

## **Exhibit 2B Reserve Study**

### **Item 1:**

Provide a general description of the actuarial methodologies used to determine and monitor carried loss and loss adjustment expense reserves for the medical malpractice business written, including frequency of reviews.

### **Response to Item 1:**

Loss and loss adjustment expense reserves for medical malpractice are reviewed on a quarterly basis by the company's chief actuary who is qualified actuary (FCAS, MAAA). Loss and allocated loss adjustment expense reserves are reviewed by state and line of coverage, producing 20 different reserve categories. An example of a reserve category is Illinois – Claims Made. Within each reserve category, indemnity losses are analyzed on a gross and capped basis (e.g. \$500,000, \$1,000,000) to facilitate analysis of severity trend and application of reinsurance terms. Various methods are used to project ultimate losses at these levels, including paid and reported development, Bornhuetter-Ferguson, and counts time severity. Other methods may be employed to adjust for operational and environmental effects, such as the Berquist-Sherman method that adjusts for case reserve strengthening. Ultimate losses and ALAE are selected based on inspection of the method estimates and evaluated for reasonableness using measures of severity, frequency, and historical reserve development. Unallocated loss adjustment expense (ULAE) reserves are also reviewed quarterly by line of coverage (claims made vs. occurrence) and projected based on the traditional paid ULAE to paid loss method.

### **Item 2:**

Discuss the adequacy of medical malpractice loss and loss adjustment expense reserves as of the most recent year-end and identify and describe any material changes in the past five years in amounts of carried reserves and in reserving methods. If a material unfavorable trend exists, indicate what actions were taken to address the issue. Identify the materiality standard used to respond to this question and provide the basis for this standard.

### **Response to Item 2:**

*Discussion of adequacy of loss and loss adjustment expense reserves as of December 31, 2006:* The company records reserves for medical malpractice loss and loss adjustment reserves based on management's review and discussion of the internal actuarial analysis as described above. In its selection of a "best estimate," management considers not only the quantitative indications but also current pricing and underwriting initiatives, an evaluation of reinsurance costs and retention levels, the claims reserving practices and philosophy, and other operational and environmental effects on reserves.

As required by insurance regulatory authorities, we receive an annual statement of opinion by an independent consulting actuary concerning the adequacy of our reserves. As of December 31, 2006, the opining actuary stated that our reserves made a reasonable provision for all unpaid losses and loss adjustment expenses under the terms of American

Physicians' contracts and agreements. Further, based on the materiality standard set by the opining actuary, the opining actuary states that the potential risks and uncertainties that could bear on American Physicians' reserve development would not reasonably be expected to contribute to material adverse deviation of American Physicians' carried loss and loss adjustment expense reserves. For more information regarding the opining actuary's conclusions, please see the 2006 Statement of Actuarial Opinion for American Physicians Assurance Corporation.

Material changes in the past five years in amounts of carried reserves: The following table shows the change in loss and loss adjustment expense reserves for American Physicians over the past five years:

<b>Year Ended December 31</b>	<b>Net Loss and Loss Adjustment Expense Reserves</b>	<b>% Change in Reserves from Prior Year</b>
2006	538,388,950	2.1%
2005	527,293,238	1.4%
2004	519,997,506	4.7%
2003	496,841,055	-3.7%
2002	515,720,196	

With the exception of 2004, there have been no material changes in loss and loss adjustment expense reserves since 2002. We deemed any change greater than 4% of reserves to be material. The material unfavorable trend that emerged between 2003 and 2004 was caused by an unanticipated increase in severity. During the third quarter of 2003, the Company experienced a sharp increase in the severity of paid losses in our medical professional liability segment, which indicated a much higher trend in claims severity. As a result, actuarial projections resulted in higher ultimate severities of loss on currently existing claims related to the 1999 through 2002 accident years, which resulted in management increasing its estimate of incurred but not reported claims related to the 1999 through 2002 accident years by approximately \$43.0 million in the third quarter of 2003. The unfavorable development in the third quarter of 2003 was primarily related to the Company's Ohio (\$16.4 million), Florida (\$16.0 million) and Kentucky (\$15.0 million) markets, partially offset by positive development of \$7.8 million in the Michigan market. The Company announced its exit from the Florida market in 2002 and also discontinued writing occurrence-based policies in the Ohio and Kentucky markets in 2002.

Material changes in the past five years in reserving methods: There have been no material changes in the company's reserving methods over the past five years.

A note about the volatility of medical malpractice reserves: Due to the long-tailed nature of the medical professional liability line of insurance, changes in the actuarially projected ultimate loss severity can have an even greater impact on the balance of recorded reserves

than with most other property and casualty insurance lines. While we believe that our estimate for ultimate projected losses are adequate based on our open and reported claim counts, there can be no assurance that additional significant reserve enhancements will not be necessary in the future given the many variables inherent in such estimates and the extended period of time that it can take for claim patterns to emerge.

**Item 3:**

Compare company trends to industry trends, with regards to the medical malpractice line of business and include information about the specific business written by the company and, if necessary, reasons why company trends are different from the industry.

**Response to Item 3:**

Due to the proximity to year end, many industry analyses have yet to be completed using data through December 31, 2006. As a result, we created our own industry benchmark using Schedule P data from insurers who focus primarily on medical practitioners (physicians, surgeons, other health care professionals). Two companies that write primarily medical practitioners were excluded, MLMIC and PRI, because of their size and influence on the rest of the companies included in the industry group. The selected benchmark is not a commonly accepted or reported benchmark but may be a close proxy to PIAA member companies.

Industry trends are difficult to determine as an appropriate benchmark against American Physicians due to the varying nature of medical professional liability business by state and health care practitioner/facility. Further complicating benchmarking and trend analysis are differences between companies in their underwriting and claims philosophies.

The American Physicians (AP) and benchmark data are pulled from the 2006 Schedule P, Part 1F, Section 2 – Medical Malpractice Claims Made. To avoid differences in reinsurance programs, the measures were calculated on a direct and assumed basis. The tables below show five year and ten year trends for the industry benchmark and AP, as well as a comparison of industry and AP statistics by report year.

Report Year	Frequency Reported Claims per Earned Premium			Ultimate LLAE Ratio Incurred LLAE / Earned Premium		
	Industry	AP	AP vs. Industry	Industry	AP	AP vs. Industry
1997	0.017	0.018	3.7%	106%	102%	-3.2%
1998	0.017	0.018	8.9%	116%	112%	-3.9%
1999	0.017	0.020	18.4%	121%	123%	1.5%
2000	0.018	0.021	19.0%	129%	138%	6.8%
2001	0.017	0.023	34.8%	126%	168%	33.6%
2002	0.014	0.017	24.3%	101%	121%	19.3%
2003	0.011	0.013	12.5%	87%	97%	11.3%
2004	0.009	0.009	1.6%	75%	82%	9.4%
2005	0.009	0.009	-4.0%	77%	74%	-4.7%
2006	0.010	0.009	-6.6%	79%	69%	-12.0%
5 Yr Trend	-0.1%	-0.2%		-5.4%	-12.6%	
10 Yr Trend	-0.1%	-0.1%		-5.4%	-5.6%	

Report Year	Paid LLAE Severity Paid LLAE / Closed with Payment			Ultimate LLAE Severity Incurred LLAE / Reported Claims		
	Industry	AP	AP vs. Industry	Industry	AP	AP vs. Industry
1997	60,912	57,025	-6.4%	62,197	58,062	-6.6%
1998	67,785	59,984	-11.5%	69,878	61,656	-11.8%
1999	68,693	59,789	-13.0%	72,686	62,333	-14.2%
2000	66,987	60,112	-10.3%	73,147	65,635	-10.3%
2001	66,909	60,999	-8.8%	74,940	74,290	-0.9%
2002	59,326	53,136	-10.4%	73,826	70,839	-4.0%
2003	52,255	37,391	-28.4%	76,131	75,348	-1.0%
2004	37,900	28,642	-24.4%	80,910	87,070	7.6%
2005	23,638	13,975	-40.9%	82,543	81,941	-0.7%
2006	7,051	5,340	-24.3%	81,830	77,068	-5.8%
5 Yr Trend	na	na		2.9%	2.6%	
10 Yr Trend	na	na		2.6%	4.1%	

Because Schedule P data was used, it is difficult to analyze and investigate differences in trends due to significant operational changes beginning in 2002 and changes in the mix of business by state within AP and the industry. Descriptions of the operational changes can be found in responses to the Surplus Study items. Despite the effects of operational changes, the 5 year and 10 year trends on the various statistics are fairly consistent with each other.

## **Exhibit 2A – Surplus Study**

### **Item 1:**

Provide a general discussion regarding the adequacy of surplus reported on Annual Statement, page 3 (Liabilities, Surplus and Other Funds), line 35, Surplus as regards policyholders, as of the last year-end.

### **Response to Item 1:**

American Physicians' surplus has becoming increasingly adequate over the last five years as indicated by the amounts and ratios in the table below.

	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net loss and LAE reserves	538,388,950	527,293,238	519,997,506	496,841,055	517,208,659
Net written premiums	146,834,977	156,258,752	181,221,529	131,925,799	231,981,485
Capital and surplus	233,933,833	225,685,927	200,080,166	113,295,856	163,465,756
Reserves/Surplus Ratio	2.30	2.34	2.60	4.39	3.16
NWP/Surplus Ratio	0.63	0.69	0.91	1.16	1.42
Total Adjusted Capital/RBC	5.08	5.05	4.67	2.52	3.83

The reasons for the improved surplus adequacy are primarily the result of improved underwriting results, as shown in the table below. The improved underwriting results have been achieved through more disciplined underwriting practices and enhanced claim handling initiatives relative to our medical malpractice line of business. Changes in underwriting and claims handling practices began in 2002. However, we did not really begin to see the benefits until sometime in 2004. In addition, we took double digit rate increases in most markets in 2003, 2004 and 2005, and exited certain poor performing medical malpractice markets, such as Florida, discontinued writing occurrence based policies in select markets and lowered policy limits in virtually all jurisdictions. In late 2003, we also announced our exit from the workers' compensation and health insurance lines of business. The last policies related to these exited lines of business expired on June 30, 2005.

	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Underwriting gain or (loss)	18,931,246	3,897,761	(8,341,434)	(74,700,036)	(55,697,560)
Net income (loss)	52,615,687	44,264,335	26,376,059	(32,199,575)	(12,471,557)

### **Item 2:**

Identify and describe any material events or known material trends, favorable or unfavorable, in the insurer's surplus account in the past five years. This description should include any significant changes in the surplus ratios shown on Exhibit A. If a material unfavorable trend exists, indicate the courses of remedial actions already taken or that are available to the insurer and the effects or potential effects of each. Identify the materiality standard used to respond to this item and provide the basis for this standard.

**Response to Item 2:**

In addition to the operational changes that have had a positive impact on our underwriting results in recent years, there are two other events that had a material impact on our operating results and surplus in 2003. The first of these was a realignment of various lines of business between American Physicians and its sister companies, Insurance Corporation of America (ICA) and APSpecialty Insurance Corporation (APSpecialty). We refer to the three companies collectively as “the APCapital Group.” This realignment, which was effected through a novation of certain policies and balances, essentially made ICA the APCapital Group’s workers’ compensation carrier, American Physicians was the medical malpractice carrier for the APCapital Group and APSpecialty became primarily an excess and surplus lines writer. As a result of the novation, American Physicians net loss and loss adjustment expense reserves were decreased by \$57.4 million and net written premiums were reduced by \$77.3 million. The novation also resulted in a \$15 million reduction in surplus for American Physicians, as it transferred these funds to ICA to bolster ICA’s surplus as a result of the workers’ compensation reserves they were assuming from American Physicians.

The second event that impacted results of operations in 2003 was \$46.4 million of prior year loss and loss adjustment expense reserve development. Approximately \$43 million of this prior year development was recorded in the third quarter of 2003 when certain trends in both the frequency and severity of medical malpractice losses appeared in the statistical data used by the actuaries to project ultimate losses. This prior year development primarily related to accident years 1999 and 2002 and was especially noted in our Ohio, Florida and Kentucky markets.

