# Legislative Actuarial Note 

Health Benefits

BILL NUMBER: House Bill 1985 (First Edition)<br>SHORT TITLE: State Health Plan/Repeal Indemnity Plan.<br>SPONSOR(S): Representative Holliman

SYSTEM OR PROGRAM AFFECTED: Teachers' and State Employees' Comprehensive Major Medical Plan.

FUNDS AFFECTED: State General Fund, State Highway Fund, other State employer receipts, premium payments for dependents by active and retired teachers and State employees, premium payments for coverages selected by eligible former teachers and State employees, premium payments for coverages selected by firefighters, rescue squad workers, members of the National Guard, and certain authorized local governments.

BILL SUMMARY: Enacts new GS 135-39.5(28) allowing the Executive Administrator and Board of Trustees of the Teachers' and State Employees' Comprehensive Major Medical Plan to discontinue the indemnity plan, as long as the Executive Administrator and Board of Trustees make an alternative health benefit option with similar benefits available on the same day as the discontinuation. A noncontributory plan option must be available at all times. Effective July 1, 2007, and provides that an alternative health benefit option may become effective no earlier than July 1, 2008. Source: Bill Digest H.B. 1985 (05/08/0200)

EFFECTIVE DATE: July 1, 2008
Based upon information provided by the Plan, Aon Consulting, consulting actuary for the Plan, estimates that elimination of the Indemnity plan as a benefit option effective July 1, 2008, will result in a total cost reduction of $\$ 85.3$ million in the 2008-2009 fiscal year. The elimination of the Indemnity plan would reduce premium contributions to the overall Plan by $\$ 31.8$ million through shifting current Indemnity plan members to lower premium rates under the PPO. This premium reduction accrues to the employing agencies and plan members paying dependent premiums. Thus, the estimated net savings to the Plan is $\$ 53.5$ million according to Aon Consulting's actuarial estimate.

Based upon information provided by the Plan, Hartman \& Associates, consulting actuary for the General Assembly, estimates that elimination of the Indemnity plan as a benefit option effective July 1, 2008, will result in a total cost reduction of $\$ 55.1$ million (gross savings in provider rates minus richer benefits paid under the PPO) in the 2008-2009 fiscal year. The elimination of the Indemnity plan reduces premium contributions to the overall Plan by $\$ 31.4$ through shifting current Indemnity plan members to lower premium rates under the PPO. This premium reduction
accrues to the employing agencies and members paying dependent premiums. Thus, the estimated net savings to the Plan is $\$ 23.7$ million according to the actuarial analysis of the Plan’s data by Hartman and Associates.

## ASSUMPTIONS AND METHODOLOGY:

## Assumptions for HB 1985 by each Consulting Actuary

Hartman and Associates: The information below reflects the verbatim assumptions of the General Assembly's consulting actuary with respect to the estimate of cost reduction:

## <Begin quote>

To model ending the Indemnity program, I assumed all current Indemnity members become covered under the Standard (SmartChoice) PPO option as of July 1, 2008. Claim costs for these members were projected by modeling the primary changes in benefit provisions and adjusting for the difference in PPO provider reimbursement rates. The Plan has assumed that reimbursement rates for medical services are 8\% lower under the PPO than in the Indemnity program, although they state a detailed analysis is not available. I used an $8 \%$ reduction in allowable charges in this analysis; however, I do not have sufficient data to verify this assumption, and results could vary significantly based on a detailed rate comparison.

Based on the lower provider reimbursement rates, ending the indemnity program is expected to provide a savings to the Plan of $\$ 23,716,000$ for the 2009 fiscal year. The savings is a combination of lower benefit costs offset by a reduction in premium income due to lower PPO premium rates. The table below provides detail on the components of the change.

| Impact of Ending Indemnity Program <br> Fiscal Year 2009 |  |
| :--- | :---: |
| Component | Savings/(Cost) |
| Reduced Provider Rates | $\$ 72,713,200$ |
| Benefit Enhancements | $(17,620,600)$ |
| Reduced Member Premiums | $(21,606,100)$ |
| Reduced Employer Premiums |  |
|  | $\$ 23,716,000$ |
| Total Impact on Plan | $\$ 45,486,500$ |
| Reduction in Employer Financing |  |

These projections are based on the indemnity program ending June 30, 2008. The premium differential is based on the current premium rates under the Plan. A summary of assumptions and basic data is included an Attachment \#1. The results do not account for any migration from the Indemnity program to the PPO's prior to July 1, 2008. Such movement could occur and would alter the above results.

