NORTH CAROLINA GENERAL ASSEMBLY LEGISLATIVE ACTUARIAL NOTE

BILL NUMBER: House Bill 1414 (First Edition)

SHORT TITLE: 2004 Appropriations Act - 1.

SPONSOR(S): Representatives Crawford, Sherrill, Baker, Clary, Earle, Grady,

Owens, and Wright

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: Section 31.21(a), (b) & (c). Employees of the North Carolina Symphony Society, Inc. Provided Membership in the Plan: The section includes the North Carolina Symphony Society, Inc., a non-profit corporation, as an employing unit for the purpose of providing health benefits to its employees and employees' families under the Teachers' and State Employees' Comprehensive Major Medical Plan. Coverage under the Plan will be on a partially contributory basis for employees and enrolled spouses and dependent children. The section does not include retired employees of the Symphony Society, Inc., since its employees are not eligible for benefits through the State Retirement Systems.

Section 31.23. In-State Providers of Emergency Medical Care: The section eliminates the Plan's requirement that a Plan member be incapable of making a decision about the use of in-state emergency medical care providers and must use emergency medical transportation in order to obtain in-state emergency medical care. The 2003 Session of the General Assembly required 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 was required by the 2003 Session to be incapable of making a decision about the use of medical providers and was required to use emergency medical transportation to obtain emergency medical care in order to get relief from excess charges.

EFFECTIVE DATE: July 1, 2004

ESTIMATED IMPACT ON STATE: Section 31.21(a), (b) & (c) .Employees of the North Carolina Symphony Society, Inc. Provided Membership in the Plan: Based upon census data provided by the North Carolina Symphony Society, Inc., Aon Consulting, consulting actuary for the Plan, states that the provision will have a negligible impact upon the Plan. Hartman & Associates, consulting actuary for the General Assembly's Fiscal Research Division, states that the provision is not expected to have a significant financial impact on the Plan. Both actuaries, however, express concerns about adverse selection against the Plan.

The Symphony Society, Inc. would be expected to realize health benefit cost savings from the provision. A comparison of the Society's health benefit claims and administrative costs for fiscal year 2002-03 and the benefit claims and administrative costs projected for fiscal year 2003-04 with premium rates charged by the Plan for state employees and their families for the same periods shows the following expected gains and (losses) to the Society and the Plan:

		2002-03	2003-04
Symphony Society Costs		Annual Costs	Annual Costs
Total Claims Paid		\$448,955.88	\$610,320.00
Total Administrative Fees		\$107,068.19	\$116,160.00
Total Costs		\$556,024.07	\$726,480.00
Unadjusted Gain (Loss) to Society		\$215,409.71	\$279,180.00
	No. of		
State Employee Health Benefit	<u>Society</u>	<u>2002-03</u>	<u>2003-04</u>
Plan Coverage & Costs	Employees	Annual Premium	Annual Premium
Employee Only	41	\$106,237.62	\$140,672.64
Employee & Spouse	4	\$27,511.62	\$34,243.20
Employee & Family	31	\$200,867.82	\$265,384.80
COBRA Employee Only	2	\$5,997.30	\$6,999.36
Total	78	\$340,614.36	\$447,300.00
Unadjusted Gain (Loss) to Plan		(\$108,341.52)	(\$163,020.00)

Notes: 2003-04 Society Costs Projected from 9 Months' Experience.

Plan Member Cost-Sharing not in Society Costs or Plan Premiums.

The foregoing unadjusted losses to the Plan would, however, have to be adjusted by the following differences in benefits currently offered to employees of the Symphony Society, Inc. and their families and those provided by the Plan:

Benefit Comparisons	<u>Plan</u>	<u>Society</u>
Member Annual Deductible	\$350	\$250
Family Annual Deductible	\$1,050	\$750
Member Coinsurance		
Network	20%	10% & 20%
Non-Network	40%	20% & 30%
Out-of-Area	40%	20%
Out-of-Pocket Maximums		
Annual Network	\$1,500	\$1,500
Annual Non-Network	\$6,500	\$3,000
Member Copayments		
Office Visits	\$15	\$20
Outpatient Drugs	\$10, \$25,	\$10, \$15
	\$35, \$40	
Hospital Inpatient	\$100	\$300 Non-Net.
Hospital Outpatient	\$50	None

Plan Member Cost-Sharing not in Society Costs or Plan Premiums

The reduced level of benefits provided by the Plan would be expected to absorb about one-half of the unadjusted losses to the Plan.