There have also been capital transactions in each of the last several years that have had an impact on American Physicians surplus levels. In late 2003, American Physicians received a \$25 million capital contribution from its parent, American Physicians Capital, Inc. (APCapital). These funds were provided by the issuance of trust preferred securities by trusts formed and owned by APCapital. APCapital is an insurance holding company whose stock is publicly traded on the Nasdaq Stock Market.

APCapital also contributed the stock of APSpecialty to American Physicians effective March 31, 2004. Because of APSpecialty’s very low reserves and premiums in relation to its surplus, the contribution of APSpecialty to American Physicians effectively increase American Physicians surplus by approximately \$20 million.

In addition, as operating results have improved, American Physicians has elected to issue several ordinary dividend payments to its parent company, APCapital, who in turn has used the funds to repurchase shares of its outstanding common stock. This has been deemed by management to be the best use of these funds in light of American Physicians excellent financial position and limited premium growth opportunities. In total, \$8 million, \$17.3 million and \$43 million of dividends were paid by American Physicians to APCapital in 2004, 2005 and 2006, respectively.

## **Company Defined Items**

### **Item#1:**

County is defined as the premium county, the county in which the premium was generated. This is consistent with our ratemaking methodology. No changes have been made to premium county definitions over the past 10 years.

### **Item#2:**

Claims practices have not changed in past 10 years, but both internal and external actuaries have noted case reserve strengthening starting in 2004 as a result of a change in the claims manager responsible for handling Illinois.

### **Item#3:**

Claims are defined as closed when a closed date is assigned. This definition is consistent throughout the database. Also note that claims are counted on a per defendant basis as requested. Thus, if multiple insureds are named in the same suit, separate claim records are established for each insured. No changes have occurred in this definition in the last 10 years.

### **Item#4:**

The Company writes claims made professional liability policies for physicians and surgeons throughout Illinois. Coverage for professional corporations is offered either as an additional named insured under the physicians limit, or for an additional premium, the physicians may purchase separate limits for the corporation. Tail endorsements are issued either for additional premium as defined by our rating manual or for free if the physician meets certain eligibility criteria. In addition, the Company occasionally writes policies for emergency rooms, surgical centers, and urgent care facilities on a per patient visit basis, per our rating manual. Note the rating manual referenced herein is the one that has been maintained on file with the Division of Insurance.

### **Item#5:**

The Company does not utilize a class system to develop rates. Rather, it develops rates for each individual specialty based on the experience of that particular specialty, credibility weighted with the experience of similar specialties. The Company's base class (specialty) and territory are defined as follows:

Base class (specialty)	Family/General Practitioners – No Surgery (Code 420)
Base territory	Territory 1 – Cook, Madison, and St. Clair Counties

### **Item#6:**

Extended reporting endorsement (ERP) exposures are defined as a single policy within Exhibit 1b (File 1), earned immediately upon issue for unlimited ERPs and earned throughout the year for the 1<sup>st</sup> and 2<sup>nd</sup> annual extensions. Because the 3<sup>rd</sup> annual extension extends the reporting period to an indefinite period, the exposure issued on the

3<sup>rd</sup> extension is earned immediately similar to the unlimited ERPs. This approach to earning exposures is consistent with statutory accounting principles.

For Exhibit 1ci (File 1), the ERP exposures are earned on the basis of the company's step and tail factors to facilitate comparison with losses arrayed by accident year and development year.

Note the effective date of our extended reporting endorsement policies is the date in which the endorsement was issued, consistent with the General Instructions. For example, if the last claims made policy was issued on 1/1/2004 and subsequently endorsed for extended reporting, the effective date for the tail policy would be 1/1/2005. If a limited extension is issued (e.g. one year) and the policy is subsequently endorsed for an additional year, then the 2<sup>nd</sup> extension would have an effective date of 1/1/2006.

**Item#7:**

The following table lists the tail factors at each corresponding maturity year. The first column represents the factor that applies to the expiring claims made premium based on the claims made maturity from the expiring policy. The second column relates the filed tail factors in the first column to a mature claims-made premium.

<b>Maturity Year</b>	<b>Reporting Period Extension Factors (per filing)</b>	<b>Reporting Period Extension Factors (ratio to Mature CM rate)</b>
First Year	4.00	1.00
Second Year	3.88	1.55
Third Year	2.40	1.80
Fourth Year	2.11	1.90
Fifth Year	2.05	1.95
Sixth Year	2.01	1.97
Mature	1.97	1.97

**Item#8:**

The expenses included in the Expense factor on Exhibit 1cv (File 1) include all company expenses exclusive of loss adjustment expenses, premium taxes, and commissions. The Expense factor is intended to cover company activities including but not limited to underwriting and policy issuance, risk management, marketing, human resources, compliance, corporate management, accounting, actuarial, information systems, attorney fees, internal/external audit services, issuing of actuarial opinions, and facility management.

**Item#9:**

The “other” factors listed in Exhibit 1cv (File 1) include other expenses provided for in premiums: commissions, DDR, profit load, taxes, and investment income offset. The commissions represent the external agent and broker fees associated with writing insurance policies. DDR stands for death, disability, and retirement and is intended to provide funding for the cost of issuing free extended reporting period (ERP) endorsements based on certain eligibility criteria. The Company’s profit load, in combination with the recognition of investment income earned on reserves, constitutes the provision required for the Company to meet its overall profit objectives.

An additional item that is considered in the ratemaking process is the adjustment for discounts from manual rates. This is shown on Exhibit 1cv (File 1) as “other” and was equal to -10% in our last rate filing. We recognize and expect a number of insureds will qualify for discounts such as claims-free that reduce manual premiums. Also, based on the criteria within our rating manual, insureds may be eligible for schedule rating which further adjusts the manual rate for certain individual risk characteristics.

Note the investment income offset and the “other” factor is recorded in File 1 are actually negative numbers. As there was no guidance for handling negative numbers in the Decimal format, we have included the negative sign immediately in front of the amounts within the field.

**Item#10:**

Assumptions used in completing File 2 (Exhibit 2A):

- Although the instructions do not state explicitly, the first 15 characters have been used as a key for each record.
- The record layout only allows 2 spaces for Policy Type. However, the instructions indicate that the allowable policy types are CMPA and OERE. For this field we only filled in the first 2 positions with CM and OE.
- Note that only calendar year 2006 activity has been included for premiums, claim counts, paid losses and loss expenses, and incurred losses and expenses. Case reserves and IBNR estimates are shown as recorded on December 31, 2006. It is our understanding that the Division of Insurance recognized the difficulty for companies in populating and reconciling data from prior years and as a result the benefit of Exhibit 2A data will not be realized for some time.
- Due to the restriction of field lengths in Exhibit 2A-Surplus, amounts are shown in thousands of dollars.

Assumptions used in producing File 1 (Exhibit 1):

- Although the instructions do not state explicitly, the first 25 characters have been used as a key for each record.
- The two amount fields on position 90 and 128 for Exhibits 1b and 1ci are shown as DEC (3,3) although not in percentage format. Thus, if an exposure amount was 150.345, the amount would be shown as 150345.

## **Reconciliation**

Loss, allocated loss adjustment expense, and premium amounts included in this filing have been reconciled wherever possible with American Physicians' statutory page 14 and/or Supplement A to Schedule T on a direct basis. No significant differences were noted.

**Consulting Actuarial Report and  
Data Supporting the Company's Rate Filing**

Attached is a copy of our April 1, 2005 rate filing submitted to the Division of Insurance on April 27, 2005. Our internal actuarial department determines the rates based on its own analysis of loss and loss adjustment expenses, expense levels, and necessary profit provisions. Competitor rate and relativity levels as well as information available from ISMIE's latest rate filing are used to supplement American Physicians' own experience. As this filing represents rates that were in effect as of December 31, 2006, we are submitting the actuarial justification used to support our April 1, 2005 rate levels.

**American**   
**Physicians**<sup>SM</sup>  
ASSURANCE CORPORATION

*Practices That Set The Standard*

April 27, 2005

OVERNIGHT

Michael T. McRaith, Director of Insurance  
Illinois Division of Insurance  
320 West Washington Street, 4th Floor  
Springfield, IL 62676

Attention: Property & Casualty Section

APA's Filing No.: IL-05-05  
NAIC No.: 33006  
Company FEIN: 38-2102867

Dear Mr. McRaith:

Subject: Professional Medical Malpractice Liability  
Program: Health Care Providers Professional Liability Program  
Type: Rates/Rules  
Effective Date: April 1, 2005

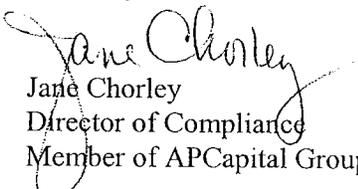
This is to advise that American Physicians Assurance Corporation (American Physicians) wishes to place on file the below outlined revisions to its Health Care Providers Professional Liability Program (HCP-PL). We are requesting an effective date of April 1, 2005.

The following summary outlines the changes to the HCP-PL Program:

1. The base rates and rules have been amended for an overall premium increase of +9.0%.
2. Territory Factors for Territories 2, 3, 4, and 5 have been adjusted – see attached Actuarial Filing Memorandum and exhibits for complete details.
3. The \$2,000,000/\$,00,000 Increased Limits Factors have been amended – see attached Actuarial Filing memorandum and exhibits for complete details.
4. Minor verbiage changes have been made in the specialty descriptions for dentists, clarification language has been added to several rules and minor typographical errors have been corrected.
5. Manual pages IL-1 through IL-9 (04/01/05) replace currently filed pages IL-1 through IL-8 (00101/05). Please see Exhibit I for highlighted changes and Exhibit II for a final printed copy of the revised manual pages.

Please direct any questions regarding this submission to my attention at 800-748-0465, Ext. 6794 or e-mail me at [jchorley@apcapital.com](mailto:jchorley@apcapital.com). Thank you for your consideration in this matter.

Sincerely,

  
Jane Chorley  
Director of Compliance  
Member of APCapital Group

Encs.

**ILLINOIS DEPARTMENT OF INSURANCE**

**FILING FEE TRANSMITTAL FORM**  
(Please type of print)

**THIS FORM, IN DUPLICATE, MUST BE THE FIRST DOCUMENT TO APPEAR ON THE FILING**

Date: 04/27/05 Division and Code: 03-Consumer

Insurance Company FEIN #: 38-2102867

Company Name: American Physicians Assurance Corporation

Contact Person: Jane P. Chorley, Director of Compliance

Address: P. O. Box 1471  
East Lansing, MI 48826-1471

Company Filing Number: IL-05-05

Remarks: If a fee is not submitted for any form(s), please explain:

Number of Forms: \$50.00 = TOTAL  
(\$500.00 Maximum)

Revenue Code: 46  
(Fill in the appropriate code listed below)

- 36 -- Life, Accident and Health Filing Fee or
- 46 -- Property and Casualty Filing Fee

**MAKE CHECKS PAYABLE TO: Director of Insurance/State of Illinois**

**NOTE:** Each company making a filing must submit duplicate Transmittal Forms with the appropriate fee. A separate check must be submitted for each company. (Refer to Public Act 86-753 for filing fee requirements.)

**ILLINOIS SUMMARY SHEET**

**FORM RF-3**

Change in Company's premium or rate level produced by rate revision effective:

(1) Coverage	(2) Annual Premium Volume (Illinois)*	(3) Percent Change (+ or -)**
1. Automobile Liability		
Private Passenger		
Commercial		
2. Automobile Physical Damage		
Private Passenger		
Commercial		
3. Liability Other than Auto		
4. Burglary and Theft		
5. Glass		
6. Fidelity		
7. Surety		
8. Boiler and Machinery		
9. Fire		
10. Extended Coverage		
11. Inland Marine		
12. Homeowners		
13. Commercial Multi-Peril		
14. Crop Hail		
15. Workers Compensation		
16. <u>Other: Medical Malpractice</u>	<u>\$55,438,918</u>	<u>+9.0%</u>
Line of Insurance		

Does filing only apply to certain territory (territories or certain classes? If so, specify: N/A

Brief description of filing (if filing follows rates of an advisory organization, specify organization):

\* Adjusted to reflect all prior rate changes.