# House Bill 1985 <br> Actuarial Assumptions and Data <br> [Attachment 1] 

Data Sources: SHP Distribution of Claims Reports FY 2003-06
SHP Charge Summary Reports FY 2005-06
SHP Utilization Study for FY 2002-2006
SHP Report on Mental Health and Substance Abuse Care FY 2002-2006

Data Summary:

| Distribution of Claims <br> FY2006 |  |
| :---: | :---: |
| Annual <br> Eligible Charges | Percent of Plan <br> Members |
| $<\$ 150$ | $13.8 \%$ |
| $150-300$ | $4.2 \%$ |
| $300-500$ | $4.5 \%$ |
| $500-1,000$ | $9.4 \%$ |
| $1,000-5,000$ | $34.0 \%$ |
| $5,000-10,000$ | $14.6 \%$ |
| $10,000-20,000$ | $10.0 \%$ |
| $20,000-40,000$ | $5.5 \%$ |
| $>40,000$ | $4.0 \%$ |


| Indemnity Plan Office Visits <br> Fiscal Year 2006 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Annual Visits/Member |  |  |  |
| Group | Primary <br> Care | Specialty <br> Care | Total | Allowed <br> per Visit |
| Active | 2.3 | 4.3 | 6.6 | $\$ 136$ |
| Non-Medicare Retired | 3.2 | 7.3 | 10.5 | $\$ 158$ |
| Medicare Retired | 3.0 | 8.7 | 11.7 | $\$ 35$ |


| Plan Members: | Indemnity | 255,211 |
| :--- | :--- | :--- |
|  | PPO | 363,477 |


| Indemnity Membership by Coverage Type <br> December 31, 2006 |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| Medicare | Coverage Type | Contracts | Dependents | Members |
| Non-Medicare | Employee | 111,740 | 0 | 111,740 |
|  | EE+Children | 10,752 | 18,358 | 29,110 |
|  | EE+Family | 9,451 | 19,491 | 28,942 |
|  |  |  |  |  |
| Medicare Elig | Employee | 71,479 | 0 | 71,479 |
|  | EE+Children | 341 | 479 | 820 |
|  | EE+Child Elig | 115 | 121 | 236 |
|  | EE+Family | 1,665 | 1,991 | 3,656 |
|  | EE+Family Elig | 4,537 | 4,691 | 9,228 |
|  |  |  |  |  |
| Total |  | 210,080 | 45,131 | 255,211 |

Actuarial Assumptions:

| Annual Claims Trends | $3.0 \%$ on office visit utilization <br> $9.0 \%$ on overall claims |
| :--- | :--- |
| Membership Growth | $0.0 \%$ |
| Pct. Elig. Charge Allowed | $75.0 \%$ |
| Average Allowed Charge |  |
| Subject to Ded/Coins | $\$ 3,652$ |
| Claim Payment Lag | 60 days for medical claims |

Premium Rate Increase None assumed
Indemnity Plan gross claim rates were reduced $11.0 \%$ as a result of lower Provider Reimbursement rates under the PPO network for fiscal year 2009. This represents the $8.0 \%$ rate reduction plus the impact of leveraging from member co-pays.

Claims for current Indemnity members were increased in fiscal year 2009 to reflect the enhanced benefits under the PPO. Costs were calculated for lower deductible and coinsurance maximum and for the different application of co-payments for office visits. No differences were calculated for mental health and substance abuse treatment or therapy treatments due to the similar benefit requirement.
<End quote>

Aon Consulting: The information below reflects the verbatim comments and assumptions of the Plan's consulting actuary with respect to the projection of funding need and estimate of cost reduction:
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## PRICING APPROACH AND COMMENTS

The following information was compiled and utilized in determining the projected costs or savings of the benefit component addressed in this actuarial note:

