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Mr. Walling is a fellow of the Casualty Actuarial Society (CAS), a Member of the American Academy of Actuaries and a Chartered Enterprise Risk Analyst. He currently serves as a member of the CAS Board of Directors. He has previously served as the Chairman of the CAS Ratemaking Seminar Committee, Risk and Capital Management Seminar Committee and the New Fellows Committee.

Rob's experience includes scores of medical professional liability studies over the last twenty years related to ratemaking, loss reserving, legislative costing and other matters. His clients in this space include birth injury funds, patient compensation funds, state insurance departments, insurers, reinsurers and captives and risk retention groups (RRGs) owned by healthcare providers and facilities.

Mr. Walling is a frequent author and speaker on actuarial topics. He has appeared in publications including *Contingencies*, *Inside Medical Liability*, *Captive Review*, *Public Risk*, *Captive Chronicle*, *Actuarial Review* and the *CAS Forum*. He has spoken at meetings such as AMA News, Bermuda Captive, CAS meetings, Cayman Captive, CICA, NAMIC, PCIAA, PRIMA, RIMS, SCCIA, SIAA, VCI, and World Captive Forum. He is also an instructor for ICCIE.

The Case for Birth Injury Funds

Robert J. Walling III, FCAS, MAAA, CERA

During the past several years, there has been a renewed interest in the development of state birth-related neurological injury compensation programs, or birth injury funds. Birth injury claims, verdicts and damages within the tort system are often highly volatile, and the tort system's delivery of benefits to the families of children with birth injuries is frequently slow and inefficient. The number of families facing the financial impact of a child with significant, permanent birth-related injuries with little or no financial support is challenging policymakers to assess whether a state-run birth injury fund provides a more equitable and efficient means to help them.

For the purposes of this discussion, a birth-related neurological injury is defined as¹:

- an injury to the brain or spinal cord of a live infant that:
 - was caused by oxygen deprivation or mechanical injury
 - occurred in the course of labor or delivery in a hospital and
 - resulted in death or permanent and substantial mental and physical disability.

To put this into perspective, Pinnacle's analysis of data from longstanding birth injury funds in Virginia and Florida suggests that there are between 0.9 and 1.0 birth injuries per 10,000 live births that meet their eligibility criteria. There are nearly four million live births in the United States annually, meaning that there are about 400 families every year that will face the emotional upheaval and potential

KEY POINT

Birth funds are true "win-win" situations for families, healthcare providers and insurers.

financial distress of a child born with a birth-related neurological injury that could receive benefits from a birth injury fund. Based on birth injury fund data, lifetime benefits for some participants can be well in excess of \$40 million due to the significant healthcare, nursing and other costs of these children's care. Even on a present value basis, these costs can surpass \$4 million per child.

There are several inherent problems with funding benefits for severe birth injuries in the tort system. These problems impact many of the stakeholders in the healthcare and medical professional liability (MPL) insurance

¹This is based on elements of definitions used in the Florida and Virginia birth funds.

arena, including the children and their families, healthcare providers, hospitals and MPL insurers. These problems include:

- The tort environment creates a lack of communication and, consequently, a barrier of distrust between patient and provider at a time when communication is critical.
- Families that reach favorable settlements or verdicts may wait years before receiving benefits.
- The tort system seemingly yields random and unpredictable – and sometimes very large – verdicts, but more often provides no relief to families with severely disabled children, thus creating a “lottery” mentality.
- The low frequency and very high claim severity of birth injury claims make it very difficult to accurately estimate the potential costs for hospitals and obstetricians. This uncertainty increases insurance costs.
- In some areas, the volatility of large MPL claims, especially those associated with labor and delivery, as well as the associated insurance costs, threaten access to healthcare in some rural and urban areas.^{2,3}
- The entire process is grossly inefficient. On average, only about 31% of all MPL premiums are actually paid to the injured patient and his or her family.⁴

The tort system and the negligence standard to determine eligibility overlook a more fundamental issue – providing for families of children with birth injuries, especially those that were not the result of negligence on the part of the healthcare providers, is a societal issue, not a legal or insurance one.

Any proposed solution seeking to improve the delivery of benefits for families dealing with birth injuries should seek to achieve these objectives: 1) better communication between patient and provider to improve treatment, 2) a faster means of providing benefits to more families, 3) predictability of costs that reduces the threat to hospitals’ financial health, 4) a more efficient method of delivering benefits, and 5) increased access to care in urban and rural areas.