\*\* Change in Company's premium level which will result from application of new rates.

American Physicians Assurance Corporation

Name of Company

  
 \_\_\_\_\_  
 Jane P. Chorley  
 Director of Compliance  
 \_\_\_\_\_  
 Official -- Title

# American Physicians Assurance Corporation

## Medical Professional Liability – Illinois

### Actuarial Memorandum

With this filing, the American Physicians Assurance Corporation (American Physicians) revises its medical professional liability specialty rates, territorial plan and increased limits factors resulting in an overall premium level increase of +9.0%. The requested effective date for all these changes is April 1, 2005.

#### **Rate Change by Component**

The rate changes by component are shown in Exhibit 1. The base rate for Family/General Practitioners – No Surgery is increasing by +12.6%. Changes are also being proposed for individual specialty and territory relativities. Finally, we are proposing an increase to the 2M/4M increased limit factors (ILFs). Exhibits 7a, 7b and 9 show the indicated experience by specialty and territory respectively. Exhibit 10 provides the effect of increasing the 2M/4M ILFs.

#### **Statewide Rate Level Indication**

We analyzed the historical claims-made indemnity loss and allocated loss adjustment experience for our physicians and surgeons program as of September 30, 2004. Indemnity losses were capped to \$1,000,000 per claim due to the limited credibility of experience above \$1,000,000 and to account for our decision to stop offering policies above \$2,000,000 per claim. Exhibit 2 shows our compiled claims made experience capped at \$1M for the 1997-2003 report year period. Premiums limited to \$1M were converted to current manual rate level (rates that became effective April 1, 2004) and current underwriting discounts. Incurred losses including ALAE were projected to ultimate using paid development, reported development, counts times averages and Bornhutter-Ferguson methods. A summary of all the methods can be seen on Exhibit 3a. The triangles and historical

development factors can be seen on Exhibits 3b and 3c. Countrywide loss development patterns were used to supplement the Illinois pattern. The countrywide data shown in Exhibit 3d and 3e includes only those states with similar limits profiles as Illinois. The projected loss ratio was trended by a factor of +11.0%. We based our selection of this trend factor by fitting exponential trend lines to the projected ultimate loss plus ALAE ratios over the six year period 1998-2003, the four year period 1998-2001, the four year period 1999-2002, the three year period 1999-2001 and the three year period 2000-2002 (Exhibit 4).

This adjusted, trended and projected loss ratio was compared with our target loss ratio to calculate the indicated premium level change. The target loss ratio was based on American Physicians' budgeted expense and profit load of 34.5% (as detailed on Exhibit 5a), which was offset for expected investment income to produce a target loss plus LAE ratio of 76.7%, for the overall book of business. Historical expense ratios are shown in Exhibit 5b and 5c. American Physicians' payout pattern for claims made in Illinois is included on Exhibits 6a and 6b. We have assumed an investment return of 3.5% per year in this analysis.

### **Specialty Changes**

Exhibit 7a provides an analysis of historical experience by specialty. Exhibit 7b shows the calculation of the group rate ("weighted rate") for the entire specialty groups listed in Exhibit 7a. The weighted rate (i.e. group rate) shown in Exhibit 7a, column (4) is the exposure weighted average of all the specialty rates within their group. For those cases where the total exposure for a specialty group is zero, a straight average is used. The Minimum Bias Two-Way analysis methodology was utilized as described in the Casualty Actuarial Society's suggested reading: "The Minimum Bias Procedure, A Practitioner's Guide", CAS Study Note, Feldblum, S. and Brosius, J.E. This analysis referenced data stratified by territory and specialty group. The results of the study are shown in Exhibit 7a, column 9. The indicated relativities were capped to a maximum relativity change of +/- 10.0% in columns 11 and 12. An off-balance, due to capping, of -0.6% was applied to the remaining specialties. The base rate (Family/General Practice No Surgery, Specialty 420) change under the proposed territory 1 shown in Exhibit 7a represents an increase of +12.6%

over the current proposed territory 1 average rate. The selected specialty relativities were based on several factors, including the historical experience, the relativities of competing carriers, and the current selected relativities. The change in specialty relativities is -4.2%. The estimated impact of base rate and specialty relativity changes is +7.9%. Exhibit 8 illustrates the combined effect for each specialty.

### **Territorial Changes**

The proposed changes to territorial relativities are shown in Exhibit 9. The Minimum Bias Two-Way analysis methodology was utilized as described in the Casualty Actuarial Society's suggested reading: "The Minimum Bias Procedure, A Practitioner's Guide", CAS Study Note, Feldblum, S. and Brosius, J.E. This analysis referenced data stratified by territory and specialty group. The results of the study are shown in Exhibit 8, column 8. The selected territory relativities were based on several factors, including one way historical analysis, the relativities of competing carriers, minimum bias analysis indication and the current selected relativities. The estimated impact of this change is +0.7%.

### **Change in Increased Limit Factors**

Our reinsurer has strongly suggested that we revise our 2M/4M increased limits factor. Exhibit 10 shows the impact on our current book of business. The estimated premium level change is +0.3%.

Submitted respectfully by,



Kevin M. Dyke, FCAS, MAAA  
Chief Actuary, Professional Liability  
American Physicians Assurance Corporation  
April 25, 2005

**American Physician Assurance Corporation**  
**Illinois Professional Liability**  
 Summary of Premium Level Change  
 Evaluated as of 9/30/2004

Exhibit 1

	Exhibit
Base Rate Change	12.6%
Change in Specialty Relativities	-4.2%
Change in Territorial Relativities	0.7%
Change in Increased Limits Factor	0.3%
Overall Premium Change	<b>9.0%</b>

See Exhibit 7, Item (1)  
 See Exhibit 7, Item (2)  
 See Exhibit 9  
 See Exhibit 10

## American Physician Assurance Corporation

### Illinois Professional Liability

Rate Indication - Claims Made Experience

Evaluated as of 9/30/2004

('000's omitted)

## Exhibit 2

Report Year	(1) Dir. Earned Premium	(2) Reported Loss + ALAE	(3) Proj'd Ult. Loss + ALAE	(4) Trend Period	(5) Trend Factor	(6) Trended Proj'd Ult. Loss + ALAE
1997	6,847	1,384	1,254	8.75	2.492	3,124
1998	20,927	6,576	6,080	7.75	2.245	13,652
1999	39,109	12,020	14,278	6.75	2.023	28,880
2000	47,209	15,530	17,174	5.75	1.822	31,295
2001	55,126	29,047	26,704	4.75	1.642	43,840
2002	69,995	36,589	39,848	3.75	1.479	58,934
2003	70,536	34,701	47,704	2.75	1.332	63,562
1997-2003	309,749	135,847	153,042		1.590	243,285

Trended Projected Ultimate L&ALAE Ratio at Current Actual Rate Level **78.5%** (a)  
 ULAE Load **7.5%** (b)  
 Adjusted Trended Projected Ultimate L&LAE Ratio at Current Actual Rate Level **84.4%** (c)

Target LLAE Ratio **76.7%** (d)  
 Indicated Premium Level Change **10.1%** (e)  
 Selected Premium Level Change **9.0%**

**NOTE:**

- (1) Dir. EP at Current Rates and Discounts (a) Total (6) / Total (1)
- (2) Exhibit 3a, Column 2 (b) Exhibit 5c, Item (5)
- (3) Exhibit 3a, Column 14 (c) (a) x { 1 + (b) }
- (5) Exhibit 4, Item (d) Exhibit 5a, Line k.
- (6) (3) x (5) (e) (c) / (d) - 1.0

**American Physician Assurance Corporation**  
**Illinois Professional Liability**

Loss plus ALAE @ 9/30/2004 - Capped at \$1M  
 (000's omitted)

Exhibit 3a

Claims Made

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year	Paid	Reported	Paid Method	Reported Preliminary Selected Method	Projected CWA	Implied Ultimate Severity	2000 - 2003 Fitted Sev. $R^2 = 0.464$	Cnts X Avg Method (BF Seed)	LDF Paid Method	BF Paid Method	LDF Reported Method	BF Rep Method	Selected Projection	Selected Severity
1997	881	1,384	996	1,327	17	78,086	106,058	1,803	1.130	1,089	1.019	1,418	1,254	73,739
1998	4,114	6,576	5,035	6,462	60	107,693	112,212	6,733	1.224	5,345	1.037	6,815	6,080	101,339
1999	10,821	12,020	14,963	13,221	143	92,451	118,723	16,977	1.383	15,520	1.064	13,036	14,278	99,847
2000	10,637	15,530	16,472	17,021	145	117,387	125,611	18,214	1.548	17,089	1.105	17,259	17,174	118,439
2001	7,380	29,047	14,407	30,054	202	148,781	132,900	26,846	1.952	20,474	1.169	32,935	26,704	132,200
2002	5,222	36,589	18,139	40,415	294	137,466	140,611	41,340	3.473	34,660	1.257	45,035	39,848	135,536
2003	3,198	34,701	33,146	46,545	320	145,453	148,770	47,606	10.364	46,211	1.438	49,198	47,704	149,076
<b>Total</b>	<b>42,254</b>	<b>135,847</b>	<b>103,157</b>	<b>155,044</b>	<b>1,181</b>			<b>159,518</b>		<b>140,389</b>		<b>165,695</b>	<b>153,042</b>	

Notes:

- (1) Exhibit 3b
- (2) Exhibit 3b
- (3) Exhibit 3b
- (4) Exhibit 3b
- (5)  $0.2 \times (3) + 0.8 \times (4)$
- (6) Exhibit 3c
- (7) (5) / (6)
- (8) Exponential fit based on 2000 - 2003
- (9) (6) x (8)
- (10) Exhibit 3b
- (11) (1) + (9) [ 1 - 1 / (10) ]
- (12) Exhibit 3b
- (13) (2) + (9) [ 1 - 1 / (12) ]
- (14) [(11) + (13)] / 2
- (15) (13) / (6)

American Physician Assurance Corporation  
Illinois Professional Liability

Exhibit 3b

(000's omitted)

Claims Made Case Incurred Losses Capped at \$1M plus ALAE @ 9/30/2004

Year	EVALUATED AS OF (in months)									
	9	21	33	45	57	69	81	93	105	
1996	87	112	375	365	365	365	365	365	365	365
1997	1,192	953	1,129	1,681	1,156	902	1,384	1,384	1,384	365
1998	4,353	6,259	6,582	5,165	4,917	6,750	6,576			
1999	3,946	8,044	9,675	11,182	12,708	12,020				
2000	4,936	10,722	15,459	15,685	15,530					
2001	9,039	19,787	20,978	29,047						
2002	13,613	27,556	36,589							
2003	17,356	34,701								
2004	14,030									
All Yr/Vol Wtd	1,487	1,236	1,165	1,018	1,047	1,038	1,000			
5 Yr/Vol Wtd	1,546	1,234	1,166	1,018	1,047	1,038	1,000			
3 Yr/Vol Wtd	1,538	1,258	1,213	1,035	1,047	1,038	1,000			
Countrywide	1,481	1,144	1,075	1,058	1,039	1,026	1,017	1,012	1,008	
Select	1,481	1,144	1,075	1,058	1,039	1,026	1,017	1,012	1,008	
Cumulative	2,129	1,438	1,257	1,169	1,105	1,064	1,037	1,019	1,008	
Actual	14,030	34,701	36,589	29,047	15,530	12,020	6,576	1,384	365	
Proj'd Ultimate	29,866	49,895	45,984	33,966	17,159	12,785	6,818	1,410	368	

