# NORTH CAROLINA GENERAL ASSEMBLY LEGISLATIVE ACTUARIAL NOTE 

BILL NUMBER:

SHORT TITLE: Teachers' and State Employees’ Benefits.
SPONSOR(S): Sen. Rand.
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, and premium payments for coverages selected by eligible former teachers and State employees.

BILL SUMMARY: According to available information from the Executive Administrator of the Teachers’ and State Employees’ Comprehensive Major Medical Plan, the Plan's self-insured indemnity program needs over $\$ 927$ million in additional financial support to remain solvent and maintain minimum claim stabilization reserves for the 2001-2003 biennium. This amount of additional financial support is a net requirement for the biennium after realizing $\$ 192.708$ million in reduced outpatient prescription drug claim costs from the program's pharmacy benefit manager according to the Plan ( $\$ 86.876$ million in 2001-2002 and $\$ 105.832$ million in 2002-2003). This additional financial support can come from additional premium income, additional sources of income, reductions in payments to health care providers, a reduction in benefits provided to members of the program, a reduction in the number of members covered by the program, or from a combination of these avenues. A breakdown of this required additional financial support is:

$$
\text { Additional Financial Support (\$Million) } \quad \frac{\underline{2001-2002}}{\$ 382.258} \quad \frac{\underline{2002-2003}}{\$ 545.032} \quad \frac{\text { Biennium }}{\$ 927.290}
$$

From these requirements can be deducted the additional funding provided by this Act in the way of premiums paid on behalf of teachers, state employees, and retired employees by employing agencies and the State Retirement Systems:

| Employer Financing (\$Million) | $\frac{2001-2002}{\$ 150.000}$ | $\frac{2002-2003}{\$ 200.000}$ | $\underline{\text { Biennium }}$ |
| :--- | ---: | ---: | ---: |
| General Fund | 7.000 | 9.000 | $\$ 350.000$ |
| Highway Fund | 30.945 | 41.176 | 16.000 |
| Other Employer Funds | $\$ 187.945$ | $\$ 250.176$ | $\$ 238.121$ |
| Total |  |  |  |

This additional premium financing is equivalent to a $30 \%$ across-the-board premium rate increase effective October 1, 2001. The Plan's Executive Administrator has the statutory authority to set the premium rates for the spouses and dependent children of teachers, state employees, and retired employees who elect to pay for parent and child and family coverage. If the Executive Administrator were to increase the premium amounts paid by employees and retired employees for their family members by $30 \%$ across-the-board effective October 1, 2001, he says that the additional premium income to the program will be:

| Employee Financing (\$Million) | $\frac{2001-2002}{\$ 49.960}$ | $\frac{2002-2003}{\$ 66.477}$ | $\frac{\text { Biennium }}{\$ 116.437}$ |
| :--- | :--- | :--- | :--- |

After realizing the additional premium income provided by this Act and the anticipated premium income to be provided by the Plan's Executive Administrator, the program's financial condition would still be in a deficit position. However, the Plan's Executive Administrator reports that he can reduce payments to the providers of health care by the following amounts during the 2001-2003 biennium:

| Reduced Provider Payments (\$Million) | $\underline{2001-2002}$ |  | $\underline{2002-2003}$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Biennium |  |  |  |  |
| Additional 20\% Discount on Hospital <br> Outpatient Charges | $\$ 19.174$ |  | $\$ 26.985$ |  |
| Additional 3.45\% Discount on Hospital <br> Inpatient Charges | 5.725 |  | 7.554 | $\$ 46.159$ |
| Additional 13\% Discount on Charges <br> by Non-Primary Care Physician Services | 23.683 |  | 46.766 | 13.279 |
| Total | $\$ 48.582$ |  | $\$ 81.305$ | $\$ 129.887$ |

Assuming that the Plan's Executive Administrator is able to realize the full amount of claim cost savings that he maintains from cuts in payments to hospitals and physicians, the Plan's self-insured indemnity program would still continue to be in a deficit situation. Consequently, the Plan's Executive Administrator has recommended cuts in the benefits to members of the Plan's self-insured indemnity program. The net amount of these recommended benefit reductions for the 2001-2003 biennium is:

## $\begin{array}{lllll}\text { Recommended Benefit Reductions (\$Million) } & \underline{2001-2002} & \underline{\$ 95.771} & \underline{2002-2003} & \frac{\text { Biennium }}{\$ 147.074}\end{array}$

The special provisions contained in the referenced sections of this Act are supposed to reflect the benefit reductions recommended by the Plan’s Executive Administrator. Subsections (a) indexes the program’s annual deductibles for individuals and families to increases in the medical consumer price index beginning in July, 2002; (b) , (c), \& (f) increase the program's annual deductible from $\$ 250$ to $\$ 400$ per individual and from $\$ 750$ to $\$ 1,200$ per family; (d) \& (m) eliminate required second surgical opinions; (e) increases outpatient prescription drug copayments for each prescription from $\$ 15$ to $\$ 25$ for branded drugs, from $\$ 20$ to $\$ 35$ for branded drugs with generic equivalents, and from $\$ 25$ to $\$ 40$ for non-formulary or non-preferred formulary drugs, reduces the daily supplies for application of copayments from 34 to 30 days, eliminates coverage for erectile dysfunction, anti-wrinkle, and hair loss drugs, and requires prior approval for growth hormone, weight loss, and anti-fungal drugs; (f) \& (m) increase the program's maximum annual out-of-pocket for the $20 \%$ coinsurance paid by members of the program from $\$ 1,000$ to $\$ 1,500$; (g) clarifies that hospital inpatient costs include speech and occupational therapy; (h) \& (l) eliminates 30 days of skilled nursing facility care following a hospitalization and limits coverage for stays to 80 days per year; (i) \& (k) provide coverage for therapeutic shoes for diabetes and other high-risk conditions up to $\$ 350$; ( $j$ ) increases coverage for cardiac rehabilitation from $\$ 650$ annually to the greater of $\$ 1,300$ or charges for 60 days within 6 months after a hospital discharge or other qualifying event for cardiac conditions; (l) requires prior approval for varicose vein surgery, botulinium toxin, and growth hormone, weight loss, and anti-fungal outpatient prescription drugs; (n) increases the program's maximum lifetime benefit from $\$ 2$ million to $\$ 5$ million; and (o) disconnects workers' compensation payments for hospital inpatient charges from the amounts paid by the program for hospital inpatient charges.

