Impact of the Medical Professional Liability Insurance Crisis on Access to Care in Florida

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Background: Almost half of the US states face serious problems with professional liability insurance (PLI). Despite this, little is known about how this crisis is affecting access to care, particularly in rural areas.

Methods: We surveyed physicians practicing in rural Florida in 2003. The primary assessment was on changes in health care delivery by service type and specialty. Secondary outcomes included changes in PLI premiums and the effect of changes in premiums on service delivery and practice satisfaction.

Results: Four hundred eleven (52.6%) of 781 physicians decreased or eliminated health care services during the past year. Overall, 73 (61.3%) of 119 decreased or eliminated vaginal deliveries; 60 (52.6%) of 114, cesarean sections; 186 (51.7%) of 360, hospital-based surgical procedures; 209 (46.4%) of 450, emergency department coverage; 103 (41.7%) of 247, endoscopic procedures; 187 (40.9%) of 457, office-based surgical procedures; and 105 (41.7%) of 247, mental health services. Elimination of services was highest for general surgeons (78.4%), surgical specialists (73.6%), and obstetricians/gynecologists (70.2%). Premiums for PLI rose a mean of 93.5%. Difficulty finding or paying for PLI was listed as an important factor by those reducing or eliminating services and by those planning to leave the community within the next 2 years.

Conclusions: The current crisis in medical PLI in Florida has a major impact on the availability and delivery of health care services to rural areas. Given the number of states that are experiencing similar insurance market upheavals, adverse effects on access to care are likely occurring nationwide.

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A list of all rural physicians was obtained from the Florida State Department of Health, which maintains practitioner information for state license requirements. We identified rural physicians by their practice addresses that met any of the following 3 rural criteria: (1) the 33 statutorily designated rural counties in Florida; (2) rural areas of nonrural counties as designated by the Rural Urban Commuting Area codes; and (3) the current Health Resources and Services Administration list of defined Florida rural ZIP codes. We used these 3 sources to capture an accurate and broad sampling of rural physicians in the state. Ultimately, this resulted in a database consisting of 2178 allopathic and osteopathic physicians who had clear, active licenses to practice medicine.

We mailed surveys from May through July 2003. The survey included questions on physician and patient demographics, the physicians’ training and scope of practice, recent changes in services offered, insurance premium changes, satisfaction with practice, and future practice plans. The cover letter explained the purpose of the study and asked the physicians to participate. The protocol was approved by the institutional review board of Florida State University, Tallahassee, and the mailing and data entry were conducted by the Florida State University Survey Research Laboratory.

After the first mailing, a number of surveys were returned as undeliverable, primarily because of unknown or changed addresses or incorrect practice location. Numerous efforts were made to obtain updated mailing information, and surveys were remailed to those whose updated practice location was still in a rural location. Surveys were tracked by unique serial numbers, and participants who did not return a survey after 4 weeks were mailed a second copy of the survey with a different cover letter urging their participation. Ultimately, 1965 surveys are believed to have reached their intended participants, of which 805 were returned (participation rate of 41%).

Demographic and practice characteristics of the 805 respondents are displayed in Table 1. Overall, the mean age was 49 years (range, 27-82 years). Of the 749 respondents who identified themselves by sex, 78.6% were male. Four hundred ninety-three (61.2%) were white; 159 (19.8%), Asian; 50 (6.2%), Hispanic; 37 (4.6%), African American; and 66 (8.2%), other. Physicians had been in their current practice community for a mean of 10.7 years (range, <1 to >50 years). Overall, 55.7% of the respondents were practicing in a primary care field (family medicine, 25.3%; internal medicine, 14.5%; pediatrics, 9.6%; and obstetrics/gynecology, 6%). In addition, 15.5% were spending most of their time in a surgical area (general surgery, 4.6%; surgical subspecialty, 10.8%; 7.5%, in a medical specialty; 4.2%, in emergency medicine; and 4.2%, in psychiatry. Patient composition of the current practices included 38% covered by Medicare, 25% covered by private insurance, 18% covered by Medicaid, 10% self-paying, and 8% other. Ninety-four percent of respondents stated that they accept new private-pay patients; 89%, new patients covered by Medicare; and only 60%, new patients covered by Medicaid. New Medicaid-covered patients were being accepted by a high of 93.3% of emergency department physicians and a low of 42.6% of internal medicine physicians.