CW Tail  
1.023

Claims Made Paid Losses Capped at \$1M plus ALAE @ 9/30/2004

Year	EVALUATED AS OF (in months)									
	9	21	33	45	57	69	81	93	105	
1996	3	24	365	365	365	365	365	365	365	365
1997	14	72	788	839	860	865	867	881		
1998	49	405	1,676	3,066	3,672	3,829	4,114			
1999	92	668	2,139	4,433	8,218	10,821				
2000	88	1,468	4,902	10,137	10,637					
2001	308	1,442	5,026	7,380						
2002	158	2,373	5,222							
2003	294	3,198								
2004	270									
All Yr/Vol Wtd	7,191	3,118	1,760	1,261	1,211	1,057	1,012			
5 Yr/Vol Wtd	7,299	2,984	1,779	1,261	1,211	1,057	1,012			
3 Yr/Vol Wtd	6,926	2,868	1,819	1,277	1,217	1,057	1,012			
Countrywide	6,640	2,542	1,494	1,247	1,148	1,075	1,031	1,014	1,006	
Select	7,191	2,984	1,779	1,261	1,120	1,130	1,083	1,065	1,061	
Cumulative	74,530	10,364	3,473	1,952	1,548	1,383	1,224	1,130	1,061	
Actual	270	3,198	5,222	7,380	10,637	10,821	4,114	881	365	
Proj'd Ultimate	20,119	33,146	18,139	14,407	16,472	14,963	5,035	996	368	

CW Tail  
1.010

American Physician Assurance Corporation  
 Illinois Professional Liability

Exhibit 3c

(000's omitted)

Claims Made Closed with Amount @ 9/30/2004

Year	EVALUATED AS OF (in months)											
	9	21	33	45	57	69	81	93	105	213	225	
1996	-	4	5	6	6	6	6	6	6	6	6	6
1997	-	6	10	15	15	16	16	16	16	16	16	16
1998	1	19	36	44	49	54	54	55	55	55	55	55
1999	9	53	66	80	117	126	126	126	126	126	126	126
2000	6	28	71	101	111	111	111	111	111	111	111	111
2001	6	61	108	129	129	129	129	129	129	129	129	129
2002	3	118	158	158	158	158	158	158	158	158	158	158
2003	22	114	114	114	114	114	114	114	114	114	114	114
2004	12	12	12	12	12	12	12	12	12	12	12	12
All Yr/Vol Wtd	6.431	1.571	1.267	1.211	1.080	1.013	1.013	1.000	1.000	1.015	1.017	1.017
5 Yr/Vol Wtd	6.098	1.573	1.268	1.211	1.080	1.013	1.013	1.000	1.000	1.015	1.017	1.017
3 Yr/Vol Wtd	7.089	1.628	1.265	1.231	1.083	1.013	1.013	1.000	1.000	1.015	1.017	1.017
Countrywide	5.309	1.733	1.297	1.139	1.073	1.046	1.031	1.031	1.031	1.015	1.017	1.017
Select	5.309	1.733	1.267	1.211	1.080	1.046	1.031	1.031	1.031	1.015	1.017	1.017
Cumulative	16.966	3.196	1.844	1.456	1.202	1.112	1.064	1.032	1.032	1.015	1.017	1.017
Actual	12	114	158	129	111	126	55	16	16	6	6	6
Proj'd Ultimate	204	364	291	188	133	140	59	17	17	6	6	6
Earned Expos	50,175	70,536	69,995	55,126	47,209	39,109	20,927	6,847	6,847	6,847	6,847	6,847
Freq	4.058	5.165	4.163	3.406	2.825	3.584	2.795	2.411	2.411	2.411	2.411	2.411
BF Seed Select	4.245	4.245	4.245	4.245	4.245	4.245	4.245	4.245	4.245	4.245	4.245	4.245
BF % Exposure	212	320	294	202	145	143	60	17	17	17	17	17
		230	324	220	165	144	63	63	63	63	63	63



American Physician Assurance Corporation  
 Countrywide Professional Liability  
 Excluding Michigan and Two Kentucky High Frequency Policies  
 ('000's omitted)

Exhibit 3e

Countrywide: Claims Made Closed with Amount @ 9/30/2004

Year	EVALUATED AS OF (in months)																			
	9	21	33	45	57	69	81	93	105	117	129	141	153	165	177	189	201	213	225	
1986	1	19	26	40	53	60	63	68	68	69	69	69	69	69	69	69	69	69	69	69
1987	5	21	49	73	89	95	97	100	101	101	101	101	101	101	101	101	101	101	101	101
1988	1	38	57	77	97	110	120	124	125	126	128	129	129	129	129	129	129	129	129	129
1989	7	30	51	81	101	112	120	122	122	122	123	123	123	123	123	123	123	123	123	123
1990	4	39	70	94	113	122	125	126	126	126	126	126	126	126	126	126	126	126	126	126
1991	2	36	62	85	104	111	116	121	123	123	126	126	126	126	126	126	126	126	126	126
1992	3	26	67	101	116	128	131	139	140	141	141	141	141	141	141	141	141	141	141	141
1993	7	36	63	81	93	100	107	107	109	109	111	111	111	111	111	111	111	111	111	111
1994	14	52	74	108	126	137	146	151	154	154	159	159	159	159	159	159	159	159	159	159
1995	7	42	73	112	128	139	146	152	157	158	158	158	158	158	158	158	158	158	158	158
1996	17	54	97	134	154	167	178	188	188	188	188	188	188	188	188	188	188	188	188	188
1997	17	87	151	180	197	219	226	227	227	227	227	227	227	227	227	227	227	227	227	227
1998	17	188	295	340	389	408	423	423	423	423	423	423	423	423	423	423	423	423	423	423
1999	43	246	397	526	601	643	643	643	643	643	643	643	643	643	643	643	643	643	643	643
2000	36	280	507	664	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753
2001	49	311	559	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707	707
2002	43	372	655	655	655	655	655	655	655	655	655	655	655	655	655	655	655	655	655	655
2003	46	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327	327
2004	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28

All Yr/Vol Wtd 5.182 1.733 1.310 1.155 1.080 1.047 1.032 1.011 1.007 1.007 1.007 1.001 1.001 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000  
 5 Yr/Vol Wtd 5.309 1.727 1.266 1.136 1.073 1.046 1.027 1.015 1.010 1.010 1.008 1.000 1.002 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000  
 3 Yr/Vol Wtd 5.489 1.787 1.297 1.139 1.070 1.042 1.031 1.016 1.016 1.007 1.012 1.000 1.003 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000  
 Select 5.309 1.733 1.297 1.139 1.073 1.046 1.031 1.015 1.007 1.007 1.008 1.000 1.002 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000  
 Cumulative 16.219 3.055 1.763 1.360 1.193 1.112 1.064 1.032 1.017 1.017 1.009 1.002 1.002 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000

**American Physician Assurance Corporation**  
**Illinois Professional Liability**

**Exhibit 4**

Claims Made Experience Trend Projection

Report Year	Manual EP at CRL	Proj'd Ult. Loss + ALAE	Proj'd Ult. Loss + ALAE Ratio	1998 - 2003		1998 - 2001		1999 - 2002		1999 - 2001		1998 - 2000	
				Fitted* Exponential Trend Line									
1998	23,252	6,080	26.1%	26.1%	26.5%	26.3%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%
1999	43,454	14,278	32.9%	30.8%	30.8%	30.9%	31.3%	30.9%	31.3%	31.3%	31.3%	30.4%	30.4%
2000	52,454	17,174	32.7%	36.4%	35.9%	36.3%	36.1%	36.3%	36.1%	36.1%	36.1%	34.0%	34.0%
2001	61,251	26,704	43.6%	43.0%	41.9%	42.7%	41.5%	42.7%	41.5%	41.5%	41.5%	38.1%	38.1%
2002	77,772	39,848	51.2%	50.8%	48.8%	50.2%	47.9%	50.2%	47.9%	47.9%	47.9%	42.6%	42.6%
2003	78,374	47,704	60.9%	60.0%	56.8%	59.0%	55.1%	59.0%	55.1%	55.1%	55.1%	47.7%	47.7%
Implied Trend				18.2%	16.5%	17.6%	15.2%	17.6%	15.2%	15.2%	15.2%	11.9%	11.9%
R <sup>2</sup>				0.969	0.890	0.895	0.740	0.895	0.740	0.740	0.740	0.975	0.975
							<b>SELECT</b>		<b>SELECT</b>	<b>SELECT</b>	<b>SELECT</b>	<b>11.00%</b>	<b>11.00%</b>

\* Trend line fitted using a least squares approach on projected ultimate loss ratios.

## American Physician Assurance Corporation

### Illinois Professional Liability

Development of Target Loss and LAE Ratio  
Physicians and Surgeons Liability

Exhibit 5a

<u>Source/formula</u>	<u>Illinois</u>	<u>Countrywide</u>
a. Commissions and brokerage	9.4%	7.1%
b. Tax/licenses/fees	1.1%	1.9%
c. Other acquisition expenses	4.0%	5.1%
d. General expenses	5.0%	7.4%
e. DDR Load	5.0%	5.0%
f. Profit provision	10.0%	10.0%
g. Total expenses excluding LAE	<u>34.5%</u>	<u>36.4%</u>
h. Expected loss and LAE ratio	65.5%	63.6%
i. Present Values Factor*	0.854	
j. Investment income offset	11.2%	
k. <b>Target loss and LAE ratio</b>	<b>76.7%</b>	

\* Discount rate = 3.5%

American Physician Assurance Corporation

Illinois Professional Liability

Calendar Year Loss and Expense Ratios

Annual Statement Page 24 - Statutory Page 14 Data

Exhibit 5b

Company-Specific Results (APAssurance & APSpecialty)

Company	(Multiple Items)
State	II

2001 and prior includes APSpecialty data.

Data	Year						Grand Total
	1998	1999	2000	2001	2002	2003	
DPW	8,515	14,205	15,800	21,867	35,498	54,108	149,993
DPE	6,697	12,495	14,591	16,664	29,336	45,510	125,293
Paid Loss	294	668	2,811	1,551	6,826	12,164	24,314
Incurred Loss	4,518	7,529	13,685	13,455	19,709	43,541	102,437
Paid ALAE	168	666	1,354	1,843	3,081	4,437	11,549
Incurred ALAE	677	2,030	3,825	6,363	6,374	8,962	28,231
Comm & Broker	820	1,574	1,673	2,060	3,425	4,995	14,547
Tax License Fees	-	119	205	256	532	441	1,553

	1998	1999	2000	2001	2002	2003	6 year total	3 year total	Illinois Selected
	67.5%	60.3%	93.8%	80.7%	67.2%	95.7%	81.8%	83.8%	
Loss Ratio	67.5%	60.3%	93.8%	80.7%	67.2%	95.7%	81.8%	83.8%	
ALAE Ratio	10.1%	16.2%	26.2%	38.2%	21.7%	19.7%	22.5%	23.7%	
LALAE Ratio	77.6%	76.5%	120.0%	118.9%	88.9%	115.4%	104.3%	107.5%	
Comm%	9.6%	11.1%	10.6%	9.4%	9.6%	9.2%	9.7%	9.4%	9.4% (1)
TLF%	0.0%	0.8%	1.3%	1.2%	1.5%	0.8%	1.0%	1.1%	1.1% (2)

**American Physician Assurance Corporation**

**Illinois Professional Liability**

Insurance Expense Exhibit Data

Line 11 - Medical Malpractice

Exhibit 5c

	IEE, Calendar Year						Illinois
	1998	1999	2000	2001	2002	2003	Selected
Direct written premium	62,723	67,396	79,049	129,349	170,441	227,911	
Direct earned premium	60,124	63,092	84,852	101,210	160,977	220,646	1998 - 2003 736,869 690,901
Commissions and brokerage	3,456	4,849	5,506	9,396	14,036	14,795	52,038
Tax/licenses/fees	1,205	1,715	1,597	3,248	2,736	3,134	13,635
Other acquisition expenses	4,119	4,859	4,590	6,306	5,908	9,216	34,998
General expenses	6,061	6,635	6,649	9,171	9,019	13,551	51,086
Direct incurred loss	16,282	10,758	47,288	115,346	124,505	189,256	503,435
Direct incurred ALAE	15,688	21,714	21,846	53,315	45,196	61,715	219,474
Direct incurred ULAE	9,739	7,395	6,937	10,106	8,910	10,215	53,302
Commissions and brokerage	5.5%	7.2%	7.0%	7.3%	8.2%	6.5%	7.1%
Tax/licenses/fees	1.9%	2.5%	2.0%	2.5%	1.6%	1.4%	1.9%
Other acquisition expenses	6.9%	7.7%	5.4%	6.2%	3.7%	4.2%	5.1%
General expenses	10.1%	10.5%	7.8%	9.1%	5.6%	6.1%	7.4%
ULAE as a % of Loss and ALAE	30.5%	22.8%	10.0%	6.0%	5.3%	4.1%	7.5%

(1) 9.4%  
(2) 1.1%  
(3) 4.0%  
(4) 5.0%  
(5) 7.5%

Exhibit 6a

American Physician Assurance Corporation

Illinois Professional Liability

Present Value Factor

Evaluated as of 9/30/2004

	Net Present Value
Claims Made	0.849
ULAE *	0.924
Overall	0.854 (1)

\* Assumes 50% paid at claim report and 50% paid out according to LALAE payout pattern.