With the additional premium income provided by this Act and expected to be provided by the Plan's Executive Administrator, and the cuts in payments to hospitals and physicians and the benefit reductions recommended by the Plan's Executive Administrator, the Plan's self-insured indemnity program is projected to end the 2001-2003 biennium with a cash balance of $\$ 102.4$ million of which only $\$ 3.7$ million would not be obligated, according to the Plan.

It must be noted that the data on the amount of financial support included in this Summary comes from the Executive Administrator of the Teachers’ and State Employees’ Comprehensive Major Medical Plan and not from the General Assembly’s Fiscal Research Division nor from its consulting actuary.

EFFECTIVE DATE: All subsections are effective July 1, 2001, except for subsection (a) which becomes effective July 1, 2002.

ESTIMATED IMPACT ON STATE: Based upon information provided by the Plan, its consulting actuary, Aon Consulting, estimates that the referenced provisions of the bill will result in a net cost reduction to the Plan's self-insured indemnity program of $\$ 107.6$ million in fiscal year 2001-2002 and $\$ 141.9$ million in fiscal year 2002-2003 for a total net cost reduction for the 2001-2003 biennium of $\$ 249.5$ million. Aon Consulting's estimate has $\$ 112.8$ million in total cost reductions for 2001-2002 and $\$ 141.9$ million for 2002-2003 for a total of $\$ 262.7$ million for the biennium. Aon Consulting's estimate has a total increase in the program's cost of $\$ 5.2$ million in 2001-2002 and $\$ 8$ million in 2002-2003 for a total increase in cost for the biennium of $\$ 13.2$ million. Based upon information available from the Plan, the consulting actuary for the General Assembly's Fiscal Research Division, Hartman and Associates, estimates the referenced provisions of the bill will result in a net cost reduction to the Plan's self-insured indemnity program of $\$ 121.8$ million in fiscal year 2001-2002 and $\$ 162$ million in fiscal year 2002-2003 for a total net cost reduction of $\$ 283.8$ million for the 2001-2003 biennium. Hartman and Associates' estimate has $\$ 123.2$ million in total cost reductions for 2001-2002 and $\$ 164.1$ million for 2002-2003 for a total of $\$ 287.3$ million for the biennium. Hartman and Associates' estimate has a total increase in the program's cost of $\$ 1.4$ million in 2001-2002 and $\$ 2.1$ million in 2002-2003 for a total increase in cost for the biennium of $\$ 3.5$ million.

The differences in the cost reduction estimates between Aon Consulting and Hartman and Associates are:

## 2001-2002 <br> Aon Consulting Hartman \& Associate

## Associates

Increased Deductibles Indexed Deductibles
Increased Coinsurance
Out-of-Pocket
Increased Drug Copayments
Decreased Drug
Supply/Copayment
80 Day Annual Limit on Skilled Nursing
Facility Care \$1.7 Million \$1.1 Million
Second Surgical Opinions
Eliminated
\$33.7 Million
\$17.7 Million
\$57.8 Million
\$3.4 Million

Prior Approval of
Botox/Anti-Fungal Drugs \$0.5 Million
\$2.1 Million
\$47.1 Million
\$23.8 Million
\$48.5 Million
\$0.3 Million
\$0.3 Million

2003-2003
Aon Consulting Hartman \&

| \$43.5 Million <br> \$1.5 Million | \$57.6 Million <br> \$6.0 Million |
| ---: | ---: |
| \$27.4 Million | \$31.9 Million |
| \$72.0 Million | \$63.7 Million |
| \$4.7 Million | \$2.7 Million |
| \$2.5 Million | \$1.3 Million |
| \$0.4 Million | \$0.5 Million |
| \$0.7 Million | \$0.4 Million |

The differences in the cost increase estimates between Aon Consulting and Hartman and Associates involves the cost of increasing the maximum lifetime benefit in the self-insured indemnity program from $\$ 2$ million to $\$ 5$ million. The differences are:

2001-2002<br>Aon Consulting Hartman \& Associate<br>\$5.2 Million \$1.4 Million

## Aon Consulting Hartman \& Associates <br> \$8.0 Million <br> \$2.1 Million

The projection of Aon Consulting is based upon Aon's proprietary rating manual and claimant distributions. The projection of Hartman and Associates is based upon the Society of Actuaries’ Group Medical Insurance Large Claims Database Collection and Analysis Report.

ASSUMPTIONS AND METHODOLOGY: The Comprehensive Major Medical Plan for Teachers and State Employees is divided into two programs. From October, 1982, through June, 1986, the Plan only had a selffunded indemnity type of program which covered all employees, retired employees, eligible dependents of employees and retired employees, and eligible former employees and their eligible dependents authorized to continue coverage past a termination of employment other than for retirement or disability purposes. A prepaid program of coverage by health maintenance organizations (HMOs) was offered in July, 1986, as an alternative to the Plan's self-insured indemnity program. The benefits of the self-insured indemnity type of program are spelled out in Part 3 of Article 3 of Chapter 135 of the North Carolina General Statutes (i.e., \$250 annual deductible, $20 \%$ coinsurance up to $\$ 1,000$ annually, etc. paid by the program’s members). HMOs are required to offer benefits that are comparable to those provided by the self-insured indemnity program. Beginning in July, 2000, firefighters, rescue squad workers, and members of the National Guard and their eligible dependents were allowed to voluntarily participate in the Plan on a fully contributory basis, provided they were ineligible for any other type of group health benefits and had been without such benefits for at least six months. Employer-paid non-contributory premiums are only authorized for the indemnity program's coverage for employees and retired employees. All other types of premium in the indemnity program are fully contributory. The Plan's Executive Administrator has set the premium rates for firefighters, rescue squad workers, and members of the National Guard and their families at $47 \%$ more than the comparable rates charged for employees, retired employees, and their families. Premiums paid by employers to HMOs are limited to like amounts paid to the indemnity program with employees and retired employees paying any HMO amounts above the indemnity program's non-contributory rates. Both types of coverage continue to be available in the Plan with three HMOs currently covering about $9 \%$ of the Plan's total population in 24 of the State's 100 counties. The Plan's employees and retired employees select the type of program that they wish for themselves and their dependents during the months of August and September of each year for coverage beginning in October. The demographics of the Plan as of December 31, 2000, include:

|  | Self-Insured <br> Indemnity Program | Alternative <br> HMOs | Plan <br> Total |
| :--- | :---: | :---: | ---: |
|  | 248,518 | 28,822 | 277,340 |
| Nctive Employees | 134,795 | 17,376 | 152,171 |
| Active Employee Dependents | 104,305 | 3,185 | 107,490 |
| Retired Employees | 17,936 | 594 | 18,530 |
| Retired Employee Dependents <br> Former Employees \& Dependents <br> with Continued Coverage | 2,865 | 381 | 3,246 |


| Firefighters, Rescue Squad |  |  |  |
| :--- | ---: | ---: | ---: |
| Workers, National Guard |  |  | 3 |
| Members \& Dependents | 3 | - | 558,780 |
| Total Enrollments | 508,422 | 50,358 |  |
| Number of Contracts |  |  | 293,545 |
| Employee Only | 270,322 | 23,223 | 44,781 |
| Employee \& Child(ren) | 38,775 | 3,006 | 48,790 |
| Employee \& Family | 45,764 | 32,026 | 387,116 |

Percentage of
Enrollment by Age

| $29 \&$ Under | $28.0 \%$ | $41.6 \%$ | $29.2 \%$ |
| :--- | :--- | :---: | :---: |
| $30-44$ | 20.9 | 26.6 | 21.4 |
| $45-54$ | 21.3 | 19.2 | 21.1 |
| $55-64$ | 14.5 | 9.2 | 14.0 |
| 65 \& Over | 15.4 | 3.4 | 14.3 |

Percentage of
Enrollment by Sex
Male
Female

> 39.1\%
60.9
36.9\%
38.9\%
63.1
61.1

Assumptions for the Self-Insured Indemnity Program: For the fiscal year beginning July 1, 2000, the selfinsured program started its operations with a beginning cash balance of $\$ 188$ million. Receipts for the year are estimated to be $\$ 929$ million from premium collections, $\$ 10$ million from investment earnings, and $\$ 8$ million in risk adjustment and administrative fees from HMOs, for a total of $\$ 947$ million in receipts for the year. Disbursements from the self-insured program are expected to be $\$ 1.085$ billion in claim payments and $\$ 31$ million in administration and claims processing expenses for a total of $\$ 1.116$ billion for the year beginning July 1, 2000. For the fiscal year beginning July 1, 2001, the self-insured indemnity program is expected to have an operating cash balance of only $\$ 19$ million. The self-insured indemnity program is consequently assumed to be unable to carry out its operations for the 2001-2003 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, pre-admission hospital testing, pre-admission hospital inpatient certification with length-ofstay approval, hospital bill audits, required second surgical opinions, mental health case management, coordination of benefits with other payers, Medicare benefit "carve-outs", cost reduction contracts with participating physicians and other providers, prescription drug manufacturer rebates from formularies, and fraud detection) are maintained and improved where possible. Of particular note in these cost containment strategies is that the program's contract with its pharmacy benefit manager, AdvancePCS, calls for a further reduction in claim payments for outpatient prescription drugs for the 2001-03 biennium. Effective July 1, 2001, dispensing fees for pharmacies will be reduced from $\$ 4.00$ to $\$ 1.50$ per prescription. In addition, ingredient prices for pharmacies will be reduced from $90 \%$ to $85 \%$ of average wholesale price (AWP) for branded drugs and from maximum allowable charges (MAC) by the federal Health Care Financing Administration (HCFA) or $80 \%$ of AWP to $45 \%$ of AWP for generic drugs. Current non-contributory premium rates are $\$ 143.10$ monthly for employees whose primary payer of health benefits is Medicare and $\$ 187.98$ per month for employees whose primary payer of health benefits is not Medicare. Fully contributory premium amounts for employee and child(ren) contracts are $\$ 89.06$ monthly for children whose primary payer of health benefits is Medicare and $\$ 117.16$ monthly for other covered children, and $\$ 213.60$ per month for
family contracts whose dependents have Medicare as the primary payer of health benefits and $\$ 281.04$ per month for other family contract dependents. Claim cost trends are expected to increase $12 \%$ annually. Total enrollment in the program is expected to increase about $3 \%$ annually over the next two years due to enrollment losses from alternative HMOs. The number of enrolled active employees is expected to show a $3 \%$ increase annually over the next two years, whereas the growth in the number of retired employees is assumed to be $5 \%$ per year. The program is expected to have an increase in the number of active employee dependents and retiree dependents of $2 \%$ per year. Investment earnings are based upon a $6 \%$ return on available cash balances. The self-insured indemnity 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.

