NORTH CAROLINA GENERAL ASSEMBLY
LEGISLATIVE ACTUARIAL NOTE

BILL NUMBER: House Bill 397, Conference Committee Substitute, Section 30.19C.

SHORT TITLE: 2003 Appropriations Act

SPONSOR(S): Sens. Garrou, Dalton, Hagan, and Rand
Reps. Crawford, Sherrill, Wright, Baker, Earle, Grady, Owens, and Clary

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 and premium payments for coverages selected by firefighters, rescue squad workers, and members of the National Guard.

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 $540 million in additional financial support to remain solvent and maintain minimum claim stabilization reserves for the 2003-2005 biennium. 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:

	2003-2004	2004-2005	Biennium
Additional Financial Support ($Million)	$231.655	$308.874	$540.529

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)	2003-2004	2004-2005	Biennium
General Fund	$113.418	$151.225	$264.643
Highway Fund	5.671	7.561	13.232
Other Employer Funds	22.684	30.245	52.929
Total	$141.773	$189.031	$330.804

This additional premium financing is equivalent to a 17% across-the-board premium rate increase effective October 1, 2003. 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 17% across-the-board effective October 1, 2003, he says that the additional premium income to the program will be:

	2001-2002	2002-2003	Biennium

Employee Financing ($Million)	$33.255	$44.340	$77.595

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 2003-2005 biennium:

Reduced Provider Payments ($Million)	2003-2004	2004-2005	Biennium
8%-25% Reduction in Allowed Hospital Outpatient Charges, Effective July 1, 2003, For 88 Hospitals with No Additional Reduction in Allowed Hospital Outpatient Charges for 36 Hospitals	$24.969	$34.458	$59.427
3%-50% Reduction in Allowed Physician Charges on 584 Selected Procedures, Effective April 1, 2003, with 5%-30% Increase in Allowed Physician Charges On 26 Other Selected Procedures, Effective April 1, 2003	$29.862	$39.799	$69.661

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. The remaining deficit for the Plan's self-insured indemnity program for the 2003-2005 biennium would be:

	2003-2004	2004-2005	Biennium
Remaining Deficit ($Million)	$1.796	$1.246	$3.042

Section 30.19C of the bill requires the Plan and the providers of medical services to negotiate any amounts that billed charges are in excess of charges allowed by the Plan for preferred providers of medical care in emergencies when preferred providers of care are not reasonably available. The purpose of the negotiations is for Plan members not to be financially responsible for the amounts in excess of allowed charges in cases of medical emergencies. For emergencies occurring within North Carolina, a Plan member must be incapable of making a decision about use of medical providers and must use emergency medical transportation to obtain care in order to be covered by the section.

EFFECTIVE DATE: July 1, 2003

ESTIMATED IMPACT ON STATE: Based upon information provided by the Plan, its consulting actuary, Aon Consulting, estimates that the referenced provision of the bill will result in a cost increase to the Plan's self-insured indemnity program of $1.1 million in fiscal year 2003-2004 and $1.4 million in fiscal year 2004-2005 for a total cost increase for the 2003-2005 biennium of $2.5 million.

Based upon information available from the Plan, the consulting actuary for the General Assembly's Fiscal Research Division, Hartman & Associates, estimates the referenced provision of the bill will result in a cost increase to the Plan's self-insured indemnity program of $0.818 million in fiscal year 2003-2004 and $1.099 million in fiscal year 2004-2005 for a total cost increase of $1.917 million for the 2003-2005 biennium.

The actuarial projections by Aon Consulting on the amount of cost increase from the benefit change to the Plan's self-insured indemnity program increases the program's remaining deficit for the 2003-05 biennium to $5.542 million over the two-year period. The actuarial estimates by Hartman & Associates on the amount of cost increase from the benefit change to the program increases the program's remaining deficit to $4.959 million for the 2003-05 biennium. Independent research by the Fiscal Research Division on the amount of savings to be realized by the program's net reduction in selected allowable charges by physicians for the biennium indicates that the savings to the program will exceed the $69.661 million biennial total projected by the Plan by at least $5.542 million. This research covered claims for two years comparing the number of procedures processed and the amount of charges, allowable charges, copayments, deductibles, coinsurance, and claim payments processed for each of the 610 Current Procedural Terminology (CPT) codes affected by the savings beginning in April, 2003. In addition, the projected $97.663 million cash balance for the Plan's self-insured indemnity program to begin fiscal year 2003-04 is expected to be more than $97.663 million by at least $5.542 million.