**American Physician Assurance Corporation**  
**Illinois Professional Liability**  
 Claims Made Net Present Value Factor

**Exhibit 6b**

Midpoint	Balanced Payout	Discount Factor	Discounted Values
4.5	0.007	0.987	0.007
15	0.056	0.958	0.054
27	0.127	0.926	0.118
39	0.185	0.894	0.165
51	0.142	0.864	0.123
63	0.160	0.835	0.133
75	0.114	0.807	0.092
87	0.081	0.779	0.063
99	0.058	0.753	0.043
111	0.041	0.727	0.030
123	0.029	0.703	0.020
135	0.000	0.679	0.000
147	0.000	0.656	0.000
159	0.000	0.634	0.000
171	0.000	0.612	0.000
183	0.000	0.592	0.000
195	0.000	0.572	0.000
207	0.000	0.552	0.000
219	0.000	0.534	0.000
231	0.000	0.516	0.000
243	0.000	0.498	0.000
255	0.000	0.481	0.000
267	0.000	0.465	0.000
<b>Total</b>	<b>1.000</b>	<b>LALAE</b>	<b>0.849</b>

Assumes loss payments at the midpoint of the period and a 3.5% discount rate.



**American Physician Assurance Corporation**  
**Illinois Professional Liability**

Claims Made, Mature, Territory 1 Specialty Group Weighted Rate  
 Evaluated as of 9/30/2004

Exhibit 7b

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Code	Group	Specialty Description	InForce Count (%)	Current Rate 4/1/2004	Current Relativity to 420	Wgtd Rate [(5)x(4)] / (4 Grp Ttl)
151	Anesthesiology	Anesthesiology	5.7%	43,600	1.127	33,948
196	Anesthesiology	Anesthesiology - Pain Management	1.6%	43,600	1.127	9,652
				<b>Weighted Rate</b>		<b>43,600</b>
255	Cardiovascular	Cardiovascular Disease - No Surgery	0.4%	33,507	0.866	3,554
281	Cardiovascular	Cardiovascular Disease - Minor Surgery	3.3%	69,820	1.804	62,415
				<b>Weighted Rate</b>		<b>65,969</b>
115	Colon and Rectal	Surgery - Colon and Rectal	0.0%	96,185	2.485	96,185
256	Dermatology	Dermatology - No Surgery	0.7%	23,996	0.620	9,453
282	Dermatology	Dermatology - Minor Surgery	1.1%	43,282	1.118	24,920
472	Dermatology	Surgery - Dermatology	0.1%	73,096	1.889	2,215
				<b>Weighted Rate</b>		<b>36,588</b>
237	Diabetes	Diabetes - No Surgery	0.0%	33,845	0.875	16,923
271	Diabetes	Diabetes - Minor Surgery	0.0%	50,016	1.292	25,008
				<b>Weighted Rate</b>		<b>41,931</b>
102	EMR	Emergency Medicine - No Major Surgery	0.0%	100,154	2.588	33,385
157	EMR	Surgery - Emergency Medicine	0.0%	113,907	2.943	37,969
424	EMR	Urgent Care Medicine	0.0%	35,265	0.911	11,755
				<b>Weighted Rate</b>		<b>83,109</b>
265	ENT	Otorhinolaryngology - No Surgery	0.1%	24,044	0.621	4,007
291	ENT	Otorhinolaryngology - Minor Surgery	0.0%	50,016	1.292	-
159	ENT	Surgery - Otorhinolaryngology	0.3%	73,576	1.901	61,313
				<b>Weighted Rate</b>		<b>65,321</b>

# American Physician Assurance Corporation

## Illinois Professional Liability

Claims Made, Mature, Territory 1 Specialty Group Weighted Rate  
Evaluated as of 9/30/2004

Exhibit 7b

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Code	Group	Specialty Description	InForce Count (%)	Current Rate 4/1/2004	Current Relativity to 420	Wgtd Rate [(5)x(4)] / (4 Grp Totl)
421	Fam/Gen	Family/General Practitioners - Minor Surgery	0.9%	63,628	1.644	26,104
521	Fam/Gen	Family/General Practitioners - Minor Surgery -0 to 24 deli	1.1%	64,637	1.670	33,147
231	Fam/Gen	General Preventive Medicine - No Surgery	0.2%	22,442	0.580	1,726
		<b>Weighted Rate</b>				<b>60,977</b>
420	Fam/Gen 420	Family/General Practitioners - No Surgery	16.4%	38,699	1.000	38,699
117	Fam/Gen Surg	Surgery - Family/General Practice	0.2%	91,376	2.361	8,567
143	Fam/Gen Surg	Surgery - General - not otherwise classified	1.6%	121,832	3.148	110,410
		<b>Weighted Rate</b>				<b>118,977</b>
241	Gastroenterology	Gastroenterology - No Surgery	0.6%	52,085	1.346	20,462
274	Gastroenterology	Gastroenterology - Minor Surgery	1.0%	55,544	1.435	33,723
104	Gastroenterology	Surgery - Gastroenterology	0.0%	75,879	1.961	-
		<b>Weighted Rate</b>				<b>54,185</b>
246	Infectious	Infectious Diseases - No Surgery	1.5%	55,845	1.443	55,845
279	Infectious	Infectious Diseases - Minor Surgery	0.0%	88,025	2.275	-
		<b>Weighted Rate</b>				<b>55,845</b>
257	Internal Medicine	Internal Medicine - No Surgery	17.7%	58,514	1.512	55,351
284	Internal Medicine	Internal medicine - Minor Surgery	1.0%	76,180	1.969	4,118
		<b>Weighted Rate</b>				<b>59,469</b>
258	Laryngology	Laryngology - No Surgery	0.0%	33,845	0.875	16,923
285	Laryngology	Laryngology - Minor Surgery	0.0%	50,016	1.292	25,008
		<b>Weighted Rate</b>				<b>41,931</b>

Exhibit 7b

American Physician Assurance Corporation

Illinois Professional Liability

Claims Made, Mature, Territory 1 Specialty Group Weighted Rate  
Evaluated as of 9/30/2004

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Code	Group	Specialty Description	InForce Count (%)	Current Rate 4/1/2004	Current Relativity to 420	Wgtd Rate [(5)x(4)] / (4 Grp Ttl)
141	Major Surgery	Surgery - Cardiac	0.1%	182,421	4.714	28,065
150	Major Surgery	Surgery - Cardiovascular Disease	0.0%	166,714	4.308	-
170	Major Surgery	Surgery - Head and Neck	0.0%	128,244	3.314	-
152	Major Surgery	Surgery - Neurology	0.2%	278,217	7.189	64,204
144	Major Surgery	Surgery - Thoracic	0.1%	176,652	4.565	13,589
171	Major Surgery	Surgery - Traumatic	0.3%	166,714	4.308	64,121
146	Major Surgery	Surgery - Vascular	0.0%	173,382	4.480	-
803	Major Surgery	Surgery Vascular - Peripheral	0.1%	128,244	3.314	19,730
				<b>Weighted Rate</b>		<b>189,708</b>

166	Misc Surgery	Surgery - Abdominal	0.0%	128,244	3.314	-
101	Misc Surgery	Surgery - Broncho-esophagology	0.0%	76,945	1.988	-
103	Misc Surgery	Surgery - Endocrinology	0.2%	72,085	1.863	54,064
106	Misc Surgery	Surgery - Laryngology	0.0%	68,290	1.765	-
474	Misc Surgery	Surgery - Neonatology or Pediatrics	0.0%	128,244	3.314	-
107	Misc Surgery	Surgery - Neoplastic	0.0%	67,326	1.740	-
108	Misc Surgery	Surgery - Nephrology	0.0%	67,326	1.740	-
804	Misc Surgery	Surgery - Ophthalmology - Plastic	0.0%	81,752	2.113	-
158	Misc Surgery	Surgery - Otolaryngology	0.1%	76,945	1.988	19,236
160	Misc Surgery	Surgery - Rhinology	0.0%	76,945	1.988	-
				<b>Weighted Rate</b>		<b>73,300</b>

**American Physician Assurance Corporation**  
**Illinois Professional Liability**

Claims Made, Mature, Territory 1 Specialty Group Weighted Rate  
 Evaluated as of 9/30/2004

Exhibit 7b

(1) Code	(2) Group	(3) Specialty Description	(4) InForce Count (%)	(5) Current Rate 4/1/2004	(6) Current Relativity to 420	(7) Wgtd Rate [(5)x(4)] / (4 Grp Tot)
229	Miscellaneous	Addictionology	0.3%	22,442	0.580	743
230	Miscellaneous	Aerospace Medicine	0.0%	32,059	0.828	-
254	Miscellaneous	Allergy	0.6%	22,954	0.593	1,672
238	Miscellaneous	Endocrinology - No Surgery	0.5%	33,845	0.875	2,017
272	Miscellaneous	Endocrinology - Minor Surgery	0.0%	50,016	1.292	-
240	Miscellaneous	Forensic or Legal Medicine	0.1%	22,442	0.580	149
243	Miscellaneous	Geriatrics - No Surgery	0.0%	33,845	0.875	-
276	Miscellaneous	Geriatrics - Minor Surgery	0.0%	50,016	1.292	-
245	Miscellaneous	Hematology - No Surgery	0.2%	35,265	0.911	934
278	Miscellaneous	Hematology - Minor Surgery	0.0%	50,016	1.292	-
232	Miscellaneous	Hypnosis	0.0%	19,874	0.514	-
283	Miscellaneous	Intensive Care Medicine	0.4%	50,016	1.292	2,650
801	Miscellaneous	Manipulative Medicine	0.1%	23,086	0.597	153
471	Miscellaneous	Neonatology - No Surgery	0.6%	76,945	1.988	5,605
476	Miscellaneous	Neonatology - Minor Surgery	0.2%	96,182	2.485	2,548
259	Miscellaneous	Neoplastic Diseases - No Surgery	0.1%	40,615	1.050	269
262	Miscellaneous	Nuclear Medicine	0.1%	33,845	0.875	448
248	Miscellaneous	Nutrition	0.0%	19,874	0.514	-
233	Miscellaneous	Occupational Medicine	0.7%	26,715	0.690	2,300
473	Miscellaneous	Oncology - No Surgery	0.8%	40,615	1.050	4,035
286	Miscellaneous	Oncology - Minor Surgery	0.1%	50,016	1.292	662
234	Miscellaneous	Pharmacology	0.0%	32,059	0.828	-
235	Miscellaneous	Physiatry or Physical Medicine and Rehabilitation	1.1%	23,086	0.597	3,058
437	Miscellaneous	Physicians - No Major Surgery - acupuncture	0.2%	50,016	1.292	1,325
802	Miscellaneous	Physicians - No Major Surgery - Sclerotherapy	0.1%	54,507	1.408	361
431	Miscellaneous	Physicians - No Major Surgery - shock therapy	0.0%	54,507	1.408	-
268	Miscellaneous	Physicians - not otherwise classified - no surgery	0.2%	32,059	0.828	637
294	Miscellaneous	Physicians - not other classified - minor surgery	0.0%	50,016	1.292	-
236	Miscellaneous	Public Health	0.0%	22,442	0.580	-
269	Miscellaneous	Pulmonary Diseases - No Surgery	0.3%	33,845	0.875	1,345
298	Miscellaneous	Pulmonary Diseases - Minor Surgery	1.3%	57,712	1.491	8,791
252	Miscellaneous	Rheumatology - No Surgery	0.4%	33,845	0.875	1,569
105	Miscellaneous	Surgery - Geriatrics	0.0%	75,879	1.961	-
					<b>Weighted Rate</b>	<b>41,270</b>