### METHODS

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### RESULTS

Overall, 411 (52.6%) of 781 responding physicians stated that they had decreased or eliminated patient services within the past year. Trends in a select group of these health care services are outlined in Table 2. Elimination of services was particularly frequent with regard to deliveries and hospital-based services. For example, 61.3% of those who responded and performed obstetrical services (family physicians and obstetricians/gynecologists) decreased or
eliminated vaginal deliveries (a geographical representation of their locations is provided in Figure 1), and 52.6% decreased or eliminated cesarean sections. Overall, hospital-based surgical procedures were decreased or eliminated by 51.6% of the respondents, and 46.5% decreased or eliminated emergency department coverage.

The reduction or elimination of services by physician specialty is given in Table 3. Particularly noteworthy is the decline or elimination in service delivery reported by general surgeons (78.4%), surgical specialists (73.6%), and obstetricians/gynecologists (70.2%). Primary care physicians (family physicians, internists, and pediatricians), as a group or individually, had fewer services decreased or eliminated when compared with general surgeons or obstetricians/gynecologists (for all, P <.05). When those physicians who decreased or eliminated services were asked “to what extent has the difficulty with finding or paying for medical liability insurance played a role” in change in service delivery, 396 responded, of which 203 (51.3%) stated “a lot,” and 157 (39.6%) stated “some.” Only 20 (5.1%) said that it had very little impact and 16 (4.0%) said that it had no impact on the change in services.

**PLI COVERAGE AND PREMIUMS**

Overall, 716 (89.9%) of the 796 physicians responding stated they currently have medical PLI. Of the 80 physicians (10%) who stated that they did not have insurance, 34 (68%) stated that it stopped within the past year and another 6 (12%) that it stopped from 1 to 2 years previously. When assessed by specialty, insurance coverage ranged from a high of 100% of anesthesiologists and 96.6% of internal medicine and medical specialists, to a low of 66.7% of obstetricians/gynecologists.

When asked about the percentage of change in their medical PLI premiums in the past year, 570 physicians responded. The mean increase in their premiums was 93.5% (SE, 5.3%). When assessed by distribution, 50% of physicians saw at least a 50% increase, 25% saw at least a 100% increase, and 10% saw at least a 250% increase in premiums in the past year. Changes in PLI premiums were associated with reduction or elimination of services. When comparing the lowest and highest quartiles of premium increases (Figure 2), 116 physicians in the highest quartile (62.7%) reduced or eliminated services vs 69 (47.3%) of those in the lowest quartile of premium increases ($\chi^2 = 7.89; P = .005$).

**SATISFACTION AND FUTURE PRACTICE PLANS**

When asked about satisfaction with their current medical practice, 143 (18.4%) of 778 respondents stated they were “very satisfied”; 254 (32.6%) were “somewhat satisfied”; 124 (15.9%) were “neutral”; 161 (20.7%) were “somewhat dissatisfied”; and 96 (12.3%) were “very dissatisfied.” Those physicians who stated they were somewhat or very dissatisfied with their current medical practice were significantly more likely to have indicated that they had decreased or eliminated services ($\chi^2 = 77.84; P \leq .001$) and had higher mean increases in their PLI premiums ($t = 2.03; P = .04$).
The debate about medical PLI and its relationship to quality of care, including access to health care services, continues to rage across the United States.1,16 Although many reports in the media have detailed the exodus of physicians from states and areas with medical PLI instability, surprisingly little in the way of systematically collected information is available in the scientific literature regarding the effect of this crisis on patient access to care. As one of the states with the most alarming PLI market changes, Florida has a medical environment that offers a chance to help understand the possible impact these changes may have on the delivery of health care services and access to care. We chose to survey physicians practicing in rural areas for this study because rural communities are known to face barriers to access and utilization of important health care services and are likely to be particularly vulnerable to additional reduction in services. Although the ratio of physicians to patients in Florida is similar to that in the United States overall, most Florida counties have at least some recognized areas of physician shortage, with rural communities being more deeply affected.