Birth Injury Funds

It may be useful to more fully define birth injury funds in general terms before describing specific features and options. Birth injury funds are a specialized form of patient compensation fund (PCF). Patient compensation funds are medical malpractice government insurance programs, created by state or federal law, designed to increase professional liability coverage availability and/or affordability primarily by providing coverage for a specific type of injury or an excess layer of insurance coverage. In the case of birth injury funds, both the type of injury (birth-related neurological injuries) and the benefits are very precisely defined. To date, there are three state birth injury funds in Florida, New York and Virginia. The National Vaccine Injury Compensation Program (VICP) is structured in a similar fashion and provides comparable benefits. VICP is a national program for individuals found to be injured by certain vaccines.

The Virginia and Florida funds were formed in the 1980’s in response to crisis conditions in the healthcare industry, specifically MPL insurance for labor and delivery rooms. The New York program was established in late 2011 based on similar concerns.

² According to “Philadelphia’s Maternity Care Crisis,” University of Pennsylvania Leonard Davis Institute of Health Economics, November 25, 2013, “the number of maternity centers in Philadelphia dwindled from 19 in 1997 to just 6 in 2011.” Information from the Maryland Maternity Coalition suggests that this has continued to worsen.

³ “Change in Oregon Maternity Care Workforce after Malpractice Premium Subsidy Implementation” from Health Services Research, August 2009, suggests that “a state program to subsidize the liability premiums of rural maternity care providers does not appear to be effective at keeping rural providers delivering babies.”

⁴ Based on a Pinnacle analysis of U.S. Medical Professional Liability Insurance industry data 2005-2014 from A.M. Best Company.

Benefits Provided – Florida and Virginia

The Florida and Virginia birth injury funds have very similar coverage and benefits. They provide unlimited and broad medical and economic benefits to program participants who qualify on a “no-fault” basis, that is, regardless of fault or negligence. The no-fault nature of the Florida and Virginia programs is essential to their success, particularly their ability to provide very broad benefits to a much larger group of families than were served by these states’ tort systems. Eligibility is determined by a specific court of claims, such as Florida Division of Administrative Hearings, or a workers’ compensation court that is accustomed to an existing no-fault system, such as the Virginia Workers’ Compensation Commission. Each program’s eligibility is carefully designed. For example, substantial mental and physical impairment are typically required and disabilities due to genetic or congenital abnormalities are ineligible.

The economic benefits are quite comprehensive and commonly extend well beyond medical care (physicians, hospital, on-site nursing care, physical therapy, prescription drugs and medical equipment) to include housing and transportation accommodations. There is no deductible or any other limitation of benefits. However, collateral sources such as health insurance, Medicaid waivers, and other sources of benefits, including

state and federal health insurance programs, can in some cases be applied prior to the birth injury funds. For example, about 10% of Virginia participants receive nursing benefits via Medicaid. The unlimited benefits do not include “pain & suffering” or other non-economic damages. **Figure 1** summarizes the current benefits of the various compensation funds.

Funding

Providing benefits to an additional cohort of participants, namely children with birth injuries where a court would not have determined negligence, significantly increases the number of families receiving benefits. However, birth injury funds must be able to provide these additional benefits without significantly increasing overall system costs in order for them to be viable. Fortunately, birth funds appear to be capable of providing broad, lifetime benefits to a larger group of families at a lower overall cost than was possible in the tort system. These overall system savings are the result of reductions in legal costs by largely removing both defense counsel and plaintiff’s attorney fees associated with the tort system.

Benefits provided by the Virginia and Florida birth injury funds are accounted for on an occurrence basis. Annual funding is intended to be sufficient to cover all benefits due to the program participants born that year, regardless of when they are admitted to the program or when the benefits

