impairment.⁷⁶

The use of available professional statements, most notably the Report of the American College of Obstetricians and Gynecologists ("ACOG") Task Force on Neonatal Encephalopathy and Cerebral Palsy, ⁷⁷ was generally criticized by non-medical interviewees as a basis for guiding the

It is not possible to ascertain retrospectively whether earlier obstetric intervention could have prevented cerebral damage in any individual case where no detectable sentinel hypoxic event occurred. After a detectable sentinel hypoxic event, it is necessary to consider the local conditions and facilities available at the time of the birth in question when commenting on whether the care provided met acceptable standards. Any major deviations from the range of normal clinical responses can only be considered critical to the development of cerebral palsy if they could plausibly and most likely have affected the duration or severity of the hypoxic event. The actual length of time and degree of hypoxia required to produce cerebral palsy in a previously healthy human fetus is not known. Many special physiological mechanisms protect the fetus from acute hypoxia, allowing it to survive intact for a longer period—minutes to perhaps hours—than an adult with similar blood gas concentrations.

MacLennan et al., supra note 69, at 1058-59.

⁷⁵ For an example of experts' disagreement on the scope and breadth of "oxygen deprivation," see *In re Elijah David Johnson*, VWC File No. B-04-03 (Va. Worker's Comp. Comm'n May 17, 2005) (unpublished opinion).

For a comprehensive list of the clinical indicators that current medical opinion holds to be necessary evidence to draw conclusions about the contributory role of oxygen deprivation, see MacLennan, *supra* note 69, at 1056.

⁷⁷ See generally Am. C. of Obstetricians and Gynecologists, Neonatal Encephalopathy and Cerebral Palsy: Defining the Pathogenesis and Pathophysiology (2003).

⁷³ See JLARC, supra note 40, at 72.

⁷⁴ Experts attest that:

determination; indeed, it was actually formally rejected by the WCC.⁷⁸ The non-medical interviewees' lack of enthusiasm for the ACOG Report stemmed from a mix of reasons, including the Report's lack of peer review,⁷⁹ use of old data, exclusion of preterm babies, and implicit motivation to protect the profession against cerebral palsy claims. Several medical informants lamented this position, arguing that the rejection of the ACOG Report is a lost opportunity to incorporate expert scientific consensus into the decision-making process and leaves decision makers with no alternative tools. Medical informants strongly felt such guiding tools are necessary if coherence, consistency, and justice are to be achieved in compensation decisions.

Another controversy has centered on how to deal with cases in which information about the newborn's umbilical cord gases, an important piece of evidence about oxygen deprivation, is unavailable. ⁸⁰ In a recent case, a Virginia court ruled that missing blood gases establish a presumption of oxygen deprivation based on a spoliation of evidence theory. ⁸¹ This ruling was criticized by informants from both states, who stressed that too much emphasis was given to cord blood gases as an indicator of oxygen deprivation. Obtaining blood cord gases is not part of routine obstetric practice even after the Virginia ruling: blood gases have no medical value for determining needed treatment for the mother or newborn, and errors in drawing the sample are common. ⁸² As a result, informants felt that if cord blood gases were available, they should be taken into consideration; however, if they were unavailable, no spoliation inference should be drawn.

3. "Or Caused by Mechanical Injury"

Mechanical injury provides an alternative causal route through which claimants may establish birth-related impairment. It is intended to cover untoward events ranging from trauma in delivery as a result of forced extraction (forceps or vacuum) to catastrophic infection from fetal scalp electrodes.⁸³ In practice, mechanical injury has proved to be an exotic basis

 $^{^{78}}$ See In re Bakke, VWC File No. B-03-04, at 22 (Sept. 7, 2004), aff'd, 620 S.E.2d 107 (Va. Ct. App. 2005), available at http://www.vwc.state.va.us/listdecisions_all/Neonatal/Reviews/B-03-04.rev(9-7-04).doc ("we agree that the ACOG report should not have been considered as independent, probative evidence relating to whether the Program met its burden of rebutting the presumption provided in Code § 38.2-5008.").

This assertion was vehemently opposed by our medical informants. Interview with informants (anonymous), in Richmond, Va. (Dec. 8, 2005) (on file with authors).

This was perceived as a problem in Virginia more than in Florida. In Florida, informants stated, determining oxygen deprivation had not proved problematic because in most cases, systemic oxygen deprivation was documented or could be inferred from the entire labor process. Interview with informants (anonymous), in Tallahassee, Fla. (Aug. 4, 2005) (on file with authors).

Wolfe v. Va. Birth-Related Neurological Injury Comp. Program, 580 S.E.2d 467, 475 (Va. Ct. App. 2003).

But see Isaac Blickstein & Tamar Green, Umbilical Cord Blood Gases, 34 CLINICS IN PERINATOLOGY 451, 458 (2007) (observing that, although measurements may be affected by several factors related to the method of sampling, storage, and assessment, a wide margin of accuracy exists even when prompt assessment is unavailable; therefore, "it is doubtful whether standard sampling methods would be ineligible in litigation.").

⁸³ See In re Moses, VWC File No. B-94-4, at 6 (Va. Worker's Comp. Comm'n April 17, 1995), available at http://www.vwc.state.va.us/listdecisions_all/Neonatal/Evidentiary/B-94-

for claims. Its low prevalence, compared to hypoxia, as a cause of severe neurological injury probably partly explains its limited use. In addition, because this causal pathway is usually demonstrable in ways that hypoxia may not be, the claimants are held to relatively high standards of proof: they must present neuroimaging showing bruising, fracture, bleeding, or other types of harm consistent with a history of problems during delivery.

4. "In the Course of Labor, Delivery or Resuscitation"

Evaluating the temporal connection between the neurological insult and the birth has proved to be another particularly challenging aspect of applying the compensation criteria. Like "oxygen deprivation," the key terms are somewhat ambiguous. A series of questions have emerged in relation to the prenatal, intrapartum, and postpartum periods, which have had to be resolved *ad hoc.* For instance, does an injury qualify if its cause originated in utero but continued through labor?⁸⁵

With respect to labor itself, ruptured membranes and effective contractions are the conventional markers of labor, but they are bypassed or irrelevant in some clinical circumstances. Elective cesarean sections, for example, are usually scheduled and occur without labor. When a placental abruption occurs, contractions may not be documented, either because the condition would render them undetectable or because the woman would simply be rushed to the operating room for a cesarean section. The generic term "delivery" may capture some non-active labor scenarios, although the extent to which it does is not entirely clear.

With respect to the immediate postnatal period, statutes in both states stretch the qualifying time to include "resuscitation" of the infant. Florida goes even further, into "the immediate postdelivery period." Again, however, the lines are unclear, and both programs have been forced to adjudicate claims that press on this uncertainty. Must resuscitation begin immediately

 $^{04.\}text{opn}(4-17-95).\text{doc.}$ In this case, the Commission eventually dismissed the claim because there was no evidence that the infection was transmitted through the mechanical injury or of when it was transmitted. *Id.* at 6.

Because of the "difficulty in proving when such an injury was sustained" and the equally difficult task of proving, prospectively, that the infant will permanently need assistance in all activities of daily living, "the legislature enacted a presumption to assist potential claimants in obtaining benefits." Coffey $ex\ rel$. Coffey v. Va. Birth-Related Neurological Injury Comp. Program, 558 S.E.2d 563, 567 (Va. Ct. App. 2002).

The WCC opted for accepting such cases once it was established that oxygen deprivation occurred during labor, even if it began at an earlier stage. See In re Wells, VWC File No. B-90-2, at 9-10 (Va. Worker's Comp. Comm'n Feb. 5, 1992), available at http://www.vwc.state.va.us/listdecisions_all/Neonatal/Reviews/B-90-02.rev(2-5-92).doc; In re Haggart, VWC File No. B-98-5, at 10 (Sept. 15, 2000), available at http://www.vwc.state.va.us/listdecisions_all/Neonatal/Evidentiary/B-98-05.opn(9-15-00).doc. See also In re Johnson, VWC File No. B-04-03, at 20-24 (May 17, 2005), available at http://www.vwc.state.va.us/listdecisions_all/Neonatal/Reviews/B-04-03.rev(5-17-05).doc (holding that inflammatory and infectious processes commencing prior to labor yet continuing through the labor, delivery, and immediate post-delivery periods qualify for compensation).

⁸⁶ See Fla. Stat. § 766.302(2) (2007); Va. Code. Ann. § 38.2-5001 (2007).

⁸⁷ FLA. STAT. § 766.302(2) (2007).

after birth, or could it come later?⁸⁸ Similarly, is resuscitation in the delivery ward necessary, or could it occur soon after birth in the Neonatal Intensive Care Unit ("NICU")?⁸⁹

Several interviewees suggested that a term with clearer temporality, such as "until stabilization of the baby," would be a better guide. A more prevalent view, however, was that any extensions of eligibility beyond the actual labor would be problematic because they would diverge from the enabling legislation's explicit coverage intent. The need for clear evidence linking the injury to the birthing process becomes stronger in the postpartum period because of the greater potential for rival causes.⁹⁰ In addition, one informant noted that folding resuscitation into the qualifying time period may introduce some unfairness towards obstetrician-gynecologists who participate in the program. The program does not ascribe blame to providers in awarding compensation to claimants. Nonetheless, physicians who deliver babies pay the full assessment (\$5,000), while all other physicians, including pediatricians who typically perform post-delivery resuscitations and may enjoy the program's preemption of tort litigation for some of those resuscitations, are considered non-participating physicians and pay much less $(\$250).^{91}$

5. Impairment Requirement

In Florida, the impairment requirement for eligibility is that the injury renders the infant "permanently and substantially mentally and physically impaired." Virginia requires that the injury leave the infant "permanently motorically disabled and (i) developmentally disabled or (ii) for infants sufficiently developed to be cognitively evaluated, cognitively disabled . . . [such that the infant is] permanently in need of assistance in all activities of daily living." In both states, the impairment criterion has raised two main interpretive difficulties. First, how should non-quantifiable terms such as "substantial" and "permanent" be interpreted? Second, should both physical and mental disability be required?