Assumptions for Changes in the Indemnity Plan's Benefits:
Overall Finances: Since the benefits in the Plan's self-insured indemnity program have not suffered any reductions since July 1, 1991, with an overall premium increase of only once since that time ( $30 \%$ increase in October, 1999), an overview of the program's financial condition for the last six years shows:

| (\$ Million) |
| :--- |
| BEGINNING BALANCE |
| RECEIPTS |
| Premiums Due |
| Plus: Receivables (Prior) |
| Sub-Total |
| Less: Receivables (Current) |
| Premium Receipts |
| Employees |
| Retirees |
| Dependents |
| Former Members |
| Sub-Total |
| Less: Refunds |
| Total Net Premiums |
| Investment Earnings |
| Average Annual Yield |
| Long Term Care Fees |
| HMO Fees |
| Total Receipts |
| TOTAL BEGINNING BALANCE |
| AND RECEIPTS |
| Claim Receipts |
| Plus: Payables (Prior) |
| Sub-Total |


| $\underline{1993-94}$ | $\underline{1994-95}$ | $\underline{1995-96}$ | $\underline{1996-97}$ | $\underline{1997-98}$ | $\underline{1998-99}$ | $\underline{1999-2000}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 193.205$ | $\$ 287.088$ | $\$ 348.944$ | $\$ 368.255$ | $\$ 384.924$ | $\$ 334.140$ | $\$ 234.145$ |
|  |  |  |  |  |  |  |
| $\$ 596.526$ | $\$ 601.680$ | $\$ 587.139$ | $\$ 574.459$ | $\$ 569.901$ | $\$ 592.920$ | $\$ 765.552$ |
| $\$ 0.162$ | $\$ 0.100$ | $\$ 0.103$ | $\$ 0.770$ | $\$ 0.291$ | $\$ 0.276$ | $\$ 0.194$ |
| $\$ 0.688$ | $\$ 601.780$ | $\$ 587.242$ | $\$ 575.229$ | $\$ 570.192$ | $\$ 593.196$ | $\$ 765.746$ |
|  | $\$ 0.103$ | $\$ 0.770$ | $\$ 0.291$ | $\$ 0.276$ | $\$ 0.194$ | $\$ 0.263$ |
| $\$ 352.709$ | $\$ 355.357$ | $\$ 341.011$ | $\$ 328.462$ | $\$ 321.901$ | $\$ 334.388$ | $\$ 432.624$ |
| $\$ 108.897$ | $\$ 113.039$ | $\$ 117.259$ | $\$ 121.477$ | $\$ 125.550$ | $\$ 131.759$ | $\$ 170.560$ |
| $\$ 131.394$ | $\$ 129.522$ | $\$ 124.228$ | $\$ 121.040$ | $\$ 118.686$ | $\$ 122.842$ | $\$ 157.675$ |
| $\$ 3.588$ | $\$ 3.759$ | $\$ 3.974$ | $\$ 3.959$ | $\$ 3.779$ | $\$ 4.013$ | $\$ 4.624$ |
| $\$ 596.588$ | $\$ 601.677$ | $\$ 586.472$ | $\$ 574.938$ | $\$ 569.916$ | $\$ 593.002$ | $\$ 765.483$ |
| $\$ 1.053$ | $\$ 1.451$ | $\$ 1.006$ | $\$ 0.839$ | $\$ 1.294$ | $\$ 1.295$ | $\$ 1.641$ |
| $\$ 595.535$ | $\$ 600.226$ | $\$ 585.466$ | $\$ 574.099$ | $\$ 568.622$ | $\$ 591.707$ | $\$ 763.842$ |
| $\$ 16.081$ | $\$ 21.843$ | $\$ 24.931$ | $\$ 25.471$ | $\$ 24.354$ | $\$ 20.464$ | $\$ 15.241$ |
| $6.1 \%$ | $6.4 \%$ | $6.4 \%$ | $6.3 \%$ | $6.2 \%$ | $6.0 \%$ | $5.9 \%$ |
|  |  |  |  |  |  |  |
|  |  |  |  |  | $\$ 0.006$ | $\$ 0.017$ |
| $\$ 5.778$ | $\$ 6.104$ | $\$ 7.697$ | $\$ 13.365$ | $\$ 16.803$ | $\$ 16.473$ | $\$ 14.516$ |
|  |  |  |  |  |  |  |
| $\$ 617.394$ | $\$ 628.173$ | $\$ 618.094$ | $\$ 612.935$ | $\$ 609.779$ | $\$ 628.650$ | $\$ 793.616$ |
|  |  |  |  |  |  |  |
| $\$ 810.599$ | $\$ 915.261$ | $\$ 967.038$ | $\$ 981.190$ | $\$ 994.703$ | $\$ 962.790$ | $\$ 1,027.761$ |
|  |  |  |  |  |  |  |
| $\$ 1,191.185$ | $\$ 1,293.920$ | $\$ 1,421.994$ | $\$ 1,431.975$ | $\$ 1,561.104$ | $\$ 1,779.548$ | $\$ 2,016.299$ |
| $\$ 7.232$ | $\$ 5.998$ | $\$ 10.009$ | $\$ 9.165$ | $\$ 10.899$ | $\$ 13.718$ | $\$ 15.583$ |
| $\$ 198.417$ | $\$ 1,299.918$ | $\$ 1,432.003$ | $\$ 1,441.140$ | $\$ 1,572.003$ | $\$ 1,793.266$ | $\$ 2,031.882$ |

