NORTH CAROLINA GENERAL ASSEMBLY
LEGISLATIVE ACTUARIAL NOTE

BILL NUMBER: Senate Bill 388, Sections 4 & 5

SHORT TITLE: Update Cervical Cancer Screening Coverage

SPONSOR(S): Sen. Foxx

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: The bill replaces the Plan's coverage of one Pap smear per year in its coverage for routine diagnostic examinations with whatever guidelines are published by the American Cancer Society for examinations and tests for the early detection of cervical cancer.

EFFECTIVE DATE: January 1, 2004

ESTIMATED IMPACT ON STATE: Based upon information provided by the Plan, both Aon Consulting, consulting actuary for the Plan, and Hartman & Associates, consulting actuary for the General Assembly's Fiscal Research Division, estimate the bill will result in cost savings to the Plan. These estimates are based upon the American Cancer Society's current guidelines on examinations and tests for the early detection of cervical cancer. Aon consulting projects a cost savings to the Plan of $70,000 for fiscal year 2003-04 and a cost savings of $300,000 for fiscal year 2004-05. Hartman & Associates estimates a cost savings to the Plan of $117,000 for fiscal year 2003-04 and a cost savings of $394,000 for fiscal year 2004-05.

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 $14 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 Plan's Coverage of Screening for Cervical Cancer: New guidelines addressing when and how often women should get early detection tests for cervical cancer and pre-cancer were issued November 14, 2002, by the American Cancer Society. Based on the new recommendations, most women would begin cervical cancer screening later, have an option to stop at a certain age, and be exempt from screening entirely if they have had a hysterectomy. The new guidelines are expected to have a major impact on the number of women who are over-screened and over-treated. Because most cervical pre-cancers grow slowly, having a test every two to three years will find almost all cervical pre-cancers and cancers while they can be removed or treated successfully, according to medical experts with the American Cancer Society. The Society, however, notes that the biggest gain in reducing cervical cancer incidence and mortality would be achieved by increasing screening rates among women who have not been screened or who have not been screened regularly.

The new guidelines, in summary form, are:

- Cervical cancer screening should begin about three years after a woman begins having vaginal intercourse, but no later than 21 years of age.
- Cervical screening should be done every year with regular Pap tests or every two years using liquid-based Pap tests. At or after age 30, women who have had three normal test results in a row may get screened every two to three years. A doctor may suggest getting the test more often if a woman has certain risk factors such as human immunodeficiency virus (HIV) infection or a weakened immune system.
- Women 70 years of age and older who have had three or more normal Pap test results and no abnormal results in the last 10 years may choose to stop cervical cancer screening.
- Screening after a total hysterectomy (with removal of the cervix) is not necessary unless the surgery was done as a treatment for cervical cancer or pre-cancer. Some other special conditions may require continued screening. Women who have had a hysterectomy without removal of the cervix should continue cervical cancer screening at least until age 70. In addition, a promising new test for human papilloma virus (HPV), not yet approved for screening by the FDA, may be useful in detecting early cervical cancer in women over 30 years of age. If the test is approved, it may be added to the guidelines.

The ACS estimates that 13,000 women will develop invasive cervical cancer this year, and about 4,100 women will die of the disease.

For the last two fiscal years, the Plan's claims experience for cervical cancer screenings has been:

			Member Ages		
Group	Up to 17	18-34	35-54	55 & Over	Total
FY2002					
No. of Screenings					
Active	771	23,811	49,088	10,748	84,418
Retired (Non-Medicare)	37	383	2,313	8,071	10,804
Total	808	24,194	51,401	18,819	95,222
Cost of Screenings					
Active - Charge	$22,421	$697,424	$1,421,588	$304,383	$2,445,817
Active - Paid	$19,190	$597,894	$1,115,279	$231,512	$1,963,876
Retired - Charge	$1,214	$10,923	$66,198	$227,199	$305,533
Retired - Paid	$971	$9,154	$49,984	$175,302	$235,410
Total - Charge	$23,634	$708,347	$1,487,787	$531,582	$2,751,350
Total - Paid	$20,161	$607,048	$1,165,263	$406,814	$2,199,286
FY2001					
No. of Screenings					
Active	632	19,344	42,874	9,007	71,857
Retired (Non-Medicare)	26	308	1,994	6,935	9,263
Total	658	19,652	44,868	15,942	81,120
Cost of Screenings					
Active - Charge	$21,425	$664,273	$1,434,993	$297,321	$2,418,012
Active - Paid	$17,159	$509,134	$1,043,982	$217,789	$1,788,064
Retired - Charge	$986	$10,632	$66,261	$225,665	$303,544
Retired - Paid	$824	$8,091	$48,614	$166,856	$224,385
Total - Charge	$22,411	$674,905	$1,501,253	$522,986	$2,721,556
Total - Paid	$17,982	$517,225	$1,092,596	$384,645	$2,012,449