 $^{^{88}}$ In Meador v. Va. Birth-Related Neurological Injury Comp. Program, 604 S.E.2d 88, 91 (Va. Ct. App. 2004), the court stated, "[n]or can the term 'birth' be expanded to include the efforts of hospital staff members to resuscitate a child who was born at home."

Early intubations, such as those performed in preterm births, might delay the onset of the detrimental effect of oxygen deprivation. American Heart Association, Neonatal Resuscitation Guidelines, 112 CIRCULATION 188, 190. In premature infants, the oxygen deprivation that causes the neurological injury does not occur until several hours later. See generally Vidya Bhushan, Cerebral Palsy and Birth Asphyxia: Myth and Reality, 61 Indian J. Pediatrics 49 (1994). Even though the infants receive supplemental oxygen, their lungs are not developed enough to handle the available oxygen. American Heart Association, supra. Thus, the question becomes how to determine exactly when the "injury" occurred. In order to prevent frustration of the programs' intent of providing coverage to severely injured infants, the statutes give claimants the benefit of the presumption of this element. Va. Code Ann. § 38.2-5001(a)(1) (2007); Fla. Stat. § 766.31 (2007).

⁹⁰ See Nagy v. Fla. Birth-Related Neurological Injury Comp. Ass'n, 813 So. 2d 155, 160 (Fla. Dist. Ct. App. 2002) (holding that the child was not NICA eligible because oxygen deprivation did not occur during labor, delivery, or immediately thereafter).

⁹¹ See Fla. Stat. § 766.31(4)(b)-(c) (2007); Va. Code Ann. § 38.2-5020(a), (d) (2007).

⁹² FLA. STAT. § 766.302(2) (2007).

⁹³ VA. CODE ANN. § 38.2-5001 (2007).

The "substantiality"/"need of assistance in all activities of daily living" criterion is usually evaluated through disability assessments made on the basis of one or more examinations or, in some cases, based on review of the child's medical record. Informants with experience in these examinations indicated that they are limited in nature, and often do not involve follow-up assessments. Several benchmarks are used to illustrate the concept of "substantial" physical disability, including whether the child is wheelchair-bound, has retractable seizures, or lacks head and/or trunk control. ⁹⁴ In both programs, establishing the degree of mental impairment was said to be fraught with difficulty because most claimants are less than three years old. In young children, few relevant cognitive benchmarks are available, severity is less apparent, and mental evaluations are problematic.

Further complicating matters, assessments of both physical and mental disability call for prognosis of the child's future condition and needs, an exercise that can be quite speculative and uncertain. The term "permanent" suggests that the disability is static over time, but some young children may improve physically and/or mentally as they develop. This possibility raises the question of whether to perform a reevaluation at a later time, as is routinely done in workers' compensation,95 or to defer the evaluation for a year. Some informants felt that either of these options could help improve the accuracy of disability determinations, but others felt that children should not be "punished" for successful rehabilitation, that is, denied compensation because they had improved their functioning over time. There were also concerns that statutes of limitation might prevent children from accessing the courts and obtaining redress if they are rejected from these programs at a later time, and that delaying eligibility determinations would leave physicians and the program uncertain about their financial obligations for a longer period of time. In light of these concerns, most respondents seemed to favor prompt, one-time disability evaluations.

The requirement that both physical and mental substantial impairment must be established ⁹⁶ has provoked controversy, as noted earlier in the discussion of Erb's palsy. Defenders of the requirement point out that adopting a formulation that permits these types of injury in the alternative would dramatically increase program expenditures. ⁹⁷ The cost increases would be a function of both the larger pool of eligible injuries and the longer life expectancies that would accompany the influx of less-seriously injured claimants, stringing compensation commitments out over long timelines. ⁹⁸ The budgetary pressures created by such a change, some informants asserted,

See Bovbjerg et al., supra note 35, at 97-98.

 $^{^{95}}$ $See,\,e.g.,\,In$ re Hoell, VWC File No. B-03-11 at 7-16 (Va. Worker's Comp. Comm'n Apr. 2, 2004).

See Adventist Health Sys. v. Fla. Birth-Related Neurological Injury Comp. Ass'n, 865 So. 2d 561, 567-68 (Fla. Ct. App. 2004). See also In re Mason Allen McGrady, VWC File No. B-03-08 at 18 (Va. Worker's Comp. Comm'n Apr. 19, 2005).

⁹⁷ See OPPAGA, supra note 41, at 8-9.

The current life expectancy of enrollees was reported to be around thirty years. See The Fla. obstetric & gynecological Soc'y President's Task Force, NICA Update 2007: The Fla. Obstetric & Gynecological Soc'y President's Task Force Report on the Fla. Birth-Related Neurological Injury Compensation Ass'n (NICA) 4 (2007), http://www.flobgyn.org/nica_newsletter.pdf.

could be so substantial as to undo NICA's ability to operate on a self-sustaining basis through assessments and may deepen BIP's woes regarding future liabilities. Finally, a shift to the alternative could raise legal concerns. The programs' license to abrogate the constitutional rights of injured patients to access the courts was based on a perceived public necessity arising from the need to relieve the tort system of the burden of catastrophic birth injuries. Admitting a new, less severe class of injuries could lead to a legal challenge revisiting this argument.

Although no large changes to the injury severity requirements are on the horizon, there have been modest shifts toward expanding eligibility over time. BIP began slowly, with fewer claimants compensated in the early years than expected. Have claims in this period were rejected because of the very high physical injury threshold, which demanded the child be "permanently nonambulatory, aphasic and incontinent. Organized medicine and other stakeholders insisted that this restrictive formulation frustrated the goals of the initiative, an argument taken seriously by the Virginia legislature, which altered the formulation to "permanently disabled and in need of assistance in all activities of daily living. In addition to such formal changes, informants in Florida suggested that a more lenient attitude towards qualifying mental disability could and should be adopted.

 $^{^{99}}$ This change would result in additional claims expenses of \$39.7 million to \$52.2 million per year. See OPPAGA, supra note 41, at 6-8.

Univ. of Miami v. Echarte, 618 So. 2d 189, 196-198 (Fla. 1993) (holding that a statute that provides a cap on noneconomic damages in medical malpractice is constitutional in part because the legislature showed an "overpowering public necessity."); Kluger v. White, 281 So. 2d 1, 4-5 (Fla. 1973) (holding that the Constitution guarantees a right of access to courts unless: 1) a reasonable alternative approach is available; or 2) the legislature makes a showing of "overpowering public necessity for the abolishment of such right" and no available alternative method of meeting the public necessity); OPPAGA, *supra* note 41, at 9 (stating that, to expand coverage, legislature will have to include in the law findings of fact that compensation for these injuries serves an overpowering public necessity, provides no commensurate benefit to plaintiffs and no alternative or less onerous method to meet the public necessity has been shown).

See JLARC, supra note 40, at 52.

¹⁰² *Id.* at 70.

In 1989, the Medical Society of Virginia contracted with the Williamson Institute at the Medical College of Virginia to conduct a study of birth injury claims in Virginia, examining whether the definition in the Act captured the types of cases that were most likely to result in high payouts to claimants. Reviewing actual medical malpractice claims data in Virginia between 1980 and 1988, the researchers found that babies who met the disability criteria of the previous definition were very likely to die shortly after birth, and that the definition excluded a large number of infants who had more costly medical needs and who had obtained higher payouts from medical malpractice suits. The research concluded that the previous definition of eligibility was too restrictive. *See JLARC*, *supra* note 40, at 90; Bovbjerg, *supra* note 35, at 80.

The courts have not gone in this direction. *See, e.g.*, Fla. Birth-Related Neurological Injury Comp. Ass'n v. Fla. Div. of Admin. Hearings, 686 So. 2d 1349, 1356 (Fla. 1997) (adhering to the plain wording of the statute and requiring that injuries must involve permanent and substantial impairment that has both physical and mental elements).

C. APPLICATION OF PROCEDURAL CRITERIA

In addition to medical criteria, both programs apply a set of procedural or administrative criteria in determining eligibility. This process is part of the standard administrative decision-making functions of the WCC and NICA. Because these determinations generally do not require expert input, and do not turn on hotly-disputed scientific issues, we expected application of the procedural criteria would be relatively clear-cut. Although this proved true in Virginia, we found that the non-clinical criteria had been surprisingly controversial in Florida. Families who ostensibly fell within NICA's jurisdiction, but sought to escape it and obtain relief in the courts, had repeatedly argued that they were not subject to NICA because procedural criteria were not met. The two main criteria that have formed the basis of such arguments are those relating to participation and notice.¹⁰⁵

Program participation by physicians and hospitals in both states is voluntary, with the exception of hospitals in Florida, for which participation is mandatory. Over seventy-five percent of Florida's obstetrician-gynecologists participate, a proportion that is believed to include virtually all obstetrician-gynecologists who deliver babies in the state. The Virginia, approximately half of hospitals and sixty percent of obstetrician-gynecologists participate. The relatively large proportions of non-participating physicians and hospitals in Virginia underscore the importance of notification requirements. Because participation is not the norm and the formal requirements to provide patients with notice concerning the program are limited, oncerns loom large about parents failing to recognize that their provider is a participant.

Unlike in Florida, many families in Virginia have realistic options for securing care from nonparticipating providers should they wish to preserve their rights to litigate, which means notification may be quite influential in care choices. Yet, a number of interviewees opined that many families, particularly poor and uneducated patients who deliver in participating hospitals, have little or no real understanding of what they are signing up for. Some informants expressed the view that standardizing the compensation of birth-related injuries by making participation mandatory would do much to ensure equality. Other informants objected to the notion of mandatory

Studdert, supra note 35, at 516.

 $^{^{105}}$ Other issues include statute of limitations or tolling of the statute of limitations. Fla. Stat. § 766.306 (2007).

FLA. STAT. § 766.314(4)(a) (2007).