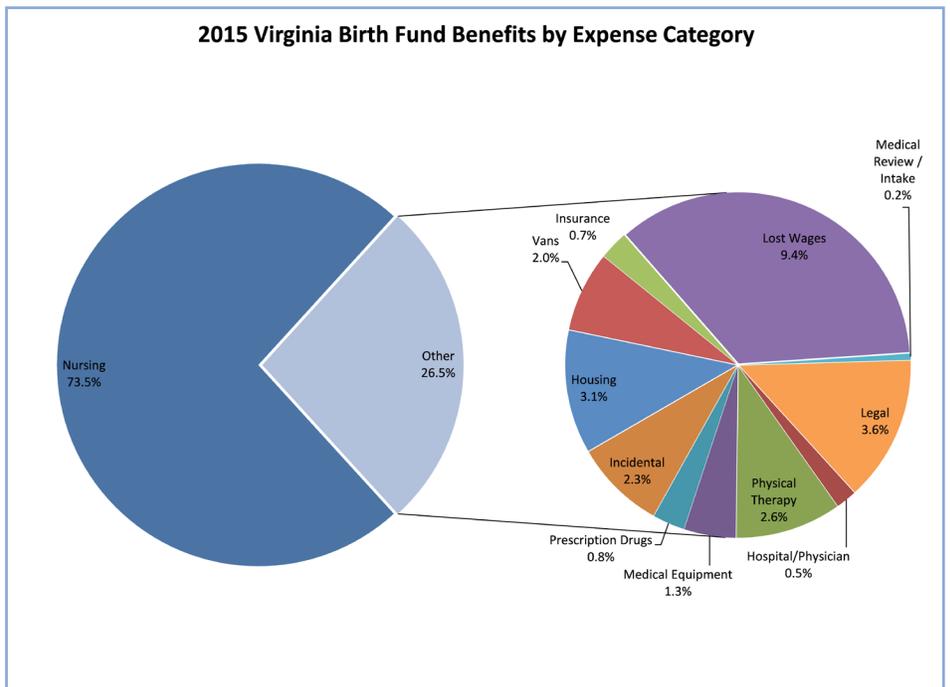
Figure 1: Comparison of Benefits

Benefit	Florida	Virginia	New York	Vaccine
Medical, Surgical, Dental	X	X	X	X
Hospital	X	X	X	X
Rehabilitation/Therapy	X	X	X	X
Residential Nursing and Custodial Care	X	X	X	X
Prescription Drugs	X	X	X	X
Lost Earnings		X		X
Special Equipment/Facilities/Transportation	X	X	X	
Claims Filing Costs		X		X
Medically Necessary Travel	X	X		
Death Benefit/Monetary Award	X	X		X
Pain & Suffering				X

are paid. Unpaid future benefits liabilities are accrued by the funds when the births occur, rather than when the petition for participation is made, when a participant is deemed eligible for participation or when the benefits are actually paid. This approach is intended to avoid the potentially disastrous problem of a large, unfunded liability for future benefits payments to current program participants.

A variety of funding mechanisms are used to pay for the benefits of birth funds in the various programs. These states recognize both the reduced MPL insurance costs obstetricians and hospitals realize from participation in a birth fund⁵, and a larger social obligation for a state to take care of children with birth injuries. Assessment income from participating obstetricians is a common element in the financing of any birth fund. It is imperative that the economic value of the birth fund be apparent to its participants. The premiums should not exceed the MPL premium discounts realized by the providers. In some states, differ-