- The March 2007 actuarial projections were utilized for the baseline numbers in the calculations. The projections have incorporated years of financial data, premium collections, administrative expense, enrollment reports, contributions receipts, claims distributions, seasonality curves, etc. The historical data goes back to 1995.
- Effective $10 / 1 / 2006$, the plan implemented the BlueChoice PPO program. The current program has three options. Aon used the most recently available financial data, in conjunction with various reports from the claims processing contractor, to project program specific costs. The baseline projections are currently divided between the PPO and Indemnity plans and combined in total.
- In additional to current financial projections, Aon made a number of assumptions to convert the current indemnity members to PPO members. We assumed that the PPO enrollment would be similar to their indemnity enrollment, meaning no movement or additional members would be added to the program. Consistent with prior actuarial estimated, the PPO was assumed to produce an $8 \%$ overall saving. There were no assumed utilization changes. The overall projected PPO per member cost took the average indemnity cost reduced by $8 \%$ and then added to it the current PPO member cost to generate a new aggregate PPO cost.
- A 2-month claims run-out was assumed for the indemnity plan members.
- Starting December 2008, a comprehensive health management program is anticipated to reduce program costs by $0.2 \%$, increasing at $0.25 \%$ per month. These savings are assumed to produce a $100 \%$ ROI for the program expenditures.
- Net claims and administrative expense savings are primarily a result of reductions to provider contractual provisions and benefit design differences with the indemnity plan. Premium rates are lower than the indemnity plan. Lower premium rates result in a reduction to State premium rates of $\$ 22.1$ million and a reduction to Employee/Retirees contribution rates of $\$ 9.7$ million. The net savings to the state would be the claims and expenses less the employee contributions or $\$ 75.6$ million. The net impact to the Plan would include an offset from reduced State funding, reducing the savings to $\$ 53.5$ million.
<End quote>


## General Plan Assumptions

The Plan currently operates on a self-insured basis funded through premium contributions, investment earnings and other receipts. As of October 1, 2006, the Plan operates an Indemnity plan and an optional Preferred Provider Option (PPO) program. Claim cost trends are expected to increase at a rate of $9 \%$ annually according to the Plan's consulting actuary. Investment earnings are based upon a $4.5 \%$ return on available cash balances.

Combined Financial Components of the Plan: For the fiscal year beginning July 1, 2006, the Plan started its operations with a beginning cash balance of $\$ 246$ million. Receipts for the year are estimated to be $\$ 1.946$ billion from premium collections, $\$ 34$ million from Medicare Part D subsidies and $\$ 11$ million from investment earnings for a total of $\$ 1.991$ billion in receipts for the year. Disbursements from the Plan are expected to be $\$ 1.977$ billion in claim payments and $\$ 105$ million in administration and claims processing expenses for a total of $\$ 2.082$ billion. For the fiscal year beginning July 1, 2006, the self-insured indemnity program is expected to have a net operating loss of approximately $\$ 91$ million for the year. The Plan is expected to have an available beginning cash balance of $\$ 155$ million for the fiscal year beginning July 1, 2007. The Plan program maintains a claim stabilization reserve for claim cost fluctuations equal to $7.5 \%$ of annual claim payments without reserving additional funds for incurred but unreported claims.

Indemnity Plan Component: For the fiscal year beginning July 1, 2006, the Indemnity plan started its operations with a beginning cash balance of $\$ 246$ million. Receipts for the year are estimated to be $\$ 1.113$ billion from premium collections, $\$ 34$ million from Medicare Part D subsidies and $\$ 9.5$ million from investment earnings for a total of $\$ 1.156$ billion in receipts for the year. Disbursements from the Indemnity plan are expected to be $\$ 1.213$ billion in claim payments and $\$ 66$ million in administration and claims processing expenses for a total of $\$ 1.279$ billion. For the fiscal year beginning July 1, 2006, the self-insured indemnity program is expected to have a net operating loss of approximately $\$ 123$ million for the year. The Indemnity plan is expected to have an available beginning cash balance of $\$ 123$ million for the fiscal year beginning July 1, 2007.

PPO Program Component: For the fiscal year beginning July 1, 2006, the PPO program started its operations with a beginning cash balance of $\$ 0$ million. Receipts for the year are estimated to be $\$ 833$ million from premium collections, $\$ 0$ million from Medicare Part D subsidies and $\$ 1.5$ million from investment earnings for a total of $\$ 835$ million in receipts for the year. Disbursements from the Indemnity plan are expected to be $\$ 763$ million in claim payments and $\$ 39$ million in administration and claims processing expenses for a total of $\$ 803$ million. For the fiscal year beginning July 1, 2006, the self-insured indemnity program is expected to have net operating income of approximately $\$ 32$ million for the year. The Plan is expected to have an available beginning cash balance of $\$ 32$ million for the fiscal year beginning July 1, 2007. The Plan program maintains a claim stabilization reserve for claim cost fluctuations equal to $7.5 \%$ of annual claim payments without reserving additional funds for incurred but unreported claims.