In 2000, the Virginia program was expanded to include professional corporations and other entities through which physicians may practice. Va. Code Ann. § 38.2-5001 (2007) (effective April 1, 2000). *See* Berner v. Mills, 579 S.E.2d. 159, 161-162 (Va. 2003) (altering the rulings in Fruiterman & Assocs. v. Waziri, 525 S.E.2d 552 (Va. 2000)).

The Virginia statute requires that "Each physician, hospital, and nurse midwife shall disclose in writing to their obstetrical patients . . . whether such physician, hospital or nurse midwife is or is not a participating provider under the Program." VA. Code Ann. § 38.2-5004.1 (2007). Parents are not required to be informed that the program has exclusive jurisdiction over birth injury claims until after a baby is delivered. *Id.* ("In addition to any other postpartum materials provided to the mother . . . every hospital shall provide for each infant who was hospitalized in a neonatal intensive care unit an informational brochure . . . describ[ing] the rights and limitations under the Program, including the Program's exclusive remedy provision").

participation, arguing that it imposes a considerable expense on practitioners (who must also maintain their regular liability insurance to cover claims that fall outside the BIP's jurisdiction), and that they should be free to decide whether BIP is a value proposition for them.

In Florida, tensions around the notice issue have played out in quite a different way. The NICA statute requires that both participating physicians and participating hospitals notify patients that NICA compensation will be an exclusive remedy for qualifying injuries and that tort options will be foreclosed. The goal is to facilitate choice of provider. Where notice is not forthcoming or is deficient, the parents may choose to pursue remedies in either NICA or tort. Arguments of inadequate notice have emerged as the leading justification for seeking to avoid NICA's exclusivity and pursue compensation in the courts. One informant called the notice objection an "escape hatch for lawyers." 112

A number of issues related to the notice requirement caused disputes, including whether it is within NICA's authority to determine whether notice has been properly given. Another uncertainty is whether notice from the hospital, but not the physician, constitutes adequate notice under the statute. The Florida Court of Appeal ruled that only the entity that failed to give notice

The law states:

Each hospital with a participating physician on its staff and each participating physician . . . shall provide notice to the obstetrical patients as to the limited no-fault alternative for birth-related neurological injuries. Such notice shall be provided on forms furnished by the association and shall include a clear and concise explanation of a patient's rights and limitations under the plan Notice need not be given to a patient when the patient has an emergency medical condition . . . or when notice is not practicable.

FLA. STAT. § 766.316 (2007).

See Galen of Fla., Inc. v. Braniff, 696 So.2d 308, 311 (Fla. 1997) (holding that "notice under the plan was intended to serve as a condition precedent to immunity...."). There is a certain irony when one juxtaposes the situations in Florida and Virginia with respect to patients' choices. Florida has strict notification requirements, but participation rates are so high among obstetrician-gynecologists that, as a practical matter, it would be difficult for patients to exercise their choice to have a non-participating provider. In Virginia, participation rates are lower and patients likely could find a non-participating obstetrician-gynecologist to deliver their baby, but they may receive inadequate notice of their right to do so.

 $^{^{112}}$ $\,$ For example, plaintiffs' attorneys could argue that the mother was underage or did not understand English. However, a patient's signature acknowledging receipt of the notice creates a rebuttable presumption that notice was given. See Fla. Stat. § 766.316 (2007).

¹¹³ This issue remained in conflict until recently. Some cases held that the administrative law judge (ALJ) determines whether notice was given. See Tabb v. Fla. Birth-Related Neurological Injury Comp. Ass'n, 880 So. 2d 1253, 1259-1260 (Fla. Dist. Ct. App. 2004); O'Leary v. Fla. Birth-Related Neurological Injury Comp. Ass'n, 757 So. 2d 624, 627 (Fla. Dist. Ct. App. 2000); Behan v. Fla. Birth-Related Neurological Injury Comp. Ass'n, 664 So. 2d 1173, 1174 (Fla. Dist. Ct. App. 1995). Other cases held that the ALJ could not determine the sufficiency of notice. See Fla. Health Sci. Ctr., Inc. v. Div. of Admin. Hearings, 871 So. 2d 1062, 1065-66 (Fla. Dist. Ct. App. 2004); Fla. Birth-Related Neurological Injury Comp. Ass'n v. Ferguson, 869 So. 2d 686, 688 (Fla. Dist. Ct. App. 2004); All Children's Hosp. v. Dep't of Admin. Hearings, 863 So. 2d 450, 455 (Fla. Dist. Ct. App. 2004); Bayfront Med. Ctr., Inc. v. Div. of Admin. Hearings, 841 So. 2d 626, 628 (Fla. Dist. Ct. App. 2003). The Florida Supreme Court recently decided that "when notice is raised as part of a claim filed under NICA, an ALJ has jurisdiction to make findings regarding whether a health care provider has satisfied the notice . . . requirement" Florida Birth-Related Neurological Injury Comp. Ass'n v. Florida Div. of Admin. Hearings, 948 So. 2d 705, 707 (Fla. 2007).

could be sued.¹¹⁴ The ALJ has ruled that notification from both parties is required for either to enjoy NICA coverage.¹¹⁵ The Florida Supreme Court has yet to resolve this difference.

In the meantime, NICA has a number of initiatives underway to improve the quality of the notification process. One involves an outreach effort to educate physicians and hospitals. ¹¹⁶ In addition, during administrative hearings, attorneys for NICA now routinely question key hospital administrators regarding the existence of established processes for facilitating notice. ¹¹⁷

D. Use of "Presumptions" in Determining Eligibility

The enabling statutes of both programs introduce certain presumptions into the process of determining eligibility. These presumptions are intended to operate chiefly for the benefit of claimants, and are particularly important to interpretation of the medical criteria because of the difficulties of proof that arise in relation to the birthing process. ¹¹⁸

The most important of the presumptions is the one related to causation. Once invoked, it shifts the burden of production, as well as the burden of persuasion, to the program to show that the eligibility criteria related to causation are not met. ¹¹⁹ Failure to rebut the presumption means acceptance into the programs. In Virginia, the presumption is stated as follows:

All Children's Hosp., Inc. v. Dep't of Admin. Hearings, 989 So. 2d 2, 3 (Fla. Dist. Ct. App. 2008).

¹¹⁵ Schur v. Fla. Birth-Related Neurological Injury Comp. Ass'n, 832 So. 2d 188, 192 (Fla. Dist. Ct. App. 2002).

FLA. OBSTETRIC & GYNECOLOGICAL SOC'Y PRESIDENT'S TASK FORCE, *supra* note 98, at 5-6, 8; *see* OPPAGA, *supra* note 41, at 6 n. 22.

patients with NICA brochure); Galen of Fla., Inc. v. Braniff, 696 So.2d 308, 310, 314 (Fla. 1997) (requiring that patient routinely receive notice of plan in "reasonable time prior to delivery" and that such notice "shall be provided on forms furnished by the association and shall include clear and concise explanation of a patient's rights"); Weeks v. Florida Birth-Related Neurological, 977 So.2d 616, 619 (2008) (requiring hospitals give notice to patients "in sufficient time to make a meaningful choice"). See generally OPPAGA, supra note 41.

[&]quot;Because of the 'difficulty in proving when such an injury was sustained' and the equally difficult task of proving, prospectively, that the infant will permanently need assistance in all activities of daily living, 'the legislature enacted a presumption to assist potential claimants in obtaining benefits." Cent. Va. Obstetrics & Gynecology Assocs, P.C. v. Whitefield, 590 S.E.2d 631, 636, n.6 (Va. Ct. App. 2004) (citing Coffey *ex rel.* Coffey v. Va. Birth-Related Neurological Injury Comp. Program, 558 S.E.2d 563, 568 (Va. Ct. App. 2002)).

Va. Birth-Related Neurological Injury Comp. Program v. Young, 541 S.E.2d 298, 301 (Va. Ct. App. 2001) (finding that "[t]he purpose of Code § 38.2-5008(A) is to implement a social policy of providing compensation to families whose neonates suffer birth-related neurological injuries. To give full effect to this policy, the presumption must be clothed with a force consistent with the underlying legislative intent Therefore, the presumption set forth in Code § 38.2-5008(A) shifts to the Program both the burden of production and the burden of persuasion on the issue of causation.").

A rebuttable presumption shall arise that the injury alleged is a birth-related neurological injury where it has been demonstrated, to the satisfaction of the Virginia Workers' Compensation Commission, that the infant has sustained a brain or spinal cord injury caused by oxygen deprivation or mechanical injury, and that the infant was thereby rendered permanently motorically disabled and (i) developmentally disabled or (ii) for infants sufficiently developed to be cognitively evaluated, cognitively disabled. 120

Once the applicant establishes the presumption that the injury is birth-related by proving the required elements (site of injury, severity, and causation in respect to oxygen deprivation), he need not prove that it occurred during labor as a result of care processes. The programs, on the other hand, must prove either that the injury did not occur in the course of labor, delivery or resuscitation in a hospital, or that there was a specific, non-birth-related cause of the injury;¹²¹ or, in Virginia, that the infant's disability did not create the permanent need for assistance in all activities of daily life.¹²² Courts have ruled that the party seeking to invoke the presumption must persuade the factfinder, not merely raise the plausibility of the proffered fact to a sufficient degree that a factfinder *could* be persuaded.¹²³ It should be noted that both sides, the claimants and the program, may take advantage of the presumption: the claimant, when attempting to gain access (the majority of cases), and the program, when seeking to prevent the claimant from evading the program's jurisdiction.¹²⁴

A second presumption relating to fetal distress, an essential element of birth-related injury, was added in Virginia in 2003. A presumption of fetal distress arises if the hospital fails to provide the fetal heart monitor tape to the claimant. The Virginia courts have created a similar presumption in situations where information on cord blood gases is missing. A final

VA. Code Ann. § 38.2-5008 (2007 & Supp. 2008). In short, the elements to be proved are (1) injury to brain or spinal cord (2) caused by oxygen deprivation or mechanical injury (3) leading to catastrophic physical impariment. The Florida wording is very similar: "If the claimant has demonstrated, to the satisfaction of the administrative law judge, that the infant has sustained a brain or spinal cord injury caused by oxygen deprivation or mechanical injury and that the infant was thereby rendered permanently and substantially mentally and physically impaired, a rebuttable presumption shall arise that the injury is a birth-related neurological injury." Fla. Stat. § 766.309 (2005).