Less: Deductibles
$\$ 72.252 \quad \$ 82.222$

| Copayments | \$63.673 | \$89.413 | \$92.789 | \$94.526 | \$102.850 | \$114.795 | \$174.055 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coordination of Benefits | \$306.962 | \$336.103 | \$381.565 | \$396.309 | \$449.379 | \$513.490 | \$550.578 |
| Non-Covered Charges | \$231.814 | \$221.744 | \$247.831 | \$263.264 | \$264.848 | \$334.009 | \$373.100 |
| Payables (Current) | \$5.998 | \$10.009 | \$9.165 | \$11.830 | \$13.718 | \$15.583 | \$8.079 |
| Claim Payments |  |  |  |  |  |  |  |
| Employees | \$272.789 | \$289.531 | \$312.305 | \$294.382 | \$312.939 | \$346.092 | \$410.692 |
| Retirees | \$112.395 | \$132.844 | \$142.236 | \$155.322 | \$174.758 | \$201.581 | \$240.441 |
| Dependents | \$125.336 | \$131.153 | \$126.576 | \$128.195 | \$154.551 | \$161.689 | \$168.364 |
| Former Members | \$7.198 | \$6.899 | \$7.567 | \$8.243 | \$8.854 | \$9.176 | \$8.998 |
| Sub-Total | \$517.718 | \$560.427 | \$588.684 | \$586.142 | \$651.102 | \$718.538 | \$828.495 |
| Less: Refunds | \$10.063 | \$10.711 | \$6.580 | \$6.825 | \$7.558 | \$8.100 | \$8.402 |
| Total Net Claims | \$507.655 | \$549.716 | \$582.104 | \$579.317 | \$643.544 | \$710.438 | \$820.093 |
| Administration | \$3.335 | \$3.620 | \$3.653 | \$3.776 | \$1.374 | \$1.299 | \$1.309 |
| Claims Processing | \$12.521 | \$12.981 | \$13.026 | \$13.173 | \$15.645 | \$16.908 | \$18.340 |
| Total Disbursements | \$523.511 | \$566.317 | \$598.783 | \$596.266 | \$660.563 | \$728.645 | \$839.742 |
| ENDING BALANCE | \$287.088 | \$348.944 | \$368.255 | \$384.924 | \$334.140 | \$234.145 | \$188.019 |
| NUMBER OF CLAIMS (000) |  |  |  |  |  |  |  |
| Beginning Inventory | 32.8 | 26.9 | 46.5 | 35.6 | 46.4 | 57.3 | 59.7 |
| Claims Received | 5,390.4 | 5,904.4 | 5,779.4 | 5,817.1 | 6,260.8 | 6,712.2 | 8,086.5 |
| Claims Processed | 5,396.4 | 5,884.8 | 5,790.3 | 5,806.3 | 6,249.9 | 6,709.8 | 8,111.4 |
| Ending Inventory | 26.8 | 46.5 | 35.6 | 46.4 | 57.3 | 59.7 | 34.8 |
| Paid Claims | 5,204.0 | 5,701.2 | 5,613.1 | 5,686.4 | 6,124.2 | 6,577.1 | 7,922.6 |
| Paid Adjustments | 69.0 | 79.2 | 83.7 | 84.1 | 89.3 | 103.4 | 141.3 |
| Total Paid Claims | 5,273.0 | 5,780.4 | 5,696.8 | 5,770.5 | 6,213.5 | 6,680.5 | 8,063.9 |
| Average Claim Payment | \$98 | \$97 | \$103 | \$102 | \$105 | \$108 | \$108 |
| AVERAGE NUMBER OF |  |  |  |  |  |  |  |
| MEMBERS (000) |  |  |  |  |  |  |  |
| Employees | 201.7 | 203.1 | 196.3 | 187.8 | 184.3 | 190.9 | 201.3 |
| Retirees | 75.7 | 78.7 | 81.5 | 84.5 | 87.2 | 91.5 | 96.1 |
| Dependents |  |  |  |  |  |  |  |
| Employee | 119.1 | 117.4 | 111.3 | 105.2 | 102.1 | 105.6 | 109.3 |
| Retiree | 14.0 | 14.1 | 14.2 | 14.4 | 14.7 | 15.5 | 16.3 |
| Total Dependents | 133.1 | 131.5 | 125.5 | 119.6 | 116.8 | 121.1 | 125.6 |
| Former Members | 2.3 | 2.5 | 2.6 | 2.6 | 2.5 | 2.6 | 2.6 |
| Total Membership | 412.8 | 415.8 | 405.9 | 394.5 | 390.8 | 406.1 | 425.6 |
| AVERAGE NUMBER OF |  |  |  |  |  |  |  |
| CONTRACTS (000) |  |  |  |  |  |  |  |
| Employee Only | 207.3 | 211.7 | 210.3 | 207.8 | 208.2 | 216.8 | 229.6 |
| Employee \& Child(ren) | 32.8 | 32.9 | 31.5 | 29.9 | 29.2 | 30.2 | 31.3 |
| Employee \& Family | 39.5 | 39.0 | 37.6 | 36.5 | 36.5 | 38.1 | 39.4 |
| Total Number of Contracts | 279.6 | 283.6 | 279.4 | 274.2 | 273.9 | 285.1 | 300.3 |

Most of the changes in the program's benefits since July, 1991, have been benefit increases. The major increases in these benefits have been an $\$ 150$ annual wellness benefit and an outpatient prescription drug card
benefit, each without application of the program's annual deductible and coinsurance requirements, and coverage for reconstructive breast surgery following a mastectomy.

Outpatient Prescription Drugs: For the last five fiscal years, the Plan’s self-insured indemnity program has seen the following claims experience for outpatient prescription drugs:

Type of Drug
Brand Drugs
Number of Prescriptions \% Change
Total Charges \% Change
Total Allowed Charges \% Change
Allowed Charges Applied to Deductible
Allowed Charges Applied to Coinsurance \% Change
Total Paid \% Change
Average Total Charge \% Change
Average Allowed Charge \% Change
Average Applied to Deduct. \% Change
Average Applied to Coinsur. \% Change
Average Paid Charge \% Change
Average \% of Charge Paid
Brand Drugs with Generics
Number of Prescriptions \% Change
Total Charges \% Change
Total Allowed Charges \% Change
Allowed Charges Applied to Deductible \% Change
Allowed Charges Applied to Coinsurance \% Change
Total Paid \% Change
Average Total Charge \% Change
Average Allowed Charge \% Change
Average Applied to Deduct.
$1995-96$
$1,876,122$
$5.8 \%$
$\$ 84,613,583$
12.2\%
\$74,410,827 12.2\%
\$14,127,198
$11.7 \%$
\$10,818,606
$12.4 \%$
$\$ 49,465,023$
12.3\%
$\$ 45.10$
$6.1 \%$
\$39.66
6.1\%
$\$ 7.53$
5.6\%
\$5.77
6.3\% $\$ 26.37$
6.2\% 58.5\%