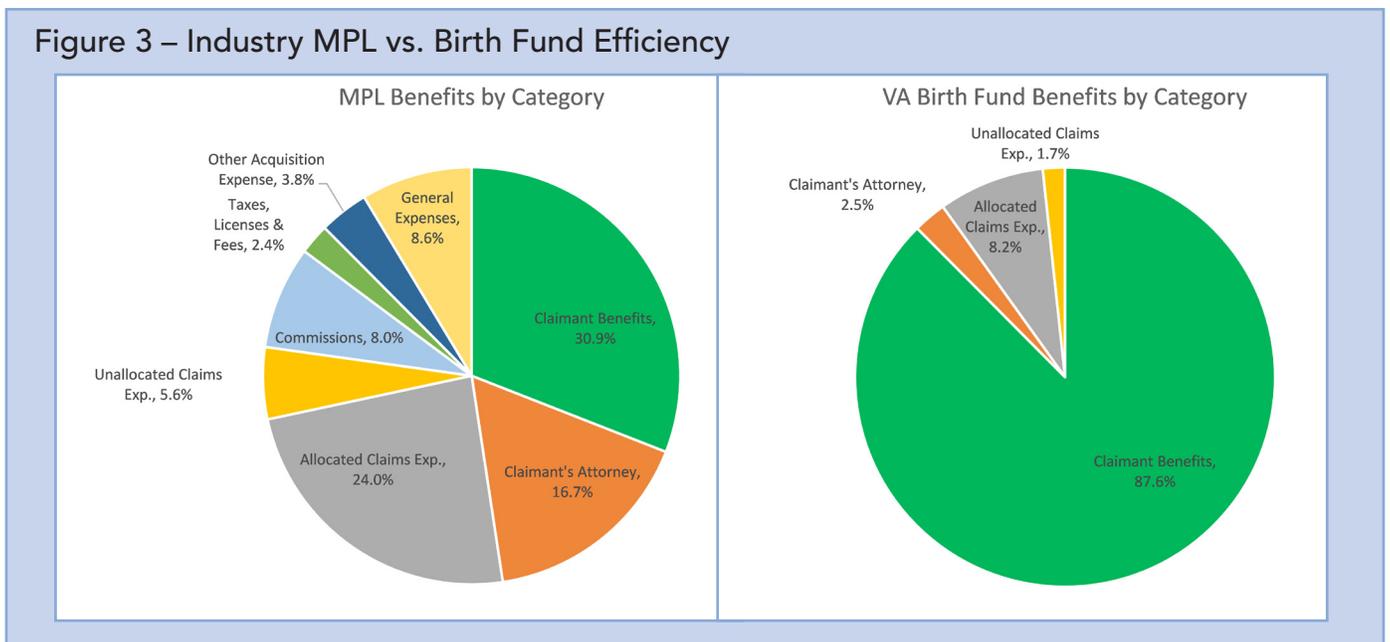
Figure 2 - Birth Injury Fund Efficiency



entiating the assessments of healthcare providers based on geographic factors (e.g. metropolitan versus rural) may be appropriate.

Hospitals also typically pay assessments and are eligible for insurance cost reductions. Both the Florida and Virginia funds assess hospitals on a per-live-birth basis. The Virginia feature capping a hospital's annual premium may be a reasonable

Figure 3 – Industry MPL vs. Birth Fund Efficiency



⁵ In Virginia, mandatory premium reductions for healthcare providers participating in the birth fund are part of the birth fund legislation.

approach to recognizing the important role of women’s and infants’ hospitals and other centers of excellence for difficult births. As more health-care providers become hospital employees, an increasing amount of birth fund financing may come through hospital assessments.

Other methods such as assessing non-birth-related physicians or charging some form of premium taxes are sometimes used. The intent of this approach is to view birth-related injuries as a state-wide health issue that needs to be addressed as a matter of public welfare, not one of liability and lawsuits. These funding mechanisms can further reduce medical professional liability insurance costs for physicians in birth-related specialties where they are used.

In Virginia, hospital professional liability and obstetricians’ medical professional liability insurance premiums are typically reduced by 10-20% due to birth fund participation. In the Virginia program, participating obstetricians pay annual assessments with their MPL insurance. These assessments are a significant portion of the birth fund’s revenues, but less than their premium savings.

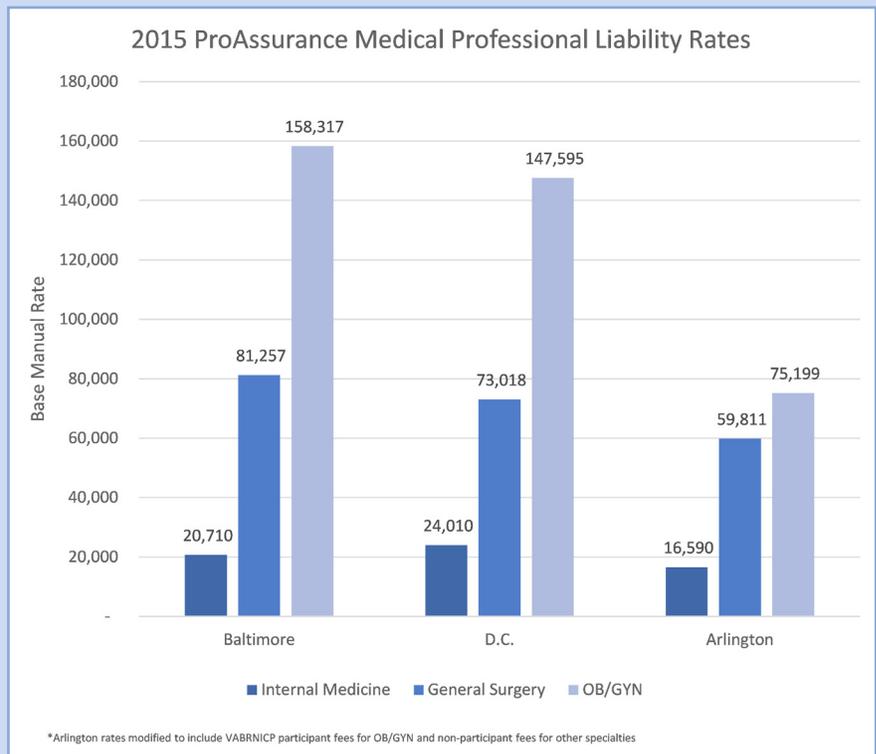
Does it work?