Exhibit 7b

American Physician Assurance Corporation

Illinois Professional Liability

Claims Made, Mature, Territory 1 Specialty Group Weighted Rate  
Evaluated as of 9/30/2004

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Code	Group	Specialty Description	InForce Count (%)	Current Rate 4/1/2004	Current Relativity to 420	Wgtd Rate [(5)x(4)] / (4 Grp Ttl)
260	Nephrology	Nephrology - No Surgery	0.1%	33,845	0.875	22,563
287	Nephrology	Nephrology - Minor Surgery	0.1%	50,016	1.292	16,672
				<b>Weighted Rate</b>		<b>39,235</b>
261	Neurology	Neurology - No Surgery	1.7%	51,766	1.338	50,148
288	Neurology	Neurology - Minor Surgery	0.1%	61,461	1.588	1,921
				<b>Weighted Rate</b>		<b>52,069</b>
244	OB/Gyn	Gynecology - No Surgery	0.1%	32,059	0.828	539
277	OB/Gyn	Gynecology - Minor Surgery	0.1%	51,403	1.328	864
167	OB/Gyn	Surgery - Gynecology	0.5%	103,445	2.673	7,824
168	OB/Gyn	Surgery - Obstetrics	0.0%	185,950	4.805	-
153	OB/Gyn	Surgery - Obstetrics - Gynecology	0.0%	185,950	4.805	-
560	OB/Gyn	Surgery - Obstetrics - Gynecology - 0 to 49 deliveries	1.2%	148,769	3.844	27,504
561	OB/Gyn	--50 to 69 deliveries	1.0%	153,409	3.964	21,916
562	OB/Gyn	--70 to 89 deliveries	1.1%	158,056	4.084	25,236
563	OB/Gyn	--90 to 109 deliveries	0.9%	167,356	4.325	22,502
564	OB/Gyn	--110 to 129 deliveries	1.0%	176,656	4.565	26,721
565	OB/Gyn	--130 to 149 deliveries	0.3%	185,950	4.805	9,376
566	OB/Gyn	--150 to 169 deliveries	0.3%	204,546	5.286	8,594
567	OB/Gyn	--170 to 189 deliveries	0.0%	223,141	5.766	-
568	OB/Gyn	--190 to 209 deliveries	0.0%	241,734	6.247	-
569	OB/Gyn	--210 to 229 deliveries	0.0%	260,332	6.727	-
570	OB/Gyn	--230 to 249 deliveries	0.1%	278,924	7.208	2,344
571	OB/Gyn	--250 to 269 deliveries	0.0%	297,520	7.688	-
572	OB/Gyn	--270 to 289 deliveries	0.0%	316,117	8.169	-
573	OB/Gyn	--290 to more deliveries	0.1%	334,710	8.649	5,625
				<b>Weighted Rate</b>		<b>159,043</b>
263	Ophthalmology	Ophthalmology - No Surgery	0.2%	26,225	0.678	4,917
289	Ophthalmology	Ophthalmology - Minor Surgery	0.1%	28,500	0.736	1,781
114	Ophthalmology	Surgery - Ophthalmology	0.7%	50,496	1.305	37,872
				<b>Weighted Rate</b>		<b>44,570</b>

**American Physician Assurance Corporation**  
**Illinois Professional Liability**

Exhibit 7b

Claims Made, Mature, Territory 1 Specialty Group Weighted Rate  
 Evaluated as of 9/30/2004

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Code	Group	Specialty Description	InForce Count (%)	Current Rate 4/1/2004	Current Relativity to 420	Wgtd Rate [(5)x(4)] / (4 Grp Tot)
169	Orthopedic	Surgery - Hand	0.1%	103,875	2.684	2,416
154	Orthopedic	Surgery - Orthopedic	0.4%	182,928	4.727	34,033
164	Orthopedic	Surgery - Orthopedic - without procedures on the back	1.9%	134,793	3.483	106,581
				<b>Weighted Rate</b>		<b>143,029</b>
264	Otology	Otology - No Surgery	0.0%	35,537	0.918	17,769
290	Otology	Otology - Minor Surgery	0.0%	50,016	1.292	25,008
				<b>Weighted Rate</b>		<b>42,777</b>
266	Pathology	Pathology - No Surgery	4.8%	28,613	0.739	28,613
292	Pathology	Pathology - Minor Surgery	0.0%	50,016	1.292	-
				<b>Weighted Rate</b>		<b>28,613</b>
267	Pediatrics	Pediatrics - No Surgery	5.5%	40,282	1.041	37,597
293	Pediatrics	Pediatrics - Minor Surgery	0.4%	59,958	1.549	3,997
				<b>Weighted Rate</b>		<b>41,594</b>
156	Plastic	Surgery - Plastic - not otherwise classified	1.1%	121,883	3.150	115,789
155	Plastic	Surgery - Otorhinolaryngology	0.1%	115,419	2.982	5,771
				<b>Weighted Rate</b>		<b>121,560</b>
249	Psychiatry	Psychiatry	7.1%	22,391	0.579	22,391
250	Psychiatry	Psychoanalysis	0.0%	20,925	0.541	-
251	Psychiatry	Psychosomatic Medicine	0.0%	16,893	0.437	-
				<b>Weighted Rate</b>		<b>22,391</b>
253	Radiology	Radiology - diagnostic - No Surgery	0.9%	50,882	1.315	16,615
280	Radiology	Radiology - diagnostic - Minor Surgery	1.7%	77,424	2.001	47,402
425	Radiology	Radiology - Therapeutic	0.2%	57,517	1.486	3,521
				<b>Weighted Rate</b>		<b>67,538</b>
247	Rhinology	Rhinology - No Surgery	0.0%	33,845	0.875	16,923
270	Rhinology	Rhinology - Minor Surgery	0.0%	50,016	1.292	25,008
				<b>Weighted Rate</b>		<b>41,931</b>

**American Physician Assurance Corporation**

**Exhibit 7b**

**Illinois Professional Liability**

Claims Made, Mature, Territory 1 Specialty Group Weighted Rate  
Evaluated as of 9/30/2004

(1) Code	(2) Group	(3) Specialty Description	(4) InForce Count (%)	(5) Current Rate 4/1/2004	(6) Current Relativity to 420	(7) Wgtd Rate [(5)x(4)] / (4 Grp Tot)
145	Urology	Surgery - Urological	1.7%	79,319	2.050	79,319

**Total**  
100.0%

**Note:**

- (1) Specialty Code
- (2) Specialty Group
- (3) Specialty Description
- (4) In-Force Count Distribution as Percentage
- (5) Current Rates Effective 4/1/2004
- (6) Current Specialty Relativity to Spec. 420-Fam/Gen Pract.-No Surg.
- (7) Weighted Rate - groups without exposure use a straight rate average

American Physician Assurance Corporation

Exhibit 8

Illinois Professional Liability

Claims Made, Mature, Territory 1 Specialty Rates

Evaluated as of 9/30/2004

Code	Specialty Definition	InForce Cnt (%)	Current 4/1/2004	Proposed 4/1/2005	Percent Change
151	Anesthesiology	5.7%	43,600	48,658	11.6%
196	Anesthesiology – Pain Management	1.6%	43,600	48,658	11.6%
255	Cardiovascular Disease – No Surgery	0.4%	33,507	37,941	13.2%
281	Cardiovascular Disease - Minor Surgery	3.3%	69,820	79,058	13.2%
115	Surgery – Colon and Rectal	0.0%	96,185	107,649	11.9%
256	Dermatology – No Surgery	0.7%	23,996	25,271	5.3%
282	Dermatology – Minor Surgery	1.1%	43,282	45,581	5.3%
472	Surgery – Dermatology	0.1%	73,096	76,979	5.3%
237	Diabetes – No Surgery	0.0%	33,845	37,879	11.9%
271	Diabetes – Minor Surgery	0.0%	50,016	55,978	11.9%
102	Emergency Medicine – No Major Surgery	0.0%	100,154	112,092	11.9%
157	Surgery – Emergency Medicine	0.0%	113,907	127,484	11.9%
424	Urgent Care Medicine	0.0%	35,265	39,468	11.9%
265	Otorhinolaryngology – No Surgery	0.1%	24,044	24,422	1.6%
291	Otorhinolaryngology – Minor Surgery	0.0%	50,016	50,804	1.6%
159	Surgery – Otorhinolaryngology	0.3%	73,576	74,735	1.6%
421	Family/General Practitioners – Minor Surgery	0.9%	63,628	65,127	2.4%
521	Family/General Practitioners –Minor Surgery –0 to 24 deliveries	1.1%	64,637	66,159	2.4%
231	General Preventive Medicine – No Surgery	0.2%	22,442	22,971	2.4%
420	Family/General Practitioners – No Surgery	16.4%	38,699	43,575	12.6%
117	Surgery – Family/General Practice	0.2%	91,376	94,795	3.7%
143	Surgery – General – not otherwise classified	1.6%	121,832	126,390	3.7%
241	Gastroenterology – No Surgery	0.6%	52,085	55,458	6.5%
274	Gastroenterology – Minor Surgery	1.0%	55,544	59,141	6.5%
104	Surgery – Gastroenterology	0.0%	75,879	80,793	6.5%
246	Infectious Diseases – No Surgery	1.5%	55,845	69,170	23.9%
279	Infectious Diseases – Minor Surgery	0.0%	88,025	109,028	23.9%
257	Internal Medicine – No Surgery	17.7%	58,514	65,887	12.6%
284	Internal medicine – Minor Surgery	1.0%	76,180	85,779	12.6%
258	Laryngology – No Surgery	0.0%	33,845	37,879	11.9%
285	Laryngology – Minor Surgery	0.0%	50,016	55,978	11.9%
141	Surgery – Cardiac	0.1%	182,421	194,808	6.8%
150	Surgery – Cardiovascular Disease	0.0%	166,714	178,035	6.8%
170	Surgery – Head and Neck	0.0%	128,244	136,952	6.8%
152	Surgery – Neurology	0.2%	278,217	297,109	6.8%
144	Surgery – Thoracic	0.1%	176,652	188,648	6.8%
171	Surgery – Traumatic	0.3%	166,714	178,035	6.8%
146	Surgery – Vascular	0.0%	173,382	185,155	6.8%
803	Surgery Vascular – Peripheral	0.1%	128,244	136,952	6.8%
166	Surgery – Abdominal	0.0%	128,244	136,111	6.1%
101	Surgery – Broncho-esophagology	0.0%	76,945	81,665	6.1%
103	Surgery – Endocrinology	0.2%	72,085	76,507	6.1%
106	Surgery – Laryngology	0.0%	68,290	72,480	6.1%
474	Surgery – Neonatology or Pediatrics	0.0%	128,244	136,111	6.1%
107	Surgery – Neoplastic	0.0%	67,326	71,456	6.1%
108	Surgery – Nephrology	0.0%	67,326	71,456	6.1%
804	Surgery – Ophthalmology – Plastic	0.0%	81,752	86,767	6.1%
158	Surgery – Otolaryngology	0.1%	76,945	81,665	6.1%