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 self-funded 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., $350 annual deductible, 20% coinsurance up to $1,500 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, except for job-sharing public school teachers who are authorized partially contributory premiums at 50% of non-contributory rates. 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 20% 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; however none of the HMOs with certificates of authority to transact business in North Carolina have offered to participate in the Plan since September 30, 2001. 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, 2002, include:

	Self-Insured Indemnity Program	Alternative HMOs	Plan Total
Number of Participants			
Active Employees	280,065	-0-	280,065
Active Employee Dependents	137,841	-0-	137,841
Retired Employees	117,225	-0-	117,225
Retired Employee Dependents	18,999	-0-	18,999
Former Employees & Dependents			

with Continued Coverage	2,535	-0-	2,535
Firefighters, Rescue Squad Workers, National Guard Members & Dependents	7	-0-	7
Total Enrollments	556,672	-0-	556,672
Number of Contracts			
Employee Only	313,439	-0-	313,439
Employee & Child(ren)	40,978	-0-	40,978
Employee & Family	44,710	-0-	44,710
Total Contracts	399,127	-0-	399,127
Percentage of Enrollment by Age			
29 & Under	26.9%	-0-%	26.9%
30-44	20.9	-0-	20.9
45-54	20.9	-0-	20.9
55-64	16.2	-0-	16.2
65 & Over	15.1	-0-	15.1
Percentage of Enrollment by Sex			
Male	38.3%	-0-%	38.3%
Female	61.7	-0-	61.7

Assumptions for the Self-Insured Indemnity Program: For the fiscal year beginning July 1, 2002, the self-insured program started its operations with a beginning cash balance of $91.6 million. Receipts for the year are estimated to be $1.371 billion from premium collections and $7 million from investment earnings for a total of $1.378 billion in receipts for the year. Disbursements from the self-insured program are expected to be $1.335 billion in claim payments and $38 million in administration and claims processing expenses for a total of $1.373 billion for the year beginning July 1, 2002. For the fiscal year beginning July 1, 2002, the self-insured indemnity program is expected to have a net operating gain of approximately $5 million for the year. Without reserving an additional $15 million for implementation of the claims data and privacy requirements of the federal Health Insurance Portability and Accountability Act (HIPPA) that take effect on and after April 14, 2003, the Plan's self-insured indemnity program is expected to have an available beginning cash balance of $96 million for the fiscal year beginning July 1, 2003. The self-insured indemnity program is nonetheless assumed to be unable to carry out its operations for the 2003-2005 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. Current non-contributory premium rates are $186.04 monthly for employees whose primary payer of health benefits is Medicare and $244.38 per month for employees whose primary payer of health benefits is not Medicare. Fully contributory premium amounts for employee and child(ren) contracts are $115.78 monthly for children whose primary payer of health benefits is Medicare and $152.32 monthly for other covered children, and $277.68 per month for family contracts whose dependents

have Medicare as the primary payer of health benefits and $365.36 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 less than 1% annually over the next two years. The number of enrolled active employees is expected to show no increase 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 a 2% decrease in the number of active employee dependents per year whereas the number of retiree dependents is expected to increase 2% per year. Investment earnings are based upon a 4.5% 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 the Indemnity Program's Disallowed Claims in Medical Emergencies: For the last three calendar years, the Teachers' and State Employees' Comprehensive Major Medical Plan has disallowed the following charges on professional health care claims for medical emergencies provided in-state and out-of-state. The "Average Disallowed Amount Per Case" is for each primary diagnosis. The "Cost Sharing" referred to in the following data refers to copayments, deductibles, and coinsuance paid by Plan members. Plan members would be financially responsible for "Disallowed Charges" as well.

