NORTH CAROLINA GENERAL ASSEMBLY
LEGISLATIVE ACTUARIAL NOTE

BILL NUMBER: Senate Bill 1461, Section 1

SHORT TITLE: Insurance Coverage for Infertility

SPONSOR(S): Senator Austin Allran

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: The bill provides coverage for infertility studies and in vitro fertilizations, ovum implant placements or transfers, gamete and zygote intrafallopian transfers for the treatment of female infertility. Although not stated in the bill, treatments for female infertility would also include intrauterine insemination and other forms of artificial insemination as well as fertility drugs such as Clomid, Metrodin, and Pergonal. Male infertility would also be treated through intracytoplasmic sperm injections, variocele ligations, vasovasostomies, and sperm aspirations. Surgery would be covered for either male or female infertility. The bill does not, however, appear to cover embryo or semen cryopreservation. Coverage would be provided only to employees and spouses since it is provided on the same basis as is coverage for maternity benefits, which are not provided by the Plan for dependent children. The infertility benefits would have to be provided by both the Plan's self-insured indemnity program and its alternative coverage through health maintenance organizations (HMOs).

EFFECTIVE DATE: January 1, 1999.

ESTIMATED IMPACT ON STATE: The Plan's consulting actuary, Aon Consulting, estimates the cost of the bill to the Plan's indemnity program to be from $8,400,000 to $11,000,000 annually with a midpoint cost of $9,700,000. For fiscal year 1998-99, the midpoint cost is estimated to be $2,700,000. For fiscal year 1999-2000, the first full fiscal year covered by the bill, the additional cost to the Plan's indemnity program is estimated to be $10,500,000. The consulting actuary for the General Assembly's Fiscal Research Division, Hartman and Associates