¹²¹ Coffey, 558 S.E.2d at 569.

Wolfe v. Va. Birth-Related Neurological Injury Comp. Program, 580 S.E.2d 467, 473 (Va. Ct. App. 2003).

¹²³ See Coffey, 558 S.E.2d at 563; Whitefield, 590 S.E.2d 631, 636, n.6.

Whitefield, 590 S.E.2d at 636, n.6.

¹²⁵ Va. Code Ann. § 38.2-5008(A)(1)(b) (2007 & Supp. 2008).

¹²⁶ See Wolfe, 580 S.E.2d 467 at 580. Another presumption that several of our informants in Virginia suggested should be added to the decision-making process relates to premature babies. Currently, BIP excludes them outright. The rationale is that there are too many competing causes of serious neurological injury in this subpopulation, most of which are far more likely than perinatal management to have caused the impairment. Several informants accepted this clinical fact, but argued that such infants should nonetheless be candidates for compensation, provided that claimants carried the burden of burden of proof for all of the prescribed criteria statutory eligibility. Interview with informants (anonymous), in Charlottesville, Va. (Dec. 7, 2005) (on file with authors).

presumption, in use in Florida, relates to the procedural criteria. In Florida, a patient's signature acknowledging receipt of the notice form regarding a physician's participation in NICA raises a rebuttable presumption that NICA's notice requirements have been met.¹²⁷

Overall, the presumptions appeared to be a highly useful tool in operationalizing the eligibility criteria in both programs. Informants in Virginia and Florida regarded them as a positive influence on the compensation process, augmenting transparency and coherence, and narrowing points of contention. Some informants suggested that non-rebuttable presumptions would have even greater utility by foreclosing avenues of legal challenge.

E. EXPANDING ELIGIBILITY

Interview informants repeatedly raised the issue of expanding the programs to include injuries outside those covered by the current eligibility criteria. Because complexities in the adjudication process center on causation, one way to sidestep much of the time and effort associated with determining eligibility would be to predicate compensation solely on outcomes. Under this alternative, infants with very severe neurological conditions would receive compensation, regardless of causation. Such an expansion would be quite radical, essentially turning the programs into targeted social insurance programs. Nonetheless, proponents highlighted the inherent fairness and administrative advantages of an outcomes-based approach. Some regarded the existing requirement that claimants prove causation as onerous and felt that it worked to the advantage of privileged claimants who, by obtaining expensive representation, could build a stronger case. Others simply found the idea of a program that cared for all who were in need of essential benefits morally appealing.

Another suggestion for expansion discussed by informants related to premature babies. In Florida, informants suggested lowering the minimum birth weight for eligibility from 2500 to 2000 grams. They felt that such a change would benefit a greater number of deserving infants, while still excluding most infants whose injuries were more likely to have stemmed from causes other than the birthing process—most notably, prematurity. Informants in Florida who opposed this idea stated that injuries to premature

Shoulder dystocia and Erb's palsy could also be folded into the covered outcomes were this approach adopted. Interview with informants (anonymous), in Richmond, Va. (Dec. 5, 2005) (on file with authors). Shoulder dystocia occurs when the infant's anterior shoulder cannot pass below the mother's pubic symphysis and the remainder of the body fails to deliver. *Id.* Erb's palsy is the paralysis of a group of muscles of the shoulder and upper arm, commonly caused by difficult childbirth. These injuries can be serious, but vary in their severity. *Id.* They frequently show up in malpractice claims, but one interviewee commented that "you just can't win these cases in court." *Id.* Informants who advocated expanding program coverage to these injuries stressed the attractiveness of being able to care for children who have difficulty obtaining compensation in tort, but others cautioned that covering these injuries would be fiscally feasible only if a fixed compensation amount was agreed upon and a re-evaluation of the patient's condition was conducted at later dates to assess actual disability on an ongoing basis. *Id.* Otherwise, this expansion would likely result in the overcompensation of a large number of claimants and the failure to adequately compensate a small number of severely injured claimants. *Id.*

²⁷ See Fla. Stat. § 766.316 (2007).

babies are not likely to be related to the care the infants received, and the programs' explicit intent was to extract from the tort system only those cases that were very likely to result in an award to the plaintiff.

Despite qualified enthusiasm for expansion among many of the informants, nearly all were cautious about change. Some noted that the political debate any such reform proposal might initiate could actually lead to contractions of the programs, given the trial bar's ongoing opposition and considerable political clout. The budgetary uncertainties introduced by any change in the eligible pool would also be unwelcome. ¹²⁹ In addition, informants pointed out that any proposed expansions would be considered against the programs' clear statutory objective: to limit the cost and destabilizing influence of high-cost "bad babies" cases in the tort system. The schemes were not built on social insurance foundations. Finally, expansions may confront constitutional challenges, which would require the state to again demonstrate an overwhelming public necessity and resulting social benefit as a justification for abrogating patients' right of access to courts.¹³⁰

Respondents expressed similar thoughts and concerns when asked whether they supported expanding the programs beyond birth-related injuries to include other injuries related to medical care. Their concerns were primarily practical in nature rather than principled objections to the idea. Many felt the complexity of the system would make it a difficult political sell. They also suspected there would be public concern about the extent to which deterrence and accountability for patient safety would be achieved without tort oversight, and about the extent to which the existing programs had been able to police substandard physicians. There were also concerns about where the needed funds could be found. Finally, a nationwide system would have to cope with the wide variation in the kinds of tort reforms that states

¹²⁹ The OPPAGA report notes:

To improve the program's ability to meet its statutory goals, NICA's eligibility requirements could be expanded. For example, the current birth weight requirement could be reduced from 2,500 to 2,000 grams, the requirement of mental and physical impairment could be changed to mental or physical impairment, and brachial plexus injuries could be covered. However, these options would increase annual costs between \$9.5 million and \$130.8 million. Expanding eligibility would require significant increases in hospital and participant fees and may require casualty insurers and exempt hospitals to begin contributing funds to the program.

OPPAGA, supra note 41, at 1.

See Kluger v. White, 281 So. 2d 1, 3 (Fla. 1973); Univ. of Miami v. Echarte, 618 So. 2d 189, 191 (Fla. 1993). See also Fla. Birth-Related Neurological Injury Comp. Ass'n v. Division of Admin. Hearings, 686 So. 2d 1349, 1355 (Fla. 1997) (stating that since NICA is a statutory substitute for common-law rights and liabilities, it should be strictly construed to include only those subjects clearly embraced within its terms and the legislature's explicit intent); Meador v. Va. Birth-Related Neurological Injury Comp. Program, 604 S.E.2d 88 (Va. Ct. App. 2004) (same).

For example, Va. Code Ann. § 38.2-5004 (2007 & Supp. 2008) directs the Board of Medicine and the Department of Health to review all birth injury petitions submitted to the WCC and assess whether the physician(s) involved in the birth provided substandard care that should give rise to disciplinary action. Respondents reported that in reality, however, only minimal investigations are carried out, and in most cases, the agencies read the petitions but take no further action. Some non-medical informants felt that programs fail to hold physicians accountable for their negligence. Interview with informants (anonymous), in Charlottesville, Va. (Dec. 8, 2005) & Richmond, Va. (Dec. 7, 2005) (on file with authors).

have already adopted. Most respondents favored adoption of additional small, carve-out programs to remove other kinds of burdensome litigation from the tort system, rather than broad-scale reform.

V. FINDINGS: ORGANIZATIONAL CHALLENGES

The previous section outlined a number of practical and technical issues the programs have confronted in applying the eligibility criteria that sit at the heart of their enterprise. These issues arise in an organizational context. Structural features of any compensation scheme have an important bearing on the effectiveness and efficiency of decision making within that scheme. This section considers a mix of organizational challenges that the programs have encountered, and how they have dealt with them. These challenges relate to defining suitable decision makers, organizing medical expert reviews, the use or nonuse of preliminary screening of claim applications, and the role of attorneys in the claim process. Again, our primary reference point in discussing these challenges consists of the information and opinions conveyed in the key informant interviews.

A. Decision Makers

At every step of the claim process in the Florida and Virginia schemes, reviewers are needed to ascertain entitlement to compensation. As we have discussed, the etiology of birth injuries and the controversies around the meaning of the eligibility criteria make these assessments highly complex in many cases, often demanding considerable scientific and medical knowledge as well as skill in legal interpretation. Thus, identifying adequately qualified decision makers is pivotal to the success of the scheme.

Both programs have grappled with the question of what qualifications decision makers should have. Should adjudicators have medical training? Should they be jurists? Laypersons? Should the caregiver community or the insurance industry be represented among the adjudicators? There are also larger questions about the extent to which adjudicators should exercise discretion or adhere to precedent or decision guidelines, and whether the schemes should rely on existing adjudicatory mechanisms (such as the Workers' Compensation Commission) or establish new, dedicated mechanisms to evaluate birth injury claims.

In both Florida and Virginia, the legislature opted to vest decision-making authority in nonmedical entities. In Florida, the WCC was originally charged with adjudicating these claims, but after a short while, authority was transferred to the Division of Administrative Hearings. Today, decisions are rendered by an administrative law judge who decides only NICA cases. In Virginia, the BIP caseload was added to the WCC's charter and has stayed there. A 2002 report by the state Joint Legislative Audit and Review

¹³² See Troyen A. Brennan, Helping Courts with Toxic Torts: Some Proposals Regarding Alternative Methods for Presenting and Assessing Scientific Evidence in Common Law Courts, 51 U. Pitt. L. Rev. 1, 63 (1989); Mello et al., supra note 12, at 470.

¹³³ See Common Good, supra note 21.

¹³⁴ Id.

¹³⁵ See JLARC, supra note 40, at 7-8.