Average	Professional Claims Disallowed							
	In-State Claims				Out-of-State Claims			
Disallowed Amount Per Case	No. of Cases	Total Charges	Disallowed Charges	Cost Sharing	No. of Cases	Total Charges	Disallowed Charges	Cost Sharing
Cal. Year 2002								
$0.01 & Over	43,947	$7,016,413	$1,760,844	$1,490,834	57,004	$9,914,085	$1,892,046	$2,063,643
$100.00 & Over	396	$554,927	$210,157	$26,923	3,171	$2,357,230	$723,569	$183,178
$500.00 & Over	123	$220,913	$110,116	$10,133	195	$717,518	$270,663	$10,401
$1,000.00 & Over	28	$80,345	$47,683	$1,839	114	$529,791	$208,149	$6,790
$1,500.00 & Over	26	$74,018	$44,915	$1,830	36	$376,099	$124,169	$5,024
$2,000.00 & Over	4	$20,366	$9,263	$15	36	$376,099	$124,169	$5,024
$2,500.00 & Over	4	$20,366	$9,263	$15	19	$324,729	$81,863	$2,679
$3,000.00 & Over	1	$4,875	$3,148	$0	19	$324,729	$81,863	$2,679
$4,000.00 & Over	0				19	$324,729	$81,863	$2,679
$5,000.00 & Over					0			
Cal. Year 2001								
$0.01 & Over	45,385	$7,261,134	$1,741,933	$1,436,968	53,229	$10,850,562	$1,396,560	$1,960,586
$100.00 & Over	4,174	$2,565,858	$800,156	$194,740	2,961	$2,870,490	$782,204	$153,461
$500.00 & Over	76	$173,988	$96,302	$3,372	210	$1,339,569	$387,653	$9,772
$1,000.00 & Over	55	$139,199	$81,955	$2,664	54	$1,063,412	$268,747	$3,476
$1,500.00 & Over	48	$115,495	$73,591	$1,839	38	$933,299	$250,415	$2,620
$2,000.00 & Over	0				38	$933,299	$250,415	$2,620
$2,500.00 & Over					38	$933,299	$250,415	$2,620
$3,000.00 & Over					37	$929,938	$248,060	$2,419
$4,000.00 & Over					1	$386,141	$112,353	$0
$5,000.00 & Over					1	$386,141	$112,353	$0
$120,000 & Over					0			
Cal. Year 2000								
$0.01 & Over	42,926	$6,340,461	$1,351,257	$1,126,691	43,461	$8,404,971	$1,065,442	$1,366,418
$100.00 & Over	2,208	$1,560,936	$420,354	$87,294	1,788	$1,814,943	$543,704	$94,966
$500.00 & Over	55	$136,360	$56,849	$2,010	149	$863,178	$294,210	$7,869
$1,000.00 & Over	20	$54,705	$33,396	$308	60	$710,415	$241,295	$1,197
$1,500.00 & Over	3	$9,235	$8,402	$13	46	$579,769	$224,045	$788

$2,000.00 & Over	3	$9,235	$8,402	$13	41	$561,280	$216,035	$560
$2,500.00 & Over	3	$9,235	$8,402	$13	40	$588,130	$213,790	$560
$3,000.00 & Over	0				34	$535,300	$197,232	$489
$4,000.00 & Over					17	$379,754	$131,882	$116
$5,000.00 & Over					17	$379,754	$131,882	$116
$10,000.00 & Over					1	$12,781	$12,539	$20
$15,000.00 & Over					0			

The diagnoses related to the larger disallowed amounts per case in the foregoing data include abdominal aortic aneurysm, acute myocardial infarction, antihemophilic globulin deficiency, arterial embolism & thrombosis, autoimmune disease, brain stem compression, cardiac tachycardia, cardiovascular disease, cervical intevertebral disc displacement, chordae tendineae rupture, colon cancer, cornonary occlusion, epilepsy, gallbladder calculus, heat stroke, intestinal obstruction, lung, trachea & bronchus cancer, Meniere's disease, meningococcal meningitis, myasthenia gravis, precerebral occlusion, pulmonary collapse, retinal detachment, sickle-cell anemia, spina bifida, thoracic aortic aneurysm, and ventricular fibrillation.