Our findings strongly indicate that loss of health care services is occurring across a wide range of procedures and specialties in these communities. This is particularly true of hospital- and office-based procedures, and less so with diagnostic tests such as radiographs, electrocardiograms, and Papanicolaou smears. Although all specialties studied saw some loss in services, elimination of important health care services and are likely to be particularly vulnerable to additional reduction in services. Although the ratio of physicians to patients in Florida is similar to that in the United States overall, most Florida counties have at least some recognized areas of physician shortage, with rural communities being more deeply affected.

When questioned about plans for continuing to practice in their current community, 104 (13.7%) of 759 respondents stated that they would be leaving within 2 years and 162 (21.3%) stated that they would be leaving within 2 to 5 years. For those 104 physicians who stated that they would be leaving within the next 2 years, 46 (44.2%) stated it was because of practice issues; 17 (16.3%), early retirement; 13 (12.5%), planned retirement; and 10 (9.6%), family issues. Furthermore, when these 104 physicians were asked “to what extent has the inability to find PLI played a role in your decision to leave your community,” 41% stated “a lot,” and 20% stated “some.” When the same group was asked “to what extent has the inability to pay for PLI played a role in your decision to leave your community,” 55% said “a lot” and 17%, “some.” Those physicians who indicated that they were dissatisfied with their medical practice were also more likely to be planning to leave within the next 2 years (χ² = 24.00; P = .001). Among the physicians stating that they were planning to leave practice in their community within 2 years, only obstetricians/gynecologists were significantly more likely to leave when compared with other specialty groups (odds ratio, 2.81; P = .04).

Table 3. Decrease or Elimination of Services and Procedures by Physician Specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Decreased or Eliminated Any Services in Last Year, No. (%)</th>
<th>Cesarean Section</th>
<th>Vaginal Delivery</th>
<th>Endoscopy</th>
<th>Hospital-Based Surgical Procedures</th>
<th>ED Coverage</th>
<th>Mental Health Services</th>
<th>Office-Based Surgical Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fam</td>
<td>96/194 (49.5)</td>
<td>47/71</td>
<td>53/76</td>
<td>52/92</td>
<td>54/106</td>
<td>72/142</td>
<td>48/143</td>
<td>69/169</td>
</tr>
<tr>
<td>IM</td>
<td>67/114 (58.8)</td>
<td>NA</td>
<td>NA</td>
<td>28/51</td>
<td>32/50</td>
<td>41/84</td>
<td>25/67</td>
<td>44/83</td>
</tr>
<tr>
<td>Ped</td>
<td>26/74 (35.1)</td>
<td>NA</td>
<td>NA</td>
<td>4/8</td>
<td>9/16</td>
<td>10/38</td>
<td>6/29</td>
<td>16/35</td>
</tr>
<tr>
<td>Ob/Gyn</td>
<td>33/47 (70.2)</td>
<td>13/43</td>
<td>20/43</td>
<td>5/20</td>
<td>28/46</td>
<td>18/41</td>
<td>8/24</td>
<td>16/41</td>
</tr>
<tr>
<td>Med Spec</td>
<td>20/59 (33.9)</td>
<td>NA</td>
<td>NA</td>
<td>5/21</td>
<td>10/25</td>
<td>10/30</td>
<td>8/16</td>
<td>9/21</td>
</tr>
<tr>
<td>Gen Surg</td>
<td>29/37 (78.4)</td>
<td>NA</td>
<td>NA</td>
<td>5/23</td>
<td>14/36</td>
<td>12/34</td>
<td>3/6</td>
<td>16/35</td>
</tr>
<tr>
<td>Surg Spec</td>
<td>64/87 (73.6)</td>
<td>NA</td>
<td>NA</td>
<td>4/32</td>
<td>39/81</td>
<td>48/81</td>
<td>7/20</td>
<td>17/73</td>
</tr>
</tbody>
</table>

Abbreviations: ED, emergency department; Fam, family medicine; Gen Surg, general surgery; IM, internal medicine; Med Spec, medical specialty; NA, not applicable; Ob/Gyn, obstetrics/gynecology; Ped, pediatrics; Surg Spec, surgical specialty.

*Because of small sample sizes, emergency medicine, psychiatry, radiology, anesthesiology, and other/unknown specialty were not included in this analysis.