Commission ("JLARC") opined that this venue is adequate and should continue hearing these cases. ¹³⁶ Reversals of WCC decisions have been rare. ¹³⁷

However, we heard a fair degree of skepticism from some informants in Virginia about how well this arrangement has worked. Although WCC deputy commissioners, who make the first tier of eligibility decisions, are experienced jurists in the field of workers' compensation, members of the full WCC committee are political nominees, not necessarily jurists, and rarely are medical professionals. Many of our informants complained that the commissioners had no relevant qualifications in evaluating complicated perinatal clinical information, received no training, and had little in the way of guidelines or instructions to aid them. They further objected to an administrative decision in recent years to allow *all* WCC deputy commissioners to review cases, rather than routing cases to a specially dedicated deputy commissioner. Informants felt that this change had reduced consistency in decision making and impeded the accumulation of knowledge and expertise.

Workers' compensation claims are the main fare of WCC deputy commissioners, and there are considerable differences in the nature of medico-legal matters raised in birth injury cases. Worker injuries are usually relatively simple to identify, causation is typically straightforward, and the current injury and its future prognosis are relatively predictable. There is a considerable written body of knowledge defining the causes and consequences of occupational injury. Adjudicators of birth injuries enjoy none of these advantages.

In both states, the adjudicators seek medical expert input. These inputs are essentially recommendations, and they are not binding on the decision maker, although in reality they are often very persuasive, even outcome determinative, especially in Florida.¹³⁹ Informants in Florida attributed this deference to the expert opinions to a longstanding working relationship that had resulted in substantial trust in the experts. There is a lesser degree of deference to the experts' recommendations in Virginia.¹⁴⁰

The medical experts we interviewed in Virginia felt that allowing the WCC to disregard expert panels' learned opinions was unreasonable and supported the creation of a dedicated adjudication panel of physicians and attorneys, whose rulings would be final. "At my level of knowledge and expertise," one expert stated, "no out-of-town expert should be regarded as superior, and the same applies to the WCC overruling our decisions." Another said, "It should be like a jury—if a jury decides a person is innocent, you don't just take another jury to find the opposite." They pointed to Florida's decision-making system as an example that should be followed, suggesting that the use of dedicated, repeat decision makers allowed for more sophisticated consideration of medical recommendations.

¹³⁶ *Id.* at 76-77.

¹³⁷ *Id.* at 80.

¹³⁸ *Id.* at 90.

¹³⁹ See Kenney Shipley, Executive Director, Neurological Injury Compensation Association, NICA: An Alternative That Works For OBGYN, http://www.flobgyn.org/se/2110.php.

over thirty percent of medical panels' recommendations are rejected by the WCC. JLARC, *supra* note 40, at 79.

B. MEDICAL EXPERTS

Composition of Expert Panels

Medical opinion in the Virginia scheme is rendered by one of three expert panels composed of professors from the state's three leading universities. The experts are appointed by the deans of the three medical schools, who in practice delegate this authority to the chairs of their respective departments of obstetrics and gynecology.

The composition of the expert panels in Virginia has been the subject of The BIP statute originally did not specify the required professional qualifications of experts. Each panel historically has been composed of three obstetrician-gynecologists from these universities who specialize in high-risk obstetrics. Most of our informants in Virginia, except for the expert panelists, criticized the program's failure to include a pediatric neurologist on each of the three panels.142 They noted that the eligibility criteria that panels must grapple with require expert knowledge in pediatric neurology-for example, assessing effects of oxygen deprivation and estimating the likely future needs for assistance in daily life activities resulting from severe neurologic injuries. Courts have recognized the superior credibility of pediatric and neurologic experts' opinions over those of obstetrician-gynecologists in birth injury cases. 143 Some informants suggested that the enabling statutes in both states should explicitly name the specialties to be represented on the panels.

In March 2008, the Virginia legislature adopted this position by passing a statutory amendment stating that panel experts may be drawn from the fields of obstetrics, pediatrics, pediatric neurology, neonatology, physical medicine and rehabilitation, or any other specialty appropriate to the facts of a particular case. 144 It further stipulated that no panel could contain more than one obstetrician, effectively ensuring representation of a more diverse range of specialties. 145

The selected experts in Virginia contribute their time as part of their professorial work—until recently, without any compensation from BIP. 146

 $^{^{141}}$ $\it{Id.}$ at 78; \it{see} \it{also} Welcome to the VA Birth Injury Program, http://www.vabirthinjury.com/Eligibility_Benefits.htm (last visited Nov. 4, 2008).

The obstetrician-gynecologists who served as experts in both programs are maternal-fetal medicine specialists with expertise in high-risk obstetrics. JLARC, *supra* note 40, at 83. The experts believed that they had sufficient medical knowledge to evaluate the medical reports and opinions, including those of pediatric neurologists and developmental experts, that routinely accompany claim files. *Id.* at 83-84.

See, e.g., Commonwealth v. Bakke, 620 S.E.2d 107, 112 (Va. Ct. App. 2005) ("Of the physicians who have offered expert opinions in this case, we conclude that Drs. Hermansen and Latimer are the most qualified to evaluate the timing of the injury causing [the infant's] cerebral palsy. Dr. Hermansen is a pediatrician who specializes in neonatology and Dr. Latimer is a neurologist specializing in treating children. In contrast, Drs. Christmas, VanDorsten and the members of the [medical panel] are obstetricians, gynecologists and specialists in maternal-fetal medicine who, although involved in high-risk pregnancies involving mothers and fetuses, do not regularly treat infants after their birth.").

¹⁴⁴ H.B.1305, 2008 Sess. (Va. 2008).

¹⁴⁵ Id

 $^{^{146}}$ $\,$ See JLARC, supra note 40, at 86. As of March 2008, BIP pays \$3,000 to the expert's institution for each review completed. Id.

One expert informant believed that the lack of compensation and voluntary nature of expert service had had implications for the kinds of opinions the panels rendered: "The result is that we deliver our opinions in a more succinct manner, which is unjustly interpreted by the WCC as lacking the same clout as claimants' experts' testimonies, which are paid by the length. Fairness dictates fair and equal compensation to experts on both sides."

In Florida, the administrative law judge receives recommendations from two experts, one obstetrician-gynecologist specializing in high-risk obstetrics and one pediatric neurologist. Florida recently modified its expert roster to include a second pediatric neurologist who provides both initial evaluations and second opinions. The experts are appointed and paid by NICA. These experts have a long tenure with NICA: the primary pediatric neurologist has been employed since the program's inception, and there have only been two consulting obstetrician-gynecologists during that time. Informants indicated that one reason for the longstanding reliance on these experts is the difficulty of finding alternatives; few physicians have the right expertise and are willing to review NICA cases.

This narrow pool of advisors has its advantages. Advisors have a very high level of relevant expertise; an institutional memory has developed that allows decisions to inform one another; and NICA staff know these reviewers very well. However, a narrow pool also has drawbacks. In particular, solo reviews preclude whatever benefits expert opinions may gain from peer-to-peer discussions. Informants stated that NICA does consult more broadly when specific clinical questions arise beyond the expertise of their stable of usual reviewers, but this is more an extension of the solo advice model than a departure from it.

2. Conflicts of Interest

One point of controversy among interview respondents was whether expert panelists in the two programs should be barred from serving as an expert witness in newborn injury malpractice litigation (and vice versa). One informant thought such a restriction necessary in order to guarantee unbiased decisions within the program. Otherwise, he felt, decision making within the program could be consciously or unconsciously shaped by decisions and testimony in past tort cases or the prospect of future pecuniary gain from serving as a hired expert in litigation. Other experts did not share this view.

A related conflict-of-interest concern is the possibility that expert reviewers might have a personal relationship with the physician involved in the petitioner's claim. In small communities with few obstetrician-gynecologists, it is possible, if not likely, that reviewers will know the involved physician. Some informants were concerned that an expert reviewer's personal acquaintance with the physician might jeopardize his or her impartiality as a reviewer. Many thought that a close relationship would be prohibitive. Informant opinion was less clear, however, about whether simply knowing a particular physician would trigger recusal. Toeing such a line

See Shipley, supra note 139.

 $^{^{148}}$ $\,$ Florida Obstetric and Gynecological Society President's Task Force, supra note 98, at 5.

could worsen problems of expert availability. Moreover, one informant suggested that the programs' eschewal of negligence findings changes the dynamic in this regard, making it more like peer-review or quality-assurance activities within a hospital.

3. Single versus Multiple Experts

The Virginia and Florida schemes have reached different conclusions about whether medical expert opinions should be rendered by a panel of physicians acting together or by experts who opine independently of one another. Virginia uses a committee of three obstetricians who reach an opinion through mutual consultation, while Florida employs two physicians from different clinical specialties who act independently, their opinions representing the perspective of their respective fields of expertise.

NICA officials cited several reasons for NICA's decision to use independent experts rather than a panel: lower costs, more rapid decision making, simplified coordination, greater consistency, and greater possibilities for the physicians to accumulate expertise. Consistency—and therefore predictability—of decisions was characterized as important not only in the interest of equitable decision making across like cases, but also for actuarial planning and sound fiscal management of the scheme. The accumulation of expertise was thought to arise from NICA's use of a small number of key experts who are repeat players over a long period of time. Although this strategy promotes consistency throughout each expert's service, it poses challenges when experts are eventually replaced because there is no institutional memory, as there would be if just one of several experts on a consensus panel was replaced. Florida informants felt that the expertise could be taught by the outgoing experts, though admittedly, no such process had been instituted.

One argument in favor of Virginia's consensus-decision approach revolves around the complexities of the decisions. Deliberations and debate among a group of experts each of whom contributes his or her own perspective and expertise would appear to be a useful way to address complex clinical issues. As mentioned above, the use of a panel is also advantageous in ensuring transfer of knowledge and consistency of decision making when individual experts transfer out of and into the program. Overall, panel decision making seems the more attractive approach, particularly if the experts do indeed bring different clinical expertise to the table.