The same type data for the last three calendar years for disallowed out-of-state hospital claims involving medical emergencies is as follows. The “Average Disallowed Amount Per Case” is for each primary diagnosis. The “Cost Sharing” referred to in the following data refers to copayments, deductibles, and coinsuance paid by Plan members. Plan members would also be financially responsible for “Disallowed Charges”.

Average	Hospital Out-of-State Claims Disallowed							
	Inpatient Claims				Outpatient Claims			
Disallowed Amount Per Case	No. of Cases	Total Charges	Disallowed Charges	Cost Sharing	No. of Cases	Total Charges	Disallowed Charges	Cost Sharing
Cal. Year 2002								
$0.01 & Over	904	$6,910,946	$3,357,874	$366,595	982	$928,228	$1,947	$211,142
$100.00 & Over	870	$6,864,660	$3,356,672	$353,575	0			
$500.00 & Over	841	$6,772,458	$3,347,211	$338,833				
$1,000.00 & Over	745	$6,465,330	$3,275,894	$303,071				
$1,500.00 & Over	589	$5,869,744	$3,086,499	$250,582				
$2,000.00 & Over	520	$5,526,227	$2,973,919	$220,622				
$2,500.00 & Over	352	$4,727,502	$2,603,246	$153,324				
$3,000.00 & Over	287	$4,309,424	$2,422,396	$130,082				
$4,000.00 & Over	214	$3,683,714	$2,174,229	$105,166				
$5,000.00 & Over	166	$3,198,792	$1,952,663	$70,755				
$6,000.00 & Over	98	$2,404,558	$1,573,325	$43,921				
$7,000.00 & Over	90	$2,284,496	$1,521,576	$38,930				
$8,000.00 & Over	58	$1,765,045	$1,269,287	$23,761				
$9,000.00 & Over	41	$1,455,875	$1,120,803	$18,182				
$10,000.00 & Over	35	$1,351,717	$1,063,672	$15,523				
$15,000.00 & Over	25	$1,183,675	$946,907	$10,220				
$20,000.00 & Over	22	$1,110,391	$897,755	$8,117				
$25,000.00 & Over	8	$413,394	$384,220	$1,859				
$30,000.00 & Over	8	$413,394	$384,220	$1,859				
$35,000.00 & Over	8	$413,394	$384,220	$1,859				
$40,000.00 & Over	18	$984,173	$812,998	$7,365				
$45,000.00 & Over	8	$413,394	$384,220	$1,859				