The Plan is consequently assumed to not be able to carry out its operations for the 2007-2009 biennium without increases in its current premium rates or a reduction in existing benefits or payments to health care providers or both. This assumption is further predicated upon the fact that the program's cost containment strategies (hospital DRG reimbursements, discounts on hospital
outpatient services, pre-admission hospital testing, pre-admission hospital inpatient certification with length-of-stay approval, hospital bill audits, case and disease management for selected medical conditions, mental health case management, coordination of benefits with other payers, Medicare benefit "carve-outs", cost reduction contracts with participating physicians and other providers, a prescription drug benefit manager with manufacturer rebates from formularies, and fraud detection) are maintained and improved where possible.

## Enrollment Data

| Percent Enrollment by Age | Indemnity <br> Plan | PPO <br> Options | Total |
| :--- | ---: | ---: | ---: |
| 29 \& Under | $\frac{16.6 \%}{}$ | $33.6 \%$ | $26.6 \%$ |
| 30 to 44 | $14.2 \%$ | $24.7 \%$ | $20.4 \%$ |
| 45 to 54 | $16.0 \%$ | $21.3 \%$ | $19.1 \%$ |
| 55 to 64 | $21.9 \%$ | $16.4 \%$ | $18.7 \%$ |
| 65 \& Over | $31.3 \%$ | $4.1 \%$ | $15.3 \%$ |


|  | Indemnity | PPO |  | Percent of |
| :---: | :---: | :---: | :---: | :---: |
| Percent Enrollment by Sex | Plan | Options | Total | Total |
| Female | 62.4\% | 162,497 | 223,760 | 386,257 |
| Male | 37.6\% | 92,714 | 139,717 | 232,431 |
| Total | 100.0\% | 255,211 | 363,477 | 618,688 |

## Plan Enrollment as of December 31, 2006

| No. of Participants | Indemnity Plan | PPO <br> Options | Total | Percent of Total |
| :---: | :---: | :---: | :---: | :---: |
| Actives |  |  |  |  |
| Employees | 100,405 | 211,349 | 311,754 | 50.4\% |
| Dependents | 32,776 | 112,785 | 145,561 | 23.5\% |
| Sub-total | 133,181 | 324,134 | 457,315 | 73.9\% |
| Retired |  |  |  |  |
| Employees | 108,263 | 29,764 | 138,027 | 22.3\% |
| Dependents | 11,876 | 7,700 | 19,576 | 3.2\% |
| Sub-total | 120,139 | 37,464 | 157,603 | 25.5\% |
| Former Employees with |  |  |  |  |
| Continuation Coverage |  |  |  |  |
| Employees | 1,391 | 297 | 1,688 | 0.3\% |
| Dependents | 478 | 154 | 632 | 0.1\% |
| Sub-total | 1,869 | 451 | 2,320 | 0.4\% |
| Firefighters, Rescue Squad \& |  |  |  |  |
| National Guard |  |  |  |  |
| Employees | 5 | 2 | 7 | 0.0\% |
| Dependents | - | 2 | 2 | 0.0\% |
| Sub-total | 5 | 4 | 9 | 0.0\% |
| Local Governments |  |  |  |  |
| Employees | 16 | 1,045 | 1,061 | 0.1\% |
| Dependents | 1 | 379 | 380 | 0.1\% |
| Sub-total | 17 | 1,424 | 1,441 | 0.2\% |
| Total | 255,211 | 363,477 | 618,688 |  |
| Percent of Total | 41.3\% | 58.7\% | 100.0\% | 100.0\% |

## SOURCES OF DATA:

-Actuarial Note, Hartman \& Associates, House Bill 1985, June 19, 2007, original of which is on file in the General Assembly's Fiscal Research Division.
-Actuarial Note, Aon Consulting, House Bill 1985 (1 ${ }^{\text {st }}$ Edition), June 6, 2007, original of which is on file with the Comprehensive Major Medical Plan for Teachers and State Employees and the General Assembly’s Fiscal Research Division.

TECHNICAL CONSIDERATIONS: None

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