Figure 2. Relationship between insurance premium increases and change in health care services. Premium increase was ≥25% for the lowest quartile and ≥100% for the highest quartile. For the highest vs lowest quartiles of premium increases, χ² = 7.89 (P = .005).
North-Central Florida, making the risk of adverse outcomes for infants and mothers even higher in these areas.

Moreover, an exodus from rural areas of physicians who perform deliveries has been noted during previous times of medical PLI crisis. This appears to occur because of a high likelihood of actual malpractice claims and a heightened perception of vulnerability to malpractice lawsuits during these periods by physicians performing deliveries. Both factors may play a role in the current loss of services described in the preceding paragraphs. Compounding the reduction or elimination of delivery services is the alarming and significant likelihood indicated by obstetricians/gynecologists of leaving practice within the next 2 years. This further emphasizes the seriousness of this problem for women needing prenatal and delivery care.

Our findings also indicate that hospital-based services, including surgery, procedures, and emergency department coverage, are also affected by the current PLI crisis. These services appeared to have been reduced by a variety of physician specialists. For example, hospital-based surgery and procedures were decreased not only by general surgeons and surgical specialists but also by primary care physicians and medical specialists. We predict that this change in service availability might force a greater number of patients to seek more complex procedures and surgical care in larger, mostly urban centers. This could delay diagnosis and treatment and have a negative effect on quality of care. Similarly, the trend in decreased emergency department coverage may place an additional burden on the emergency departments of rural hospitals, where an increase in patient visits, particularly by the elderly, is already occurring.

Access to effective diagnostic and treatment services for mental health and substance abuse is already diminished for rural populations. More than three quarters of the country’s areas designated as experiencing a shortage of mental health professionals are in nonmetropolitan areas. The loss of additional mental health services as documented in our study is also likely to result in further barriers to delivery of behavioral care in these areas of Florida.

Our study also demonstrated a link between a decrease in services and the extent of medical PLI premium increases. A PLI premium increase of 93% as self-reported by physician respondents is consistent with other evidence of premium increases reported in Florida and other states undergoing PLI market instability. Overall, recent increases in medical PLI premiums in the United States have been in the range of 20% to 25% for internists, obstetricians, and general surgeons. However, states have varied dramatically in these numbers, with Florida and several other states recording much higher increases in recent years. Although the reasons behind the recent rises in medical PLI premiums remain a subject of national debate, a recent report from the General Accounting Office has found that the largest contributor to increasing premiums are the losses incurred from malpractice claims.

Recent work by Pathman and colleagues has demonstrated a strong correlation between rural physicians’ prediction of future practice plans and their actual exit from a community. From our study, it appears that many rural physicians are poised to leave practice in the near future. In many cases, this appears to be directly related to difficulty with finding or paying for PLI. Consequently, rural communities are under PLI market pressures, as those physicians who have the greatest increases in premiums are more likely to leave the community. In our study, only obstetricians/gynecologists had a likelihood of leaving that was statistically higher than other groups. However, all specialties had attrition rates that require attention, particularly because the education pipeline for the replacement of physicians takes many years to complete and can also be affected by PLI pressures.

Our survey participation rate compares favorably with those of similar surveys in our state and in national studies of physicians, particularly when incentives are not used. However, several limitations should be noted. First, individuals in our study who were more adversely affected by the PLI situation may have been more likely to participate. Second, survey responses were based on self-reported estimates and were not objectively and independently verifiable. With this in mind, some information, such as the increase in malpractice premiums, might have been overestimated. Finally, the results of this Florida-based study must be generalized with caution to rural areas in other states, and may not be applicable to more urban practice populations.

Despite these limitations, we believe that the information reported by responding physicians demonstrates a very disconcerting decrease in critical services to rural populations in our state. Given the number of states that are currently experiencing rapid and dramatic increases in costs of PLI, these results portend a poor prognosis, at least for the immediate future, toward improving rural access to care. Certainly, further studies of the changing availability of physicians and the unique services they provide for rural and underserved populations should be conducted. These results also suggest the urgent need for policymakers at the state and national levels to help stabilize the medical PLI market. Only through timely and effective changes to the insurance marketplace are physicians likely to be able to reverse the trend of decreasing services to these vulnerable populations.

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