4. Training

Both the Florida and Virginia schemes faced challenges with respect to training participating experts. Neither program has a structured, formal training program for experts or adjudicators. This seems at odds with the complexities involved, which are legal as well as clinical. For example, the statutory definitions of eligibility have changed more than once, and experts have interpreted these complex provisions differently over time. ¹⁵⁰

But see, id.

¹⁵⁰ JLARC, *supra* note 40, at 69-81.

One informant stated that his predecessor at NICA had facilitated an informal coaching process, consisting of reviewing simple cases and debating them with the coach and NICA personnel. Others experts were self-educated. As one expert put it, "They just handed me a copy of the law and a claim.". Experts generally seemed to have encountered difficulty, at least initially, in comprehending legal language, applying legal terms to their medical knowledge, and divining legislative intent in order to facilitate their interpretations of the statutory eligibility criteria. All informants felt that new experts and adjudicators would greatly benefit from more structured mechanisms of knowledge transfer from outgoing personnel.

5. Use of Guidelines, Precedent, and Exchanges of Information

There is perhaps no more systematic way to pass along experience from past adjudications to future ones than through the use of guidelines and decision aids. Somewhat surprisingly, however, given the emphasis that informants put on consistent decision making and adequate training, neither program used formal decision aids. The programs do not, for example, furnish their medical experts with evolving judicial and WCC interpretations of the medical eligibility criteria such as "permanent and substantial" impairment. Virginia informants explained that the WCC prefers to have unbounded discretion to adjudicate cases on their specific merits without being constrained by fixed algorithms or guidelines.

Proponents of more structured decision-making processes felt that such processes would present an opportunity to promote transparency, predictability, and efficiency in the eligibility determination process. ¹⁵¹ The use of guidelines has the potential to simplify the process of eligibility determination, allowing for prescreening and expedited acceptance in clear-cut cases. Moreover, convergence toward guidelines and uniformity in clinical decision making is regarded as an important evolutionary step in high-quality medical care. ¹⁵² However, a hesitance to routinize decision-making pathways has also been observed in administrative compensation systems abroad. ¹⁵³

Herein lies a classic tension between legal and medical paradigms. Despite the perceived medical advantages of guided clinical decision making, a mentality of *de novo* review dominates because the birth injury programs are essentially structures making legal decisions (albeit informed heavily by clinical expertise). Indeed, it may even extend to stamp out attempts at standardization in the medical strands of the decision-making process. In Virginia, for example, an attempt by the chairs of the expert panels to introduce a template for reviewing cases was, in part, directed at promoting knowledge accumulation of consistency across cases and panels; the plan was rejected by the WCC. ¹⁵⁴

 $^{^{151}\,}$ The JLARC opined similarly: "The medical panels should develop a review form, in consultation with the Workers' Compensation Commission, that addresses each aspect of the eligibility definition. This form should be completed by the panels in each case they review for the Workers' Compensation Commission." Id. at 83.

¹⁵² See Mark R. Chassin, Is Healthcare Ready for Six Sigma Quality?, 76 MILBANK Q. 565, 582 (1998).

¹⁵³ See Kachalia et al., supra note 19.

 $^{^{154}}$ See JLARC, supra note 40, at 83.

The JLARC review of Virginia's program concluded that inadequate information-sharing negatively affected the decision-making process. It recommended that the legislature consider requiring the WCC to meet with medical expert panels annually "to discuss the eligibility process and any improvements that may be needed" and also that the WCC provide copies of all case opinions to the expert panel members. However, no changes have been instituted. There are still few or no channels of communication among experts or between experts and the WCC. The result is a *de facto* isolation of the experts from their peers and from the initial adjudicators and the courts. This isolation precludes a learning process through which experts could come to understand how the courts and adjudicators interpret the eligibility criteria. Such a process might reduce variability in recommendations across experts, improve fidelity to legislative intent, and reduce the rate of overturn of expert recommendations by the adjudicators.

There also is little information exchange between the Florida program and the Virginia program. This is a somewhat surprising fact considering the similarities in their heritage, design, and geographical proximity. The courts have peered across jurisdictions on occasions. The heads of the programs know one another, but no formal channels of communication or cross-learning are in place.

There is a further disconnect between the programs and their respective communities of practicing obstetricians and neonatologists. Deterrence and creation of incentives for patient safety are not founding objectives of administrative compensation programs—indeed, administrative schemes are often criticized for diminishing such incentives—but there is little diffusion of information about how the birth injury schemes interpret the statutory eligibility criteria. ¹⁵⁸ As a consequence, the physicians who deliver and care for infants do not know how to document adverse birth outcomes in a way that facilitates informed decision making by the programs. The case reviewers rely heavily on the claimant's medical records to understand what happened and whether the infant meets the eligibility criteria, but the physicians who create these records may use key terms differently from the program administrators. For example, informants reported that treating physicians

¹⁵⁵ *Id.* at 82-83.

BIP actually predated NICA, and in its November 6, 1987 report, the Florida "Task Force recommended adoption of a no-fault compensation plan for birth-related neurological injuries similar to the then-newly-enacted Virginia plan (1987 Va. Acts Ch. 540)." Galen of Fla., Inc. v. Braniff, 696 So.2d 308, 310 (Fla. 1997) (citing Academic Task Force for Review of the Insurance and Tort Systems, Medical Malpractice Recommendations 31 (1987)).

¹⁵⁷ In a 2003 case, for example, a Florida Court of Appeal noted that the Florida birth injury program was intended to have been similar to the preexisting program in Virginia. It then cited a Virginia appellate court's interpretation of a provision in the Birth-Related Neurological Injury Compensation Act and noted that "[o]ur analysis in this case appears consistent with the Virginia court." Romine v. Fla., 842 So.2d 148, 155 (Fla. Dist. Ct. App. 2003) (citing Berner v. Mills, 560 S.E.2d 925, 925 (2002)). We find this exchange encouraging, and the potential for state-to-state migration of administrative compensation programs as an appealing concept.

¹⁵⁸ See JLARC, supra note 40, at 74.

use the term "asphyxia" too broadly, without an appreciation for its legal ramifications and clinical ambiguities. 159

Many informants felt that the programs' outreach responsibilities went even farther, arguing that they should transfer knowledge and lessons learned to the community of caregivers of infants with neurologic injuries. The expertise that the programs have accumulated in managing and coordinating the care of such infants, informants felt, would be quite valuable to parents and others trying to navigate a fragmented system of health care and social services. Information about care costs and needs of children with birth-related neurological injuries could also be useful to juries making damages determinations in tort cases. Finally, it was felt that greater transparency about injured infants' prospects for obtaining compensation through the tort system would be useful to parents weighing their options.

C. Decision Processes

Use of Preliminary Screening and Expedited Decision Making

A key procedural question that both programs face is whether to increase preliminary screening of claims prior to submitting them to medical experts for review. Expert review is time-consuming and has a tangible price tag. In theory, routing at least some claims through a screening or expedited-review process could save time and money.

In days past, BIP did accept many claims without a full review and hearing. However, the JLARC review criticized this practice, emphasizing that "to ensure that the fund is protected from inappropriate claims, the medical panel review process should be strengthened and used for every case." Many of our interview informants in Virginia felt that this eliminated a valuable opportunity to employ expedited review when no real contention exists about the eligibility of the claim, and that full review in such cases unnecessarily prolonged the process for families and created avoidable work for the program.

NICA currently prescreens claims.¹⁶¹ For the last three years, NICA's Claims Supervisor, who is trained as a neonatal intensive care unit nurse, performs the preliminary screening.¹⁶² The purpose of the screening is to formulate an early opinion on the case in order to estimate NICA's actuarial risk and to ensure that the program allocates an appropriate insurance reserve to the case. The screen also serves as an early warning that the petitioner may be trying to escape NICA, an inference that the screener draws when the petition raises the issue of inadequate notice of rights. This determination is

For a discussion of some of these ambiguities, see generally George P. Giacoia, Low Apgar Scores and Birth Asphyxia: Misconceptions That Promote Undeserved Negligence Suits, 84 Postgraduate Med. 77 (1988); Steven R. Leuthner & Utpala G. Das, Low Apgar Scores and the Definition of Birth Asphyxia, 51 Pediatric Clinics North Am. 737 (2004); Jeffrey M. Perlman, Intrapartum Hypoxic-Ischemic Cerebral Injury and Subsequent Cerebral Palsy: Medicolegal Issues, 99 Pediatrics 851 (1997).

¹⁶⁰ JLARC, *supra* note 40, at 80.

⁶¹ FLA. STAT. §766.106(2) (2007).

 $^{^{162}}$ Id.

useful to the program because in such cases, it reserves additional funds for potential legal fees.

The screener also performs basic eligibility checks, rejecting cases that clearly fall outside the coverage of NICA because the child is older than five years, the infant's weight at the time of labor was less than 2,500 grams, or the delivering physician and hospital were not NICA participants. In cases that do meet these thresholds eligibility criteria, she reviews the medical records to search for key measures and circumstances during and after the delivery or later in life that may bear on the medical eligibility criteria, including Apgar score, umbilical cord pH, length of hospitalization in the neonatal intensive care unit, and time spent on a ventilator. She then writes a short opinion, which is examined by NICA's director and, subsequently, the medical experts. ¹⁶³

A review of two years of claims suggests that the prescreener's report is highly predictive of the ultimate outcome of claims.¹⁶⁴ At the time of our interviews, the screener had reviewed fifty-one claims since June 20, 2003, twenty-eight of which had reached final disposition by the administrative law judge (three had been voluntarily dismissed by the petitioner and the remainder were still open). In twenty-six of these twenty-eight cases (93%), the screener's opinion matched the opinion of both the experts and the judge. Further, in all fourteen cases that had been reviewed by the experts but had not yet reached the judge, the prescreener's opinion matched the experts' opinion. The high rate of agreement suggests either that the experts and judge afford considerable deference to the initial judgments made during prescreening, or that the screener is quite adept at predicting how cases will be resolved. Either way, it suggests that the additional layers of review primarily serve a validating function for the preliminary decision made in each case. Given the time and expense involved in full review, there seems to be potential for earlier termination of cases—at least the relatively clear-cut decisions—without significant loss of accuracy in the system.