**American Physician Assurance Corporation**  
**Illinois Professional Liability**

**Exhibit 8**

Claims Made, Mature, Territory 1 Specialty Rates  
 Evaluated as of 9/30/2004

Code	Specialty Definition	InForce Cnt (%)	Current 4/1/2004	Proposed 4/1/2005	Percent Change
160	Surgery – Rhinology	0.0%	76,945	81,665	6.1%
229	Addictionology	0.3%	22,442	24,456	9.0%
230	Aerospace Medicine	0.0%	32,059	34,936	9.0%
254	Allergy	0.6%	22,954	25,014	9.0%
238	Endocrinology – No Surgery	0.5%	33,845	36,882	9.0%
272	Endocrinology – Minor Surgery	0.0%	50,016	54,504	9.0%
240	Forensic or Legal Medicine	0.1%	22,442	24,456	9.0%
243	Geriatrics – No Surgery	0.0%	33,845	36,882	9.0%
276	Geriatrics – Minor Surgery	0.0%	50,016	54,504	9.0%
245	Hematology – No Surgery	0.2%	35,265	38,429	9.0%
278	Hematology – Minor Surgery	0.0%	50,016	54,504	9.0%
232	Hypnosis	0.0%	19,874	21,657	9.0%
283	Intensive Care Medicine	0.4%	50,016	54,504	9.0%
801	Manipulative Medicine	0.1%	23,086	25,158	9.0%
471	Neonatology - No Surgery	0.6%	76,945	83,849	9.0%
476	Neonatology – Minor Surgery	0.2%	96,182	104,813	9.0%
259	Neoplastic Diseases – No Surgery	0.1%	40,615	44,260	9.0%
262	Nuclear Medicine	0.1%	33,845	36,882	9.0%
248	Nutrition	0.0%	19,874	21,657	9.0%
233	Occupational Medicine	0.7%	26,715	29,112	9.0%
473	Oncology – No Surgery	0.8%	40,615	44,260	9.0%
286	Oncology – Minor Surgery	0.1%	50,016	54,504	9.0%
234	Pharmacology	0.0%	32,059	34,936	9.0%
235	Physiatry or Physical Medicine and Rehabilitation	1.1%	23,086	25,158	9.0%
437	Physicians – No Major Surgery – acupuncture	0.2%	50,016	54,504	9.0%
802	Physicians – No Major Surgery – Sclerotherapy	0.1%	54,507	59,398	9.0%
431	Physicians – No Major Surgery – shock therapy	0.0%	54,507	59,398	9.0%
268	Physicians – not otherwise classified – no surgery	0.2%	32,059	34,936	9.0%
294	Physicians – not other classified – minor surgery	0.0%	50,016	54,504	9.0%
236	Public Health	0.0%	22,442	24,456	9.0%
269	Pulmonary Diseases – No Surgery	0.3%	33,845	36,882	9.0%
298	Pulmonary Diseases – Minor Surgery	1.3%	57,712	62,890	9.0%
252	Rheumatology – No Surgery	0.4%	33,845	36,882	9.0%
105	Surgery – Geriatrics	0.0%	75,879	82,687	9.0%
260	Nephrology – No Surgery	0.1%	33,845	36,922	9.1%
287	Nephrology – Minor Surgery	0.1%	50,016	54,564	9.1%
261	Neurology – No Surgery	1.7%	51,766	52,460	1.3%
288	Neurology – Minor Surgery	0.1%	61,461	62,284	1.3%
244	Gynecology – No Surgery	0.1%	32,059	32,489	1.3%
277	Gynecology – Minor Surgery	0.1%	51,403	52,092	1.3%
167	Surgery – Gynecology	0.5%	103,445	104,831	1.3%
168	Surgery – Obstetrics	0.0%	185,950	188,441	1.3%
153	Surgery – Obstetrics – Gynecology	0.0%	185,950	188,441	1.3%
560	Surgery – Obstetrics – Gynecology – 0 to 49 deliveries	1.2%	148,769	150,762	1.3%
561	--50 to 69 deliveries	1.0%	153,409	155,464	1.3%
562	--70 to 89 deliveries	1.1%	158,056	160,174	1.3%
563	-- 90 to 109 deliveries	0.9%	167,356	169,598	1.3%
564	--110 to 129 deliveries	1.0%	176,656	179,023	1.3%

**American Physician Assurance Corporation**

**Exhibit 8**

**Illinois Professional Liability**

Claims Made, Mature, Territory 1 Specialty Rates

Evaluated as of 9/30/2004

Code	Specialty Definition	InForce Cnt (%)	Current 4/1/2004	Proposed 4/1/2005	Percent Change
565	--130 to 149 deliveries	0.3%	185,950	188,441	1.3%
566	--150 to 169 deliveries	0.3%	204,546	207,286	1.3%
567	--170 to 189 deliveries	0.0%	223,141	226,131	1.3%
568	--190 to 209 deliveries	0.0%	241,734	244,973	1.3%
569	--210 to 229 deliveries	0.0%	260,332	263,820	1.3%
570	--230 to 249 delivers	0.1%	278,924	282,661	1.3%
571	--250 to 269 delivers	0.0%	297,520	301,506	1.3%
572	--270 to 289 deliveries	0.0%	316,117	320,353	1.3%
573	--290 to more deliveries	0.1%	334,710	339,194	1.3%
263	Ophthalmology – No Surgery	0.2%	26,225	30,767	17.3%
289	Ophthalmology – Minor Surgery	0.1%	28,500	33,435	17.3%
114	Surgery – Ophthalmology	0.7%	50,496	59,240	17.3%
169	Surgery – Hand	0.1%	103,875	111,148	7.0%
154	Surgery – Orthopedic	0.4%	182,928	195,736	7.0%
164	Surgery – Orthopedic – without procedures on the back	1.9%	134,793	144,231	7.0%
264	Otology – No Surgery	0.0%	35,537	39,773	11.9%
290	Otology – Minor Surgery	0.0%	50,016	55,978	11.9%
266	Pathology – No Surgery	4.8%	28,613	30,398	6.2%
292	Pathology – Minor Surgery	0.0%	50,016	53,137	6.2%
267	Pediatrics – No Surgery	5.5%	40,282	41,860	3.9%
293	Pediatrics – Minor Surgery	0.4%	59,958	62,307	3.9%
156	Surgery – Plastic – not otherwise classified	1.1%	121,883	123,516	1.3%
155	Surgery – Otorhinolaryngology	0.1%	115,419	116,965	1.3%
249	Psychiatry	7.1%	22,391	22,691	1.3%
250	Psychoanalysis	0.0%	20,925	21,205	1.3%
251	Psychosomatic Medicine	0.0%	16,893	17,119	1.3%
253	Radiology – diagnostic – No Surgery	0.9%	50,882	55,292	8.7%
280	Radiology – diagnostic – Minor Surgery	1.7%	77,424	84,134	8.7%
425	Radiology – Therapeutic	0.2%	57,517	62,502	8.7%
247	Rhinology – No Surgery	0.0%	33,845	37,879	11.9%
270	Rhinology – Minor Surgery	0.0%	50,016	55,978	11.9%
145	Surgery – Urological	1.7%	79,319	87,182	9.9%
<b>Total</b>		<b>100.0%</b>	<b>59,583</b>	<b>64,279</b>	<b>7.9%</b>
Overall Base Rate and Specialty Change					7.9% (1)
Family/General Practitioners – No Surgery					12.6% (2)
Specialty Relativity and Base Rate Change					-4.2% (3)

Exhibit 9

American Physician Assurance Corporation  
 Illinois Professional Liability  
 Territory Rate Indication  
 Evaluated as of 9/30/2004

(1) Current Territory	(2) Inforce Count %	(3) Current Relativity to Terr 1	(4) Territory Credibility	(5) Indicated Territory Rt. Change	(6) Indicated Relativity to Terr 1	(7) Indicated Change in Relativity	(8) Min. Bias Proposed Relativity to Terr 1	(9) Selected Proposed Relativity to Terr 1	(10) Proposed Change in Relativity
1	56.9%	1.00000	0.908	7.7%	1.00000	0.0%	1.00000	1.00000	0.0%
2	7.6%	0.80000	0.576	0.8%	0.74906	-6.4%	0.84829	0.82000	2.5%
3	20.9%	0.75000	0.752	10.2%	0.76747	2.3%	0.79743	0.77000	2.7%
4	3.0%	0.60000	0.287	-12.4%	0.48799	-18.7%	0.61454	0.61000	1.7%
5	2.0%	0.64000	0.369	20.1%	0.71391	11.5%	0.67494	0.66000	3.1%
6	9.4%	0.50000	0.662	17.6%	0.54605	9.2%	0.51675	0.50000	0.0%
<b>Total/Ave.</b>	<b>100.0%</b>	<b>0.86577</b>			<b>0.86797</b>	<b>0.3%</b>	<b>0.88212</b>	<b>0.87220</b>	<b>0.7%</b>

NOTE:

- (2) Inforce Exposure Distribution
- (3) Current Territorial Rate Relativity
- (4)  $Credibility = \text{Prem} / (\text{Prem} + K)$ ; where  $K = \$20 \text{ M}$
- (5) One way analysis indicated rate change
- (6) Indicated Relativity,  $\{(3) \times [1.0 + (5)]\} / [1.0 + (5); \text{Territory 1}]$
- (7)  $(6) / (3) - 1.0$
- (8) Minimum Bias Proposed Relativity
- (9) Selected Proposed Relativity
- (10)  $(9) / (3) - 1.0$

**American Physician Assurance Corporation**

**Exhibit 10**

**Illinois Professional Liability**

Proposed ILFs: 1M/1M excess 1M/3M

Evaluated as of 9/30/2004

Physician Type	Inforce WP %	Current ILF Factor	Proposed ILF Factor	Proposed Change in ILF
Physicians	1.5%	1.280	1.344	5.0%
Surgeons	2.0%	1.350	1.418	5.0%
High Risk	1.2%	1.390	1.460	5.0%
<b>Total</b>	<b>4.7%</b>			<b>5.0%</b>

<b>Direct Premium Impact</b>	<b>0.3%</b>
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**Chorley, Jane**

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**From:** Chorley, Jane  
**Sent:** Tuesday, June 07, 2005 12:08 PM  
**To:** 'Sarah\_Fore@ins.state.il.us'  
**Subject:** RE: American Physicians Filing #: IL-05-05

June 7, 2005

Dear Ms. Fore,

This is a follow-up to your below e-mail requesting additional actuarial support for American Physicians Assurance Corporation's Rate/Rule filing IL-05-05. Please find attached the response to your questions from Mr. Kevin Dyke, Chief Actuary.

Should you have any additional questions or concerns, please direct them to my attention at 800-748-0465, Ext. 6794 or e-mail me at [jchorley@apcapital.com](mailto:jchorley@apcapital.com).

Thank you for your assistance regarding this submission.

Regards,

Jane Chorley  
Director of Compliance  
American Physicians Assurance Corporation  
800-748-0465, Ext. 6794  
fax: 517-333-2800  
e-mail: [jchorley@apcapital.com](mailto:jchorley@apcapital.com)

-----Original Message-----

**From:** Sarah\_Fore@ins.state.il.us [mailto:Sarah\_Fore@ins.state.il.us]  
**Sent:** Monday, May 09, 2005 2:28 PM  
**To:** Chorley, Jane  
**Subject:** American Physicians Filing #: IL-05-05

Ms. Chorley,

I am an actuary with the IL Division of Insurance and am reviewing the above filing. After my review of the actuarial support, I have attached a list of my questions.

Thank you in advance for your cooperation.

Sincerely,

Sarah J. Fore, ACAS, MAAA  
Associate Casualty Actuary  
IL Division of Insurance

American Physicians Assurance Corporation  
Medical Professional Liability – Illinois  
Proposed Rate Change effective April 1, 2005  
Actuarial Memorandum – Response to May 9, 2005 Email Letter

**Department Concern #1**

*Further explain the reinsurer's request to revise the increased limits factors.*

**Response to Concern #1**

APA purchases reinsurance for claims in excess of \$1 million on a cessions basis, which means that we cede all of the premium in excess of \$1 million to our reinsurers in turn for full coverage for the portion of claims excess of \$1 million. During negotiations for our reinsurance treaty which renews annually on January 1, our lead reinsurer suggested our increased limit factors were deficient based on its analysis of claims excess of \$1 million in Illinois. They have access to other companies' data to allow them to suggest more credible ILFs excess of \$1 million than we are able to develop based on our own experience.

The following table compares our proposed factors with those filed by our competitor ISMIE, effective July 1, 2004. We find the reinsurer request to be in line with the market.

<b>Specialty Type</b>	<b>Current APA</b>	<b>Proposed APA</b>	<b>ISMIE 7/1/2004</b>
Physicians	1.280	1.344	1.345
Surgeons	1.350	1.418	1.345 to 1.472
High risk	1.390	1.460	1.395 to 1.515

**Department Concern #2**

*(Exhibits 3B and 3C) Explain the selected development factors. On the Incurred data, countrywide factors were used; on the Paid data, IL factors were used; and on the CWA data, a combination of the two was*

*used. Also, some selections are not close to either countywide or IL specific development (for example, the Paid loss development factors after 69 months).*

**Response to Concern #2**

At the time of the analysis, the evaluation period 1997 through 2003 showed only 91 claims closed with indemnity. This claim inventory of closed claims is not large enough to be credible. Therefore, we decided to rely on the countrywide incurred factors for our Incurred data.