Section 31.23. In-State Providers of Emergency Medical Care: Based upon information provided by the Plan, Aon Consulting, consulting actuary for the Plan, estimates that the provision will cost the Plan an additional \$1.7 million for fiscal year 2004-05 and \$2 million for fiscal year 2005-06. Based upon the same information provided by the Plan, Hartman & Associates, consulting actuary for the General Assembly's Fiscal Research Division, estimates that the provision is expected to cost the Plan an additional \$1,628,000 for fiscal year 2004-05 and \$2,189,000 for fiscal year 2005-06. The Plan has sufficient reserves for the 2003-05 biennium to pay for the provision. The Plan was originally expected to have a beginning cash balance of \$97.663 million to begin the biennium on July 1, 2003. The actual cash balance to begin the biennium was over \$123 million, of which \$5.542 million was used during the 2003 Session of the General Assembly. In addition, the Plan was originally expected to have a beginning cash balance of \$159.139 million for the year beginning July 1, 2004, which has now been changed to \$226.787 million by the Plan's consulting actuary; and the Plan was originally expected to have a cash balance of \$133.212 million at the end of the biennium on June 30, 2005, which has now been changed by the Plan's consulting actuary to \$221.044 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 All other types of premium in the indemnity program are fully retired employees. 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, 2003, include:

	Self-Insured		
	Indemnity	Alternative	Plan
	Program	<u>HMOs</u>	<u>Total</u>
Number of Participants			
Active Employees	288,089	-0-	288,089
Active Employee Dependents	135,558	-0-	135,558
Retired Employees	122,014	-0-	122,014
Retired Employee Dependents	19,062	-0-	19,062
Former Employees & Dependents			
with Continued Coverage	2,458	-0-	2,458
Firefighters, Rescue Squad			
Workers, National Guard			
Members & Dependents	9	-0-	9
Total Enrollments	567,190	-0-	567,190
Number of Contracts			
	327,543	-0-	327,543
Employee Only	,		<i>'</i>
Employee & Child(ren)	41,030	-0-	41,030
Employee & Family	43,359	-0-	43,359
Total Contracts	411,932	-0-	411,932

Percentage of Enrollment by Age

29 & Under	26.5%	-0-%	26.5%
30-44	20.7	-0-	20.7
45-54	20.5	-0-	20.5
55-64	17.1	-0-	17.1
65 & Over	15.2	-0-	15.2
Percentage of			
Enrollment by Sex			
Male	38.1%	-0-%	38.1%
Female	61.9	-0-	61.9

Assumptions for the Self-Insured Indemnity Program: For the fiscal year beginning July 1, 2003, the self-insured program started its operations with a beginning cash balance of \$123 million. Receipts for the year are estimated to be \$1.564 billion from premium collections and \$7 million from investment earnings for a total of \$1.571 billion in receipts for the year. Disbursements from the self-insured program are expected to be \$1.425 billion in claim payments and \$57 million in administration and claims processing expenses for a total of \$1.482 billion for the year beginning July 1, 2003. For the fiscal year beginning July 1, 2003, the self-insured indemnity program is expected to have a net operating gain of approximately \$89 million for the year. The Plan's self-insured indemnity program is expected to have an available beginning cash balance of \$212 million for the fiscal year beginning July 1, 2004. The self-insured indemnity program is consequently assumed to be able to carry out its operations for the remainder of 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 \$217.66 monthly for employees whose primary payer of health benefits is Medicare and \$285.92 per month for employees whose primary payer of health benefits is not Medicare. Fully contributory premium amounts for employee and child(ren) contracts are \$135.46 monthly for children whose primary payer of health benefits is Medicare and \$178.22 monthly for other covered children, and \$324.88 per month for family contracts whose dependents have Medicare as the primary payer of health benefits and \$427.48 per month for other family contract dependents. Claim cost trends are expected to increase 11% annually. Total enrollment in the program is expected to increase less than 1% annually over the next few years. The number of enrolled active employees is expected to increase about 1.5% annually over the next few years, whereas the growth in the number of retired employees is assumed to be 4.5% per year. The program is expected to have a 3% decrease in the number of active employee dependents per year whereas the number of retiree dependents is expected to increase 3% per year. Investment earnings are based upon a 4.2% return on available cash balances. The self-insured indemnity program

5

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 Employees of the North Carolina Symphony, Inc.: Health benefits are provided by the Symphony Society, Inc., for its employees and employee family members through a labor contract with the Professional Musicians Association, a local of the American Federation of Musicians. Employees have chosen partially contributory for themselves in return for partially contributory premiums for their enrolled spouses and dependent children. The amount of contributions provided by the Society and by employees is determined periodically in accordance with the labor contract. Health benefits are selfinsured by the Society with claims processing provided by Penn Western Benefits, a third party administrator, and preferred provider (PPO) contracts provided by MedCost, LLC, which is owned by Carolinas Healthcare System and North Carolina Baptist Hospitals. The Society has 174 lives currently covered, of which 78 are employees. These employees have chosen the following types of coverage: 41 have chosen employee only coverage, 4 have chosen employee and spouse coverage, 31 have chosen employee and family coverage, and 2 have chosen employee only continuation coverage. An age and gender comparison of the Society's enrolled employees and total group with those of the Teachers' and State Employees' Comprehensive Major Medical Plan shows:

			Е	Employee (Only Groups				
					State Employee Health Benefit Plan				
	<u>S</u>	Symphony Employees				Active Employees			
<u>Ages</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	Percent	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Percent</u>	
0-4			0	0.0%			0	0.0%	
5-9			0	0.0%			0	0.0%	
10-14			0	0.0%			0	0.0%	
15-19		1	1	1.3%	58	60	118	0.0%	
20-24	1	1	2	2.6%	2,946	7,624	10,570	3.7%	
25-29		2	2	2.6%	7,909	18,598	26,507	9.2%	
30-34	2	2	4	5.1%	11,128	21,797	32,925	11.4%	
35-39	4	2	6	7.7%	11,604	22,533	34,137	11.8%	
40-44	11	4	15	19.2%	13,048	26,973	40,021	13.9%	
45-49	2	5	7	9.0%	14,543	32,354	46,897	16.3%	
50-54	7	6	13	16.7%	14,892	32,162	47,054	16.3%	
55-59	13	4	17	21.8%	11,327	21,932	33,259	11.5%	
60-64	8	1	9	11.5%	5,158	8,098	13,256	4.6%	
65-69	2		2	2.6%	1,228	1,426	2,654	0.9%	
70-74			0	0.0%	384	310	694	0.2%	
75-79			0	0.0%	77	62	139	0.0%	
>79			0	0.0%	28	15	43	0.0%	
Unknown			0	0.0%			0	0.0%	
TOTAL	50	28	78	100.0%	94,330	193,944	288,274	100.0%	
Percent	64.1%	35.9%	100.0%		32.7%	67.3%	100.0%		

Total Groups

					<u>-</u>	mployee He		
	<u>Sympho</u>	ny Employ	ees & Depe	endents	Active Employees & Dependents			
<u>Ages</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	Percent	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Percent</u>
0-4	3	3	6	3.4%	8,337	7,850	16,187	3.8%
5-9	6	7	13	7.5%	9,829	9,493	19,322	4.6%
10-14	11	10	21	12.1%	12,989	12,485	25,474	6.0%
15-19	5	5	10	5.7%	14,446	13,886	28,332	6.7%
20-24	6	3	9	5.2%	10,615	15,489	26,104	6.2%
25-29	3	5	8	4.6%	8,672	19,672	28,344	6.7%
30-34	2	4	6	3.4%	11,681	23,218	34,899	8.3%
35-39	5	7	12	6.9%	12,722	24,285	37,007	8.8%
40-44	6	7	13	7.5%	14,972	28,991	43,963	10.4%
45-49	10	12	22	12.6%	17,513	34,487	52,000	12.3%
50-54	8	13	21	12.1%	18,745	34,131	52,876	12.5%
55-59	14	6	20	11.5%	14,522	23,473	37,995	9.0%
60-64	9	3	12	6.9%	7,138	8,916	16,054	3.8%
65-69	1		1	0.6%	1,506	1,584	3,090	0.7%
70-74			0	0.0%	457	351	808	0.2%
75-79			0	0.0%	101	77	178	0.0%
>79			0	0.0%	42	20	62	0.0%
Unknown			0	0.0%			0	0.0%
TOTAL	89	85	174	100.0%	164,287	258,408	422,695	100.0%
Percent	51.1%	48.9%	100.0%		38.9%	61.1%	100.0%	

Assumptions for the In-State Use of Providers of Emergency Medical Care: Since North Carolina's hospitals are currently under contract with the Plan, the providers of medical care that would be affected by the provision would be the providers of professional medical services. For calendar years 2002, 2001, and 2000, the Teachers' and State Employees' Comprehensive Major Medical Plan 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 were financially responsible for "Disallowed Charges" as well.

	Professional Claims Disallowed							
Average	In-State Claims				Out-of-State Claims			
Disallowed Amount	No. of			No. of	Total	Disallowed	Cost	
Per Case	Cases	Charges	Charges	Sharing	Cases	Charges	Charges	Sharing
Cal. Year 2002			<u> </u>		•	<u> </u>	•	Ţ.
\$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		\$800,156	\$194,740		\$2,870,490	\$782,204	\$153,461
\$500.00 & Over	76	\$173,988	\$96,302	\$3,372		\$1,339,569	\$387,653	\$9,772
\$1,000.00 & Over	55	\$139,199	\$81,955	\$2,664		\$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 included 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.

SOURCES OF DATA:

- Actuarial Note, Hartman & Associates, Appropriations Act Special Provision No. 4,
 May 26, 2004, and Appropriations Act Special Provision No. 5, June 2, 2004, originals of which is on file in the General Assembly's Fiscal Research Division.
- Actuarial Note, Aon Consulting, Appropriations Act Special Provision No. 4, May 28, 2004, and Appropriations Act Special Provision No. 5, June 3, 2004, originals 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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