|  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 374,943 | 336,173 | 334,814 | 306,754 | 320,154 |
| $-10.3 \%$ | $-10.3 \%$ | $-0.4 \%$ | $-8.4 \%$ | $4.4 \%$ |
| $\$ 12,785,948$ | $\$ 12,313,930$ | $\$ 13,539,502$ | $\$ 13,152,741$ | $\$ 16,069,120$ |
| $-4.0 \%$ | $-3.7 \%$ | $10.0 \%$ | $-2.9 \%$ | $22.2 \%$ |
| $\$ 10,760,774$ | $\$ 10,295,733$ | $\$ 11,412,600$ | $\$ 10,984,534$ | $\$ 13,877,689$ |
| $-3.4 \%$ | $-4.3 \%$ | $10.8 \%$ | $-3.8 \%$ | $26.3 \%$ |
|  |  |  |  |  |
| $\$ 3,621,949$ | $\$ 3,328,113$ | $\$ 3,267,785$ | $\$ 3,220,917$ | $\$ 5,465,724$ |
| $-12.8 \%$ | $-8.1 \%$ | $-1.8 \%$ | $-1.4 \%$ | $69.7 \%$ |
| $\$ 1,316,847$ | $\$ 1,264,286$ | $\$ 1,491,598$ | $\$ 1,337,447$ | $\$ 733,622$ |
| $1.6 \%$ | $-4.0 \%$ | $18.0 \%$ | $-10.3 \%$ | $-45.1 \%$ |
| $\$ 5,821,978$ | $\$ 5,703,334$ | $\$ 6,653,217$ | $\$ 6,364,850$ | $\$ 7,625,886$ |
| $2.2 \%$ | $-2.0 \%$ | $16.7 \%$ | $-4.3 \%$ | $19.8 \%$ |
| $\$ 34.10$ | $\$ 36.63$ | $\$ 40.44$ | $\$ 42.88$ | $\$ 50.19$ |
| $7.0 \%$ | $7.4 \%$ | $10.4 \%$ | $6.0 \%$ | $17.1 \%$ |
| $\$ 28.70$ | $\$ 30.63$ | $\$ 34.09$ | $\$ 35.81$ | $\$ 43.35$ |
| $7.6 \%$ | $6.7 \%$ | $11.3 \%$ | $5.1 \%$ | $21.1 \%$ |
| $\$ 9.66$ | $\$ 9.90$ | $\$ 9.76$ | $\$ 10.50$ | $\$ 17.07$ |

\% Change
Average Applied to Coinsur.
\% Change
Average Paid Charge
\% Change
Average \% of Charge Paid

Generic Drugs
Number of Prescriptions
\% Change
Total Charges
\% Change
Total Allowed Charges \% Change Allowed Charges Applied to Deductible

Allowed Charges Applied to Coinsurance \% Change
Total Paid \% Change
Average Total Charge \% Change
Average Allowed Charge \% Change
Average Applied to Deduct. \% Change
Average Applied to Coinsur. \% Change
Average Paid Charge \% Change
Average \% of Charge Paid
Compounded Drugs
Number of Prescriptions \% Change
Total Charges \% Change
Total Allowed Charges \% Change
Allowed Charges Applied to Deductible \% Change
Allowed Charges Applied to Coinsurance \% Change
Total Paid \% Change
Average Total Charge \% Change
Average Allowed Charge \% Change
Average Applied to Deduct.
$-2.8 \%$
$\$ 3.51$
$13.2 \%$
$\$ 15.53$
$14.0 \%$
$45.5 \%$
$1,476,145$
$3.1 \%$
$\$ 22,937,681$
$6.8 \%$
$\$ 18,368,094$
$9.4 \%$
$\$ 4,487,481$
$7.7 \%$
$\$ 2,525,996$
$9.8 \%$
\$11,354,617
9.9\%
$\$ 15.54$
$3.5 \%$
$\$ 12.44$
6.0\%
$\$ 3.04$
4.5\%
\$1.71
6.5\%
\$7.69
6.6\%
49.5\%
$2.5 \%$
$\$ 3.76$
$7.1 \%$
$\$ 16.97$
$9.3 \%$
$46.3 \%$
$-1.4 \%$
$\$ 4.46$
$18.5 \%$
$\$ 19.87$
$17.1 \%$
$49.1 \%$

| $7.6 \%$ | $62.6 \%$ |
| ---: | ---: |
| $\$ 4.36$ | $\$ 2.29$ |
| $-2.1 \%$ | $-47.4 \%$ |
| $\$ 20.75$ | $\$ 23.82$ |
| $4.4 \%$ | $14.8 \%$ |
| $48.4 \%$ | $47.5 \%$ |


| $1,763,012$ | $1,882,707$ |
| ---: | ---: |
| $9.3 \%$ | $6.8 \%$ |
| $\$ 32,374,714$ | $\$ 40,868,165$ |
| $16.7 \%$ | $26.2 \%$ |
| $\$ 27,129,910$ | $\$ 37,744,073$ |
| $18.1 \%$ | $39.1 \%$ |
|  |  |
| $\$ 5,377,187$ | $\$ 14,820,145$ |
| $14.6 \%$ | $175.6 \%$ |
|  |  |
| $\$ 3,755,215$ | $\$ 1,906,143$ |
| $14.4 \%$ | $-49.2 \%$ |
| $\$ 17,880,177$ | $\$ 20,938,996$ |
| $19.2 \%$ | $17.1 \%$ |
| $\$ 18.36$ | $\$ 21.71$ |
| $6.8 \%$ | $18.2 \%$ |
| $\$ 15.39$ | $\$ 20.05$ |
| $8.0 \%$ | $30.3 \%$ |
| $\$ 3.05$ | $\$ 7.87$ |
| $4.8 \%$ | $158.1 \%$ |
| $\$ 2.13$ | $\$ 1.01$ |
| $4.7 \%$ | $-52.5 \%$ |
| $\$ 10.14$ | $\$ 11.12$ |
| $9.0 \%$ | $9.7 \%$ |
| $55.2 \%$ | $51.2 \%$ |