For the reasons indicated above, the paid projection was also supplemented with countrywide factors. Furthermore, for evaluation months 69 and subsequent, an incurred to paid factor of 1.051 was applied to the 1996 through 1999 paid ultimates to recognize for the much thicker tail implied by the incurred data shown in the following table:

Method	1999	1998	1997	1996	Total
Proj'd Inc	12,785	6,818	1,410	368	21,382
Proj'd Pd	14,963	5,035	996	388	21,382

In addition, Illinois' closing pattern is slower than most of our other states and therefore, in our view, the more difficult cases have not worked themselves into our closed experience, therefore we used the countrywide factors in the selection of the CWA factors for 69 months and onward.

**Department Concern #3**

*(Exhibit 3D) Explain the selected development factors for the Incurred triangle. For example, the historical averages for 45 to 57 months are 1.015, 1.015, and .996; however, the selected factor is 1.058. A similar case was noted for the 69 to 81 month selection. Also on this exhibit, explain the paid and incurred selected factors for after 93 months.*

### Response to Concern #3

Part of our review, but not included in our original filing, was our effort to fit four curves (Exponential Decay, Inverse Power, Power and Weibull) to the development ratios. The curves were fitted to the median of the “all year”, “5 year” and “3 year” volume weighted factors shown in Exhibit 3d for incurred and paid data separately. The results of our fitting process as well as the coefficient of determination ( $R^2$ ) are shown in Exhibit 3b-Supplement. These curves were part of our selection process

### Department Concern #4

*(Exhibit 5A) Provide support for the profit provision.*

### Response to Concern #4

The underwriting profit provision is the result of a number of assumptions regarding prevailing interest rates, underwriting leverage (premium/surplus), underwriting expenses, the percentage of unearned premium and surplus available to support underwriting operations, and federal income taxes on underwriting and investment income. The proposed profit provision was derived assuming an after-tax 15% return on equity and the following return model and assumptions:

(A) Premium to surplus ratio	0.95
(B) After tax investment income (% of surplus)	8.7%
(C) Tax rate on underwriting income	35%

Pre-tax underwriting profit provision =  $(15\% - B) / A / (1 - C) = 10.2\% \sim 10\%$

### Department Concern #5

*(Exhibit 5C) There is a significant decreasing trend in the ULAE ratio. Should this be reflected more in the selected ULAE provision?*

### Response to Concern #5

During the period 2001 to 2003, the company has gone through a period of case reserve and IBNR reserve strengthening related to the 1997 through 2000 exposure years for states outside Illinois. Therefore the recent countrywide ULAE ratios would not be appropriate for Illinois. We believe the 2001 through 2003 ULAE ratios understate the true ratio and an overall average is more appropriate.

#### **Department Concern #6**

*(Exhibit 9) Provide the underlying support for Column 5.*

#### **Response to Concern #6**

For each territory, we analyzed the experience historical claims-made indemnity loss and allocated loss adjustment experience for our physicians and surgeons program as of September 30, 2004 for the 7 year period 1997 through 2003. Indemnity losses were capped at \$1,000,000 per claim to limit the effect of any single claim on the indicated relativities. Allocated loss adjustment expense (ALAE) were not capped or prorated based on the capping procedure for indemnity. Premiums limited to \$1 M were converted to current manual rate level (rates that became effective April 1, 2004) and discounted for the projected underwriting discounts. Incurred losses capped to \$1M plus ALAE were projected to ultimate using supplemental case reserve factors derived from the overall state analysis. The resulting loss ratios by territory were trended to the projected cost level for policies written 4/1/05 to 3/31/06.

The adjusted loss ratios by territory were credibility weighted with the indicated statewide loss ratio using the following credibility formula:

$$\text{Credibility} = P / (P + K)$$

where,

P = Manual Earned Premium at Current Rate Level

K = \$20,000,000

For each territory the resulting credibility weighted loss ratios was compared with our target loss ratio to calculate the indicated premium level change which is labeled as "Indicated Territory Rt. Change" column on Exhibit 9. The current relativity is multiplied by

$(1 + \text{Indicated Territory Rate Change}) / (1 + \text{Indicated Territory Rate Change for Territory 1})$   
to calculate the “Indicated Relativity to Terr 1” column.

Submitted respectfully by,



Kevin M. Dyke, FCAS, MAAA  
Chief Actuary, Professional Liability  
American Physicians Assurance Corporation  
June 7, 2005

**American**   
**Physicians**<sup>SM</sup>  
ASSURANCE CORPORATION

*Practices That Set The Standard*

May 4, 2005

**OVERNIGHT**

Ms. Gayle Neuman  
Property & Casualty Compliance Unit  
Illinois Division of Insurance  
320 West Washington Street, 4th Floor  
Springfield, IL 62676

APA's Filing No.: **IL-05-05**  
NAIC No.: 33006  
Company FEIN: 38-2102867

Subject: Professional Medical Malpractice Liability  
Program: Health Care Providers Professional Liability Program  
Type: Rates/Rules  
Effective Date: April 1, 2005

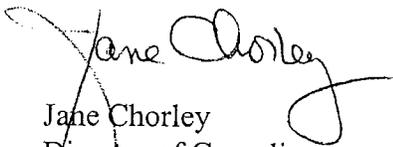
Dear Ms. Neuman:

This is a follow-up to your e-mail dated May 2, 2005, regarding the above captioned submission. The following is being submitted in response to your comments:

1. Enclosed is the executed "Illinois Certification for Medical Malpractice Rates" in compliance with 215 ILCS 5/155.18(3).
2. In regards to gathering of statistics, American Physicians gathers statistical information in-house and annually reports data to the Illinois Division of Insurance in compliance with the Data Call for Part 4203 – Cost Containment Reporting Requirements.

Please direct any questions regarding this submission to my attention at 800-748-0465, Ext. 6794 or e-mail me at [jchorley@apcapital.com](mailto:jchorley@apcapital.com).

Sincerely,

  
Jane Chorley  
Director of Compliance  
Member of APCapital Group

Encs.

1. Further explain the reinsurer's request to revise the increased limits factors.
2. (Exhibits 3B and 3C) Explain the selected development factors. On the Incurred data, countrywide factors were; on the Paid data, IL factors were used; and on the CWA data, a combination of the two was used. Also, some selections are not close to either countywide or IL specific development (for example, the Paid loss development factors after 69 months).
3. (Exhibit 3D) Explain the selected development factors for the Incurred triangle. For example, the historical averages for 45 to 57 months are 1.015, 1.015, and .996; however, the selected factor is 1.058. A similar case was noted for the 69 to 81 month selection. Also on this exhibit, explain the paid and incurred selected factors for after 93 months.
4. (Exhibit 5A) Provide support for the profit provision.
5. (Exhibit 5C) There is a significant decreasing trend in the ULAE ratio. Should this be reflected more in the selected ULAE provision?
6. (Exhibit 9) Provide the underlying support for Column 5.

Exhibit 3d-Supplement

American Physician Assurance Corporation

Countrywide Professional Liability

Curve Fitting

Excluding Michigan and Two Kentucky High Frequency Policies

(000's omitted)

Countrywide: Claims Made Case Incurred Losses Capped at \$1M plus ALAE @ 9/30/2004

Development Year	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141	141-153	153-165	165-177	177-189	189-201	201-213	213-225	225-Ult	
1-Prelim. LDF Select	1.144	1.075	1.015	1.045	1.005	1.016	1.003	1.000	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Include	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Exponential Decay	1.134	1.089	1.059	1.039	1.026	1.017	1.011	1.008	1.005	1.003	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000
3-Inverse Power	1.141	1.085	1.054	1.036	1.025	1.018	1.013	1.010	1.008	1.006	1.005	1.004	1.003	1.003	1.002	1.002	1.002	1.001	1.001
4-Power	1.134	1.088	1.058	1.039	1.026	1.017	1.012	1.008	1.005	1.003	1.002	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.000
5-Weibull	1.142	1.083	1.053	1.036	1.026	1.019	1.014	1.011	1.008	1.007	1.005	1.004	1.003	1.003	1.002	1.002	1.002	1.001	1.001

Statistics-Log Regression:

Curve	A	B	C	R-squared
Exponential Decay	0.3040974	-0.410767	-	97.58%
Inverse Power	231.27436	3.803437	5.00	96.85%
Power	1.3241982	0.6703583	-	97.55%
Weibull	1.4558895	0.51795	-	97.18%

Fit Selection:

Select	1	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Selected Value	1.144	1.075	1.058	1.039	1.026	1.017	1.012	1.008	1.005	1.003	1.002	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000

Countrywide: Claims Made Paid Losses Capped at \$1M plus ALAE @ 9/30/2004

Development Year	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117	117-129	129-141	141-153	153-165	165-177	177-189	189-201	201-213	213-225	225-Ult	
1-Prelim. LDF Select	2.542	1.494	1.247	1.148	1.075	1.030	1.023	1.027	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Include	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Exponential Decay	2.264	1.604	1.289	1.138	1.066	1.031	1.015	1.007	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3-Inverse Power	2.449	1.579	1.258	1.125	1.065	1.036	1.021	1.012	1.008	1.005	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000
4-Power	2.392	1.574	1.267	1.131	1.066	1.034	1.017	1.009	1.005	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5-Weibull	2.387	1.588	1.278	1.135	1.065	1.031	1.014	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Statistics-Log Regression:

Curve	A	B	C	R-squared
Exponential Decay	5.5360703	-0.738506	-	98.7%
Inverse Power	922044.75	-6.867414	5.00	98.9%
Power	25.006036	0.5204985	-	99.1%
Weibull	0.192988	1.4918175	-	98.9%

Fit Selection:

Select	1	1	1	1	1	1	5	5	5	5	5	5	5	5	5	5	5	5	5
Selected Value	2.542	1.494	1.247	1.148	1.075	1.031	1.014	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

**Chorley, Jane**

---

**From:** Sarah\_Fore@ins.state.il.us  
**Sent:** Monday, May 09, 2005 2:28 PM  
**To:** Chorley, Jane  
**Subject:** American Physicians Filing #: IL-05-05

Ms. Chorley,

I am an actuary with the IL Division of Insurance and am reviewing the above filing. After my review of the actuarial support, I have attached a list of my questions.

Thank you in advance for your cooperation.

Sincerely,

Sarah J. Fore, ACAS, MAAA

Associate Casualty Actuary

IL Division of Insurance

5/24/2005

**Chorley, Jane**

---

**From:** Sarah\_Fore@ins.state.il.us  
**Sent:** Monday, May 09, 2005 2:28 PM  
**To:** Chorley, Jane  
**Subject:** American Physicians Filing #: IL-05-05

Ms. Chorley,

I am an actuary with the IL Division of Insurance and am reviewing the above filing. After my review of the actuarial support, I have attached a list of my questions.

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Sarah J. Fore, ACAS, MAAA  
Associate Casualty Actuary  
IL Division of Insurance

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2. (Exhibits 3B and 3C) Explain the selected development factors. On the Incurred data, countrywide factors were; on the Paid data, IL factors were used; and on the CWA data, a combination of the two was used. Also, some selections are not close to either countywide or IL specific development (for example, the Paid loss development factors after 69 months).
3. (Exhibit 3D) Explain the selected development factors for the Incurred triangle. For example, the historical averages for 45 to 57 months are 1.015, 1.015, and .996; however, the selected factor is 1.058. A similar case was noted for the 69 to 81 month selection. Also on this exhibit, explain the paid and incurred selected factors for after 93 months.
4. (Exhibit 5A) Provide support for the profit provision.
5. (Exhibit 5C) There is a significant decreasing trend in the ULAE ratio. Should this be reflected more in the selected ULAE provision?
6. (Exhibit 9) Provide the underlying support for Column 5.