The general theory of the birth fund is that all stakeholders in the MPL system benefit from it. The no-fault system can lead to greatly improved communication, accelerated determination of eligibility and much faster payment of benefits. The broad eligibility rules can allow more injured infants and their families to benefit and receive greater lifetime economic benefits than they would receive through the tort system. Healthcare providers may benefit by having a no-fault system to provide benefits for some specific negative patient outcomes that are often very emotional, regardless of negligence. Physicians and

hospitals can also benefit by having lower overall insurance costs, mainly because of the elimination of legal defense costs for these potentially highly litigious claims. MPL insurers benefit by reducing the volatility associated with these very low-frequency/high-severity claims. This should lead to greater availability and affordability of coverage and increased competition in the MPL insurance sector. Overall system efficiency should improve (that is, more of the overall costs of the system are paid in benefits to the injured patients and their families) by replacing the tort system with a no-fault benefits delivery approach. Society then ultimately benefits from having an efficient financing mechanism in place to provide for these often severely injured infants.

This improved efficiency can be seen in Figure 3, which compares the most recent Virginia birth injury fund to the U.S. MPL insurance market. The Virginia birth injury fund has achieved an efficiency of just over 90% for the period from 2005 to 2014 as shown in Figure 2.

Figure 4 – Medical Professional Liability Insurance Rate Comparison



By comparison, the U.S. MPL system only pays out about 31% of its cash outflows to injured patients and their families, as shown in **Figure 3**. This highlights the potentially dramatic reductions in legal expenses and other cost inefficiencies provided by the no-fault Virginia and Florida birth injury funds.

In addition, premiums paid by Virginia obstetricians for professional liability reflect the birth fund's benefits. These can best be demonstrated in **Figure 4**. ProAssurance's 2015 rates for three specialties -- internal medicine, general surgery and obstetrics/gynecology -- are shown. All rates were provided by the Medical Liability Monitor 2016 Rate Survey⁶ and a single carrier was chosen to remove any differences in pricing philosophy by carrier. All specialties reflect lower rates in Arlington than both the District of Columbia and the Baltimore area. However, while rates in Virginia for the internal medicine and general surgery classes are on the order of 20-30% lower, OB/Gyn rates (including the assessments for the Virginia birth fund) are approximately half the rates for OB/Gyns in the adjacent areas. This suggests that the Virginia birth fund also contributes to obstetricians' lower premiums.

Conclusion

No-fault birth injury funds are limited government interventions into the MPL insurance market where the help is needed most. These funds have demonstrated the ability to efficiently deliver broad, lifetime benefits to children who sustain life-changing physical and neurological injuries during labor and delivery, regardless of the presence or absence of negligence on the part of the healthcare team. This system not only addresses a broad social purpose of ensuring these families receive the benefits they need to care for their children, but it can also help stabilize hospitals' and obstetricians' insurance costs. Removing significant birth injury claims costs from the traditional insurance market can increase competition and, therefore, coverage availability and affordability. The no-fault nature of most birth funds also facilitates communication between healthcare providers and families. Birth funds are true "win-win" situations for families, healthcare providers and insurers.

⁶ Medical Liability Monitor Annual Rate Survey Issue October 2016 Volume 41, Number 10.

ABOUT PINNACLE

Pinnacle Actuarial Resources, Inc. is an independent, full-service actuarial firm that focuses on the property/casualty insurance industry. Our home office is located in Bloomington, Ill., with additional offices in Atlanta, Chicago, Des Moines, Indianapolis and San Francisco.

Our *Commitment Beyond Numbers* philosophy encompasses all of who we are and what we do. It drives us to do whatever it takes to help our clients address their risks, understand the challenges they face and find the right solutions to meet their goals.



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