$50,000.00 & Over	0							
Cal. Year 2001								
$0.01 & Over	914	$6,907,861	$2,527,880	$328,562	1,558	$912,065	$8,086	$181,484
$100.00 & Over	896	$6,859,962	$2,526,807	$318,982	0			
$500.00 & Over	706	$6,326,708	$2,474,039	$256,499				
$1,000.00 & Over	455	$5,523,591	$2,255,987	$164,595				
$1,500.00 & Over	403	$5,273,285	$2,193,135	$139,926				
$2,000.00 & Over	253	$4,224,202	$1,930,533	$86,796				
$2,500.00 & Over	212	$3,958,207	$1,845,691	$71,209				
$3,000.00 & Over	208	$3,872,849	$1,834,593	$68,064				
$4,000.00 & Over	168	$3,552,266	$1,693,685	$54,043				
$5,000.00 & Over	157	$3,457,371	$1,645,012	$49,401				
$6,000.00 & Over	107	$3,029,157	$1,367,053	$27,534				
$7,000.00 & Over	69	$2,471,562	$1,124,423	$17,806				
$8,000.00 & Over	58	$2,289,113	$1,045,164	$15,589				
$9,000.00 & Over	44	$2,059,705	$929,211	$12,990				
$10,000.00 & Over	39	$1,956,799	$880,322	$11,787				
$15,000.00 & Over	22	$1,601,468	$690,990	$7,900				
$20,000.00 & Over	9	$1,221,155	$468,665	$1,001				
$25,000.00 & Over	9	$1,221,155	$468,665	$1,001				
$30,000.00 & Over	8	$1,176,303	$440,525	$904				
$35,000.00 & Over	8	$1,176,303	$440,525	$904				
$40,000.00 & Over	2	$271,727	$212,801	$177				
$45,000.00 & Over	2	$271,727	$212,801	$177				
$50,000.00 & Over	2	$271,727	$212,801	$177				
$100,000 & Over	2	$271,727	$212,801	$177				
$110,000 & Over	0							
Cal. Year 2000								
$0.01 & Over	840	$5,039,133	$1,457,128	$244,129	1,384	$837,750	$9,283	$143,213
$100.00 & Over	727	$4,843,642	$1,451,475	$212,551	1	$1,643	$780	$172
$500.00 & Over	438	$4,117,016	$1,363,047	$134,640	1	$1,643	$780	$172
$1,000.00 & Over	267	$3,520,021	$1,228,386	$82,152	0			
$1,500.00 & Over	237	$3,345,708	$1,192,943	$75,880				
$2,000.00 & Over	160	$2,553,191	$1,062,455	$47,433				
$2,500.00 & Over	126	$2,062,107	$983,662	$33,710				
$3,000.00 & Over	113	$1,965,415	$949,885	$29,623				
$4,000.00 & Over	85	$1,744,888	$851,570	$21,751				
$5,000.00 & Over	70	$1,549,120	$786,756	$19,684				
$6,000.00 & Over	65	$1,501,406	$761,508	$17,158				
$7,000.00 & Over	59	$1,384,308	$721,363	$16,933				
$8,000.00 & Over	49	$1,189,988	$647,562	$12,526				
$9,000.00 & Over	49	$1,189,988	$647,562	$12,526				
$10,000.00 & Over	47	$1,164,907	$629,046	$11,587				
$15,000.00 & Over	5	$312,814	$141,088	$784				
$20,000.00 & Over	3	$168,911	$105,234	$634				
$25,000.00 & Over	2	$131,754	$80,617	$150				
$30,000.00 & Over	2	$131,754.00	$80,617.00	$150.00				
$35,000.00 & Over	2	$131,754.00	$80,617.00	$150.00				
$40,000.00 & Over	1	$55,086	$41,595	$75				

$45,000.00 & Over	0	

The diagnoses related to the larger disallowed amounts per case in the foregoing data include acute appendicitis, acute bronchitis, acute myocardial infarction, angina pectoris, asthma, atrial fibrillation, cardiac dysrhythmia, cerebral artery occlusion, cerebral ischemia, diabetes, diverticulosis, heart failure, hypertension, kidney & ureter calculus, pneumonia, precerebral artery occlusion, prostate cancer, respiratory failure, stroke, unconsciousness, and urethra & urinary tract obstruction.

On December 31, 2002, Aon Consulting issued a Request for Proposals (RFP) on behalf of the Plan to contract with a Preferred Provider Organization (PPO) for Accessing Health Care Services Out-of-Area. A contract was proposed to run through June 30, 2005. Proposals were to be received by the Plan no later than January 31, 2003. Proposals were received from five vendors. Aon Consulting recommended that Private Healthcare Systems (PHCS), Waltham, Massachusetts, be awarded a contract to begin on or about July 1, 2003. PHCS' network of preferred providers includes institutional and professional providers of healthcare services on a nationwide basis. PHCS' fees are to be funded out of the claim cost savings to be realized by the Plan by use of the PPO, according to Aon Consulting. Contract negotiations between the Plan and PHCS have been completed and PHCS is to begin its services on September 1, 2003.

SOURCES OF DATA:
-Actuarial Note, Hartman & Associates, House Bill 874, May 14, 2003, original of which is on file in the General Assembly's Fiscal Research Division.
-Actuarial Note, Aon Consulting, House Bill 874, May 23, 2003, 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, Director Fiscal Research Division

DATE: June 28, 2003

Signed Copy Located in the NCGA Principal Clerk's Offices