| 87 | 59 | 62 | 376 | 105 |
| ---: | ---: | ---: | ---: | ---: |
| $-13.0 \%$ | $-32.2 \%$ | $5.1 \%$ | $506.5 \%$ | $-72.1 \%$ |
| $\$ 4,114$ | $\$ 2,422$ | $\$ 3,116$ | $\$ 14,278$ | $\$ 6,636$ |
| $-23.9 \%$ | $-41.1 \%$ | $28.7 \%$ | $358.2 \%$ | $-53.5 \%$ |
| $\$ 4,046$ | $\$ 2,383$ | $\$ 2,937$ | $\$ 13,664$ | $\$ 6,546$ |
| $-24.0 \%$ | $-41.1 \%$ | $23.2 \%$ | $365.2 \%$ | $-52.1 \%$ |
|  |  |  |  |  |
| $\$ 24$ | $\$ 46$ | $\$ 118$ | $\$ 1,865$ | $\$ 1,393$ |
| $-86.4 \%$ | $91.7 \%$ | $156.5 \%$ | $1480.5 \%$ | $-25.3 \%$ |
|  |  |  |  |  |
| $\$ 3,482$ | $\$ 1,230$ | $\$ 1,323$ | $\$ 1,790$ | $\$ 347$ |
| $-12.6 \%$ | $-64.7 \%$ | $7.6 \%$ | $35.3 \%$ | $-80.6 \%$ |
| $\$ 540$ | $\$ 1,107$ | $\$ 1,496$ | $\$ 9,989$ | $\$ 4,793$ |
| $-53.6 \%$ | $105.0 \%$ | $35.1 \%$ | $567.7 \%$ | $-52.0 \%$ |
| $\$ 47.29$ | $\$ 41.05$ | $\$ 50.26$ | $\$ 37.97$ | $\$ 63.20$ |
| $-12.6 \%$ | $-13.2 \%$ | $22.4 \%$ | $-24.4 \%$ | $66.4 \%$ |
| $\$ 46.51$ | $\$ 40.39$ | $\$ 47.37$ | $\$ 36.34$ | $\$ 62.34$ |
| $-12.7 \%$ | $-13.2 \%$ | $17.3 \%$ | $-23.3 \%$ | $71.6 \%$ |
| $\$ 0.28$ | $\$ 0.78$ | $\$ 1.90$ | $\$ 4.96$ | $\$ 13.27$ |


| \% Change | -84.3\% | 182.6\% | 144.1\% | 160.6\% | 167.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average Applied to Coinsur. | \$40.02 | \$20.85 | \$21.34 | \$4.76 | \$3.30 |
| \% Change | 0.4\% | -47.9\% | 2.4\% | -77.7\% | -30.6\% |
| Average Paid Charge | \$6.21 | \$18.76 | \$24.13 | \$26.57 | \$45.65 |
| \% Change | -46.7\% | 202.3\% | 28.6\% | 10.1\% | 71.8\% |
| Average \% of Charge Paid | 13.1\% | 45.7\% | 48.0\% | 70.0\% | 72.2\% |
| Total Drugs |  |  |  |  |  |
| Number of Prescriptions | 3,727,297 | 3,910,910 | 4,134,680 | 4,677,345 | 5,262,045 |
| \% Change | 2.9\% | 4.9\% | 5.7\% | 13.1\% | 12.5\% |
| Total Charges | \$120,341,326 | \$135,648,202 | \$157,211,377 | \$196,683,419 | \$265,639,823 |
| \% Change | 9.2\% | 12.7\% | 15.9\% | 25.1\% | 35.1\% |
| Total Allowed Charges | \$103,543,741 | \$117,208,129 | \$135,730,593 | \$168,770,874 | \$235,909,183 |
| \% Change | 9.8\% | 13.2\% | 15.8\% | 24.3\% | 39.8\% |
| Allowed Charges Applied |  |  |  |  |  |
| to Deductible | \$22,236,652 | \$23,367,031 | \$24,319,420 | \$28,206,135 | \$67,934,599 |
| \% Change | 6.1\% | 5.1\% | 4.1\% | 16.0\% | 140.9\% |
| Allowed Charges Applied |  |  |  |  |  |
| to Coinsurance | \$14,664,931 | \$16,811,789 | \$19,884,892 | \$23,788,097 | \$12,455,238 |
| \% Change | 10.9\% | 14.6\% | 18.3\% | 19.6\% | -47.6\% |
| Total Paid | \$66,642,158 | \$77,029,309 | \$91,526,281 | \$115,733,514 | \$154,822,694 |
| \% Change | 10.9\% | 15.6\% | 18.8\% | 26.4\% | 33.8\% |
| Average Total Charge | \$32.29 | \$34.68 | \$38.02 | \$42.05 | \$50.48 |
| \% Change | 6.1\% | 7.4\% | 9.6\% | 10.6\% | 20.1\% |
| Average Allowed Charge | \$27.78 | \$29.97 | \$32.83 | \$36.08 | \$44.83 |
| \% Change | 6.8\% | 7.9\% | 9.5\% | 9.9\% | 24.2\% |
| Average Applied to Deduct. | \$5.97 | \$5.97 | \$5.88 | \$6.03 | \$12.91 |
| \% Change | 3.1\% | 0.1\% | -1.6\% | 2.5\% | 114.1\% |
| Average Applied to Coinsur. | \$3.93 | \$4.30 | \$4.81 | \$5.09 | \$2.37 |
| \% Change | 7.8\% | 9.3\% | 11.9\% | 5.7\% | -53.5\% |
| Average Paid Charge | \$17.88 | \$19.70 | \$22.14 | \$24.74 | \$29.42 |
| \% Change | 7.8\% | 10.2\% | 12.4\% | 11.8\% | 18.9\% |
| Average \% of Charge Paid | 55.4\% | 56.8\% | 58.2\% | 58.8\% | 58.3\% |
| Average Annual Per Capita |  |  |  |  |  |
| Paid | \$172 | \$197 | \$234 | \$283 | \$350 |
| \% Change | 17.0\% | 14.5\% | 18.8\% | 20.9\% | 23.7\% |

During this same five-year period, the annual number of prescriptions per capita increased from 9.2 in 199596 to 12.4 in 1999-2000, an increase of $35 \%$. The annual number of branded prescriptions per capita increased from 5.5 in 1995-96 to 7.9 in 1999-2000, while the annual number of generic prescriptions per capita increased from 3.6 in 1995-96 to 4.4 in 1999-2000, an increase of $22 \%$.