Clearly, though, some determinations should continue to rest with medical and legal experts further downstream. In Florida, for instance, judges have more experience determining whether adequate notice was given than medical reviewers. In both states, adjudication of cases of injury to preterm infants is highly complex and requires thorough review by medical experts. The most desirable course seems to be the use of prescreening to rapidly identify claims that are suitable for an expedited eligibility decision because they involve no complicated or controversial clinical or legal issues.

2. Legal Representation and Adversarialism

Informants perceived trends toward increased adversarialism in the Florida and Virginia programs, which raises the question of the extent to which representation of claimants by attorneys is a desirable feature of administrative compensation programs for medical injury. The programs were designed to allow families to claim without the hassle and expense of

¹⁶³ See generally Fla. Stat. §766.106 (2007); Fla. Stat. §766.315 (2007).

 $^{^{164}}$ $\,$ Interview with informants (anonymous), in Tallahassee, Fla. (Aug. 4, 2005) (on file with authors).

obtaining legal representation if they wished, but in many cases, families reasonably conclude that such representation will improve their chances of receiving compensation. This may lead to greater procedural justice in the schemes, but has had implications for the speed and tenor of the claim adjudication process.

Virginia informants unanimously perceived that attorney involvement has caused the claim process there to become much more adversarial, leading to higher legal expenses, longer waits until disposition, and consequently, delays in getting coverage to eligible families. They reported that attorneys increasingly were investing considerable resources (up to \$30,000) to obtain opinions from out-of-state experts. Occasionally, this happens even in cases in which BIP has already decided to accept the child. Interviewees from BIP objected that although such moves were consistent with attorneys' obligations to vigorously represent their clients and were not ethically inappropriate, these adversarial "tactics" made it difficult for the program to adhere its framers' intent that WCC commissioners make eligibility decisions based on the preponderance of the evidence provided by the expert panel. Occasional of the evidence provided by the expert panel.

Although informants acknowledged that legal representation improved claimants' prospects at the WCC hearings, noting that the expensive lawyers had a higher success rate in getting infants accepted into the program, BIP informants described the resulting battle of the experts as having made the process less fair. The perceived injustice lay in the informants' notion that those claimants who can afford expensive representation and expert testimony have a higher chance of prevailing than those who cannot. ¹⁶⁸

Overall, there was a sense of ambivalence among Virginia informants about the evolving adversarialism in the system. On the one hand, the legislature intended to create a process that would be faster, more efficient, and involve fewer unnecessary legal expenses than the tort system. On the other hand, additional information from multiple experts and skilled legal representation in many cases allowed the non-medically-trained decision makers to understand the medical and legal issues better.

Adversarialism also was perceived to create problems in the long-term relationships between families accepted into BIP and program administrators. If the program initially opposes a claim but the family is ultimately accepted

 $^{^{165}}$ For an example of a hotly disputed case, see $\it In~re$ Katie Taylor, VWC File No. B-05-03 (Va. Worker's Comp. Comm'n 2005) (involving disputes over evidentiary rules and discovery).

¹⁶⁶ See, e.g., In re Elijah David Johnson, VWC File No. B-04-03 (Va. Worker's Comp. Comm'n May 17, 2005) (unpublished opinion).

The preponderance standard is described in Cent. Va. Obstetrics & Gynecology Assocs, P.C. v. Whitefield, 590 S.E.2d 631, 639 (Va. Ct. App. 2004), and Coffey ex rel. Coffey v. Va. Birth-Related Neurological Injury Comp. Program, 558 S.E.2d 563, 567-68 (Va. Ct. App. 2002).

This is, of course, a critique that applies to many areas of the U.S. legal system. It is noteworthy that BIP does reimburse claimants' "reasonable legal expenses," but our informants reported that the reimbursement is usually less than the amount spent and that it does not help those who may cannot afford to front the funds initially (or find an attorney willing to accept delayed and contingent payment), nor is this reimbursement available to those who are ultimately rejected by BIP. *See JLARC, supra* note 40, at 88. *See also* interview with informants (anonymous), in Richmond, Va. (Dec. 8, 2005) & Charlottesville, Va. (Dec. 7, 2005) (on file with authors).

after a hard-fought battle, hard feelings may linger, hampering constructive collaboration to provide for the child's ongoing care needs.

In Florida, informants reported that a majority of petitioners are represented by lawyers during hearings, but petitioners are using independent medical expert opinions less frequently than they did in the past. Informants suggested that this trend has occurred because NICA's positions on medical issues have been so consistently accepted by the ALJ that petitioners' counsel expect contrasting or opposing expert opinions to have little impact on outcomes. In addition, a critical distinction between Virginia and Florida is that the role of attorneys in Florida is not usually to establish the infant's eligibility for acceptance into the birth injury program, but rather to show that the infant is entitled to get out of NICA and pursue compensation in tort. Medical expert opinion may be relevant to such claims, but often is not, because the argument is about the adequacy of notice rather than the satisfaction of clinical criteria.

In summary, both programs illustrate the challenges of keeping administrative compensation schemes for medical injury from importing the lumbering pace, high costs, and adversarial nature of their tort ancestor. The benefits of legal representation for claimants, particularly in complex cases, must be balanced against the financial burden, the time costs, and the potential to put claimants and program administrators in opposition to one another.

VI. LESSONS LEARNED

Close review of the practical tasks associated with distinguishing compensable from noncompensable events in BIP and NICA highlights several key objectives for an administrative compensation scheme of this kind. The scheme should have:

- good sensitivity and specificity in the eligibility criteria (i.e., accepting those that meet the standard and rejecting those that do not);
- adjudicators with appropriate expertise and training to make the needed eligibility determinations;
- effective mechanisms for obtaining medical and scientific input and incorporating such information in final eligibility determinations;
- flexibility to accommodate evolving scientific and medical knowledge;
- a capacity to use and learn from prior decisions;
- equality of access to benefits and services;
- consistency in its decision making; and
- efficient and user-friendly processes.

In addition, the scheme must remain faithful and responsive to its founding objectives. The programs we studied were initiated largely in order to ease pressures on the tort system. Structural features or reforms that do not resonate with this goal may imperil the political viability of the wider scheme, regardless of any benefits they deliver in relation to the above goals.

In this section, we elaborate on several of the vital ingredients listed above, relaying the lessons from Virginia and Florida about their importance to the ongoing viability of administrative compensation schemes.

A. FEASIBILITY OF ALTERNATIVE COMPENSATION CRITERIA

Administrative compensation schemes generally do not employ negligence as the basis for compensation decisions. 169 Our review of the Florida and Virginia schemes focused on identifying issues that arise when negligence is jettisoned in favor of alternative, less familiar compensation criteria. It is clear that any alternative eligibility criteria for injury compensation will come under considerable pressure. This is especially true in circumstances in which the alternative program essentially carves out its jurisdiction from tort claims, and litigation avenues run in parallel for similar injuries.

The best defense against such pressure is compensation criteria that are clear, easy to apply, and scientifically defensible. NICA and BIP have partially achieved these objectives. Nonetheless, stresses and strains are evident in the application of the neurological birth-injury criteria. Many of these problems stem from the murkiness of cerebral palsy causality. The determination of eligibility for much of the NICA and BIP caseload rests on an uncertain and evolving scientific evidence base. Because many decisions must thus be made in a "gray zone," they become vulnerable to opposing forces.

A key question for any program will be which direction decision making should lean under conditions of uncertainty. Prioritizing the goal of curbing the financial burden of medical injury litigation, for example, may counsel selectivity. However, some informants spoke to a pull in the opposite direction. The dire situation of families, we heard, pushed many involved in the process, particularly in Florida, to search for ways to accept claims, especially if the family's prospects in the courts were dim.

Context exerts a strong influence on these postures in other ways. From a system-wide perspective, selectivity will be "penny wise and pound foolish" if its effect is to drive claims back into the tort system, where administrative costs and payouts are much larger. In Florida, NICA staff are highly attuned to this reality. In Virginia, on the other hand, the pressures created by BIP's precarious fiscal position are palpable. Technically, such considerations have no place in eligibility determinations, but vagaries in compensation criteria open up the possibility that they may indirectly assume weight.¹⁷⁰

One strategy for achieving greater clarity against a backdrop of scientific uncertainty is to acknowledge the impossibility of definitively determining eligibility in certain cases and account for it in decision-making rules and awards. Like judicial determinations, the administrative decisions we studied

⁶⁹ See Francine A. Hochberg, The Injustice of Health Courts, 44 Trial 42, 46 (2008).

In our interviews, a Virginia program official stated that "[t]he tendency of the WCC and the courts to broaden eligibility is compromising the financial basis of the Program. The law must take sides on the major issue—is it meant to provide support to afflicted children (and thus must find ways to provide the needed funds) or narrow the eligibility only to 'tortwinnable' cases" where doctors' fault caused the injury?" Interview with informants (anonymous), in Richmond, Va. (Dec. 8, 2005) & Charlottesville, Va. (Dec. 7, 2005) (on file with authors).

were essentially binary: a claim is either accepted, in which case a comprehensive range of benefits becomes available, or rejected, in which case the family gets nothing. A probabilistic approach to causation would provide compensation commensurate with the degree of certainty in cases where it is unclear whether the eligibility criteria were met. Traditionally, courts have been resistant to arguments about probabilistic causation and proportionate benefits. ¹⁷¹ The removal of alternative compensation programs from the courts, however, provides an opportunity to incorporate such an approach without causing major doctrinal upheaval.

Probabilistic causation is an example of a strategy that can be used to address unavoidable vagaries in the adjudication of eligibility. Other weaknesses in compensation criteria are more amenable to fixes. For example, we found that some of the medical criteria the programs use are known to be obsolete or erroneous, but the steps needed to amend them had not been taken. Programs should be supported by procedures that allow smooth alteration of criteria to take account of new scientific evidence and medical knowledge. Schemes that require frequent amendments to the enabling laws (as has occurred five times in fifteen years in Virginia) are overly cumbersome.