Over the last two fiscal years, the Plan had has the following number of cervical cancer cases with the amount of allowable charges and paid claims:

	FY2002				FY2001			
Member Age (Years)	No. of Cases	% of Cases	Claim Payments	% of Claims	No. of Cases	% of Cases	Claim Payments	% of Claims
6-10	1	0.1%	$0	0.0%	1	0.1%	$0	0.0%
11-15	0	0.0%	$0	0.0%	1	0.1%	$28	0.0%
16-20	6	0.4%	$696	0.1%	13	1.0%	$3,293	0.4%
21-25	4	0.3%	$177	0.0%	8	0.6%	$1,952	0.2%
26-30	12	0.8%	$1,295	0.1%	14	1.0%	$5,941	0.7%
31-35	67	4.6%	$37,845	4.3%	29	2.1%	$1,887	0.2%
36-40	39	2.7%	$23,451	2.7%	168	12.3%	$121,753	14.6%
41-45	295	20.1%	$274,318	31.3%	217	15.9%	$185,411	22.2%
46-50	165	11.2%	$79,264	9.0%	81	5.9%	$44,724	5.3%
51-55	140	9.5%	$126,953	14.5%	186	13.6%	$160,180	19.2%
56-60	228	15.5%	$77,233	8.8%	196	14.4%	$161,961	19.4%
61-65	154	10.5%	$203,359	23.2%	148	10.9%	$98,641	11.8%
66-70	147	10.0%	$35,276	4.0%	125	9.2%	$37,794	4.5%
71-75	44	3.0%	$2,165	0.2%	27	2.0%	$194	0.0%
76 & Over	166	11.3%	$15,736	1.8%	149	10.9%	$12,304	1.5%
Total	1,468	100.0%	$877,768	100.0%	1,363	100.0%	$836,063	100.0%

For the last three fiscal years, the Plan has had the following average quarterly number of females, aged 15 and older, enrolled:

	Female Enrollees Aged 15 & Older		
Age (Years)	FY2002	FY2001	FY2000
15-19	15,025	13,839	11,994
20-24	16,112	14,090	11,224
25-29	18,791	16,070	12,687
30-34	22,167	18,204	13,730
35-39	23,451	20,791	17,466
40-44	29,600	26,948	23,565
45-49	36,444	33,156	28,959
50-54	38,011	33,786	28,265
55-59	29,087	24,391	21,220
60-64	21,317	19,097	17,343
65-69	16,180	15,292	14,289
70-74	13,262	12,745	12,239
75-79	10,172	9,850	9,516
80 & Over	13,724	13,064	12,480
Total	303,341	271,321	234,976

SOURCES OF DATA:

- Actuarial Note, Hartman & Associates, Senate Bill 388, April 18, 2003, original of which is on file in the General Assembly's Fiscal Research Division.
- Actuarial Note, Aon Consulting, Senate Bill 388, April 17, 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: Although Section 4 of the bill amends G.S. 135-40.5(e), Routine Diagnostic Examinations, a further amendment needs to be made to G.S. 135-40.6(8)s. Benefits under G.S. 135-40.5(e) are paid without application of the Plan's annual deductible and coinsurance, which are the responsibility of Plan members, up to $150 per person per year. G.S. 135-40.6(8)s. needs a conforming amendment so that any allowed charges exceeding $150 per person per year are also covered even though annual deductibles and coinsurance are applied to the allowed charges.

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DATE: April 22, 2003

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