For the six-month period ending December 31, 2000, the Plan's self-insured indemnity program paid some $\$ 104.8$ million in outpatient prescription drug claims. An estimated 3,314,482 prescriptions were paid during this same period. Some of the changes in the program's outpatient prescription drug claim payments can be explained by changes in coverage. Beginning in January, 1992, the program's claim payments for outpatient prescription drugs were limited to $90 \%$ of average wholesale price (AWP) for each drug. Average wholesale price (AWP) is the price that drug manufacturers suggest wholesalers charge retail pharmacies for their products. The payment for these drugs was also subject to the program's overall annual deductible and coinsurance requirements paid by members of the program for all covered services, supplies, drugs, etc. Members of the program were also required to pay the full purchase price at the time of purchase and await reimbursement by the program. Effective January 1, 2000, the program's coverage was changed to a prescription drug card format. Under this change, members of the program were required to pay pharmacies
copayments for each prescription drug ranging from $\$ 10$ for generic drugs to $\$ 20$ for brand drug with generic equivalents for each 34-day supply of the drug. Pharmacies, in turn, were paid directly by the program for the balance of allowable charges not paid by program members in the way of copayments. Allowable charges were set at $90 \%$ of a drug's AWP plus a dispensing fee of $\$ 6.00$ per prescription. Outpatient prescription drugs were also removed from the program's overall annual deductible and coinsurance requirements paid by members of the program. Effective August 1, 2000, the prescription drug card format was modified to limit allowable charges. Dispensing fees were set at $\$ 4.00$ per prescription and ingredient pricing for generic drugs was reduced to $80 \%$ of AWP for those drugs not subject to maximum allowable charge limits set by the federal Health Care Financing Administration (HCFA) for use by state Medicaid programs. For those generic drugs subject to HCFA maximum allowable charge limits, ingredient pricing was changed to the HCFA limits. The program was also authorized to use a pharmacy benefit management component and an open formulary to further reduce the program's outpatient prescription drug claim costs. Virtually all pharmacies within North Carolina accept the program's payments and member copayments as payment in full for prescriptions.

During the period January through March, 2001, the program paid $\$ 765,177$ in outpatient prescription drug claims for botulinium toxin and anti-fungal conditions according to the program's pharmacy benefit manager, AdvancePCS. The number of prescriptions processed was 22,316. AdvancePCS proposed to charge $\$ 7$ for each prior approval in its’ pharmacy benefit management contract with the program. Approximately $30 \%$ of the outpatient prescription drug claims for botulinium toxin and anti-fungal conditions are expected not to receive prior approval.

Skilled Nursing Facility Claims: The Plan's self-insured indemnity program spent the following gross claims amounts for skilled nursing facility care:
Skilled Nursing Facilities (\$Million) $\quad \frac{1995-96}{\$ 11.043} \quad \frac{1996-97}{\$ 12.418} \quad \frac{1997-98}{\$ 12.213} \quad \frac{1998-99}{\$ 12.346} \quad \frac{1999-2000}{\$ 11.069}$

According to the Plan, the following claims were for stays of 30 days or less:

| Year | Admissions | Billed | Allowed | Paid | Average Length-of-Stay |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1998-99 (\$Million) | 1,058 | \$2.072 | \$1.894 | \$1.630 | 17 Days |
| 1999-2000 (\$Million) | 1,203 | \$2.499 | \$2.199 | \$1.894 | 16 Days |

For stays of more than 30 days, the Plan's claims data shows:

| Year | Admissions | Billed | Allowed | Paid | Average Length-of-Stay |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1998-99 (\$Million) | 553 | \$9.998 | \$8.180 | \$7.429 | 111 Days |
| 1999-2000 (\$Million) | 574 | \$9.522 | \$7.312 | \$6.871 | 102 Days |

Lifetime Maximum Benefits: When the State created the Plan's self-insured indemnity program in October, 1982, the program had a lifetime maximum benefit of $\$ 500,000$. This lifetime maximum benefit was increased to $\$ 1,000,000$ effective July 1, 1991, and to $\$ 2,000,000$ effective January 1, 1994. As of March 30, 2001, the program had only had one member who reached the program's current maximum of $\$ 2,000,000$, and that maximum was reached in August, 1998. As of the same date, only nine members of the program had accumulated benefits of between one and two million dollars, and their claim payments for the last year averaged less than $\$ 65,000$. Five former members of the Plan’s self-insured indemnity program had accumulated lifetime benefits of between one and two millions dollars, but two had cancelled their coverage with the Plan and three transferred their coverage to HMOs offered by the Plan.

## SOURCES OF DATA:

-Actuarial Note, Hartman \& Associates, Senate Committee Substitute for Senate Bill 1005, Sections 32.20(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), and (p), May 25, 2001, original of which is on file in the General Assembly's Fiscal Research Division.
-Actuarial Note, Aon Consulting, Senate Committee Substitute for Senate Bill 1005, Sections 32.20(a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), and (p), May 28, 2001, 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.

FISCAL RESEARCH DIVISION 733-4910

PREPARED BY: Sam Byrd
APPROVED BY: James D. Johnson
DATE: June 20, 2001.


Signed Copy Located in the NCGA Principal Clerk's Offices