A better approach would be to establish an expert body, composed of medical and allied health professionals and jurists, that meets periodically and is empowered to introduce changes to the eligibility criteria needed to keep them up-to-date and evidence-based. The changes could be judicially reviewable to ensure that they do not take the program beyond its legislative purpose. A body of this kind could also serve as a technical resource to the legislature in relation to the program.

B. STRUCTURE OF THE ADJUDICATIVE BODY

The fundamental difference between the decision-making structures in Florida and those in Virginia is that the former developed a dedicated process for adjudicating eligibility while the latter opted to entrust the tasks to existing agencies and a loosely-configured and rotating panel of medical experts. Although we recognize that there is little appetite today for new bureaucracies, we believe that the NICA approach is preferable. It facilitates the acquisition of expertise, provides greater consistency and predictability in decision making, and may reduce the contentiousness of decisions.

The decision process in BIP may also be more complex than necessary, particularly in cases that are appealed at the full Commission level. The process in Florida is sleeker. Besides in-house handlers, most claims are reviewed by two experts and an ALJ. NICA's simplicity is worthy of emulation, though any sparer a process—and, arguably, the one NICA currently employs—would raise questions about the concentration of decision-making power. Also, the NICA model relies heavily on the quality,

¹⁷¹ Troyen A. Brennan, Causal Chains and Statistical Links: The Role of Scientific Uncertainty in Hazardous-Substance Litigation, 73 CORNELL L. Rev. 469, 493-501 (1988).

similar organs have been suggested in other areas fraught with uncertainty. *See id.* at 525 ("[a] Federal Hazardous Substance Science Panel would perform three functions: policymaking, adjudication, and boundary-drawing. These three functions would deal respectively with the first, second, and third levels of uncertainty.").

expertise, and objectivity of the reviewers involved. On that note, the lack of structured training programs for experts in both programs is undesirable; it confronts new decision makers with a steep learning curve, which they must climb in real time.

C. Opportunities to Streamline Decision Making

Streamlined decision making depends on more than limiting the number of decision makers involved. Screening activities that are conducted early in the life of a claim play an important role in simplifying and focusing the work of subsequent adjudicators. The quality of screening procedures at NICA is impressive. On the other hand, neither NICA nor BIP has moved to incorporate guidelines or precedent in their deliberations in any systematic way, which would appear to be a lost opportunity to boost consistency and efficiency.

A frequently heard message from informants was that both programs, but particularly Virginia's, had suffered from a discernible drift towards adversarialism and "legalization" of policies and procedures. ¹⁷³ To some extent, this may be unavoidable. Yet, as alternative programs like BIP and NICA move in this direction, their distinctiveness from the tort system is diluted, and many of their touted advantages over litigation—including financial savings, shorter timeframes, and less anguish among the parties involved—likely are compromised.

D. Managing Information Flows

The efficient flow of information throughout and beyond compensation schemes is evidently a vital ingredient in their successful operation. Disjunctions may occur in the data available to decision makers from case to case, between legal and medical arms of the decision-making apparatus, across similar programs (like BIP and NICA), and between the programs and the broader community. Both programs we studied had deficiencies in these areas, the costs of which were not trivial. In some instances, improved information flows would improve the quality of eligibility decisions—for example, a feedback loop would allow medical experts to understand how the legal adjudicator interpreted and dealt with their input. In other instances, information exchange would enable programs to contribute more broadly to society by, for example, sharing their expertise in managing the needs of severely injured children with providers and agencies serving this population.

E. Conclusions

Two decades after their establishment, the birth injury programs in Virginia and Florida stand as unique experiments in American personal injury law. Despite much debate about and interest in administrative compensation for medical injury among policymakers and academics, virtually all claims for compensation arising from medical injury are still litigated in courts under

¹⁷³ Another major contributor to Virginia's more adversarial climate is the growing financial unsoundness of its program, as opposed to Florida. *See* JLARC, *supra* note 40, at 8.

negligence law, much as they have been for over a century. 174 BIP and NICA are anomalies.

That these models have failed to inspire replications in other states, despite widespread dissatisfaction with the current medical malpractice system, is somewhat surprising. The failure to launch new programs likely reflects a mix of political, legal, and sociological factors. Though successful on many fronts, the programs have not been problem-free. In Virginia, in particular, financial strains have overshadowed all other dimensions of program performance in recent years.

The centerpiece of the birth injury programs, and the design features that differentiate them most clearly from their tort counterparts, are the nonnegligence compensation criteria and the way in which nonadversarial processes are used to incorporate expert opinion into determination of eligibility. From a technical standpoint, both programs have demonstrated successful operationalization of compensation criteria that do not involve negligence, and there is much to admire about how they have accomplished this. There are also cautionary tales. A clearer understanding of the Florida and Virginia experiences should position health courts or other programs modelled along these lines to deploy alternative compensation criteria in ways that avoid the pitfalls experienced by BIP and NICA. Optimal design will go far toward ensuring a program's successful operation. But architects of future initiatives should also note this lesson: some factors largely external to the program itself—including the conditions that lead to the program's establishment, the quality of the medical knowledge that can be marshalled to support the compensation criteria, and the programs' relationship to the tort system—may well end up exerting a stronger influence on the program's performance scorecard than any design choice.

¹⁷⁴ James C. Mohr, American Medical Malpractice Litigation in Historical Perspective, 283 JAMA 1731, 1731-32 (2003).

Paul J. Barringer et al., Administrative Compensation of Medical Injuries: A Hardy Perennial Blooms Again, 33 J. Health Polit. Poly L. 725, 752 (2008).

Table 1. Major Features of the				
	Virginia and Florida Birth In Virginia	jury Programs Florida		
		1101144		
Covered Entities	Physicians, nurse midwives, and hospitals that provide obstetrical care to indigent patients eligible for Medical Assistance Services and that pay the participation fee	Physicians, nurse midwives, and hospitals that pay the participation fee		
Notice Requirements	Must prospectively notify patients of provider's participation in the program; after an infant is delivered, must notify parents of their rights under the program and ways in which the program limits their rights	Must prospectively notify patients of provider's participation in the program; notice must include a clear statement of patients' rights under the program and ways in which the program limits their rights		
Statute of Limitations	Ten years after the birth of the infant, tolled by filing a claim	Five years after the birth of the infant, tolled by filing a claim		
Adjudicator	Workers' Compensation Commission	Administrative law judge in the Department of Management Services' Division of Administrative Hearings		
Medical Review Panel	Claims are reviewed by a panel of three medical experts which issues a nonbinding decision regarding eligibility	Claims undergo independent review by two to three medical experts		
Covered Expenses	Reasonable and necessary: - Medical care, training, residential and custodial care - Needed equipment - Pharmaceutical costs - Related travel expenses - Lost earnings from age eighteen to sixty-five, set at fifty percent of state average wage earnings - One-time family benefit up to \$100,000 for infants dying within 180 days of birth - Reasonable legal fees	Reasonable and necessary: Medical care, training, residential and custodial care Needed equipment Pharmaceutical costs Related travel expenses One-time family benefit up to \$100,000 Death benefit of \$10,000 Reasonable legal fees		

Table 2. Eligibility Requirements of the Virginia and Florida Birth Injury Programs			
	Virginia	Florida	
Nature of Injury	Injury to the brain or spinal cord	Injury to the brain or spinal cord	
Live Birth Requirement	Infant must be born alive	Infant must be born alive	
Minimum Infant Weight	None	Infant must weigh at least 2,500 grams at birth (2,000 in multiple gestation cases)	
Causation	Injury must be caused by oxygen deprivation or mechanical injury	Injury must be caused by oxygen deprivation or mechanical injury	
Specific Exclusions Based on Injury Causation	Injuries caused by genetic or congenital abnormality, degenerative neurological disease, or maternal substance abuse	Injuries caused by genetic or congenital abnormality	
Timing of Injury	Injury must occur in the course of labor, delivery, or resuscitation necessitated by a deprivation of oxygen or mechanical injury that occurred in the course of labor or delivery	Injury must occur in the course of labor, delivery, or resuscitation in the immediate post-delivery period	
Location in which Injury Occurred	In a hospital	In a hospital	
Severity of Injury	Injury must render the infant permanently disabled	Injury must render the infant permanently and substantially disabled	
Nature of Disability	Infant must be motorically disabled and (i) developmentally disabled or (ii) for infants sufficiently developed to be cognitively evaluated, cognitively disabled	Infant must be physically and mentally impaired	

Table 3. Caseloads and Payments in the				
Virginia and Florida Birth Injury Programs				
	Virginia	Florida		
Cases Adjudicated	192	636		
Cases Accepted	134 (70%)	226 (36%)		
Cases Denied	38	277		
Cases Withdrawn	12	96		
Cases Pending	8	37		
Total Payments Made	\$74,000,000	\$73,300,000		
Annual Expense per	\$94,400	\$59,000		
Active Accepted Case				

Data sources: E-mail from Candace Thomas, Deputy Director, Virginia Birth-Related Neurological Injury Compensation Program, to Michelle Mello, Professor of Law and Public Health, Harvard School of Public Health (May 28, 2008, 10:11:00 EST) (on file with author); E-mail from George Deebo, Executive Director, Virginia Birth-Related Neurological Injury Compensation Program, to Michelle Mello, Professor of Law and Public Health, Harvard School of Public Health (May 28, 2008, 09:37:00 EST) (on file with author); E-mail from George Deebo, Executive Director, Virginia Birth-Related Neurological Injury Compensation Program, to Michelle Mello, Professor of Law and Public Health, Harvard School of Public Health (May 27, 2008, 10:20:00 EST) (on file with author); E-mail from Kenney Shipley, Executive Director, Florida Neurological Birth Injury Compensation Association, to David M. Studdert, Professor, (May 22, 2008, 06:13:00 EST) (on file with author). Florida data are current as of March 31, 2008; Virginia data are current as of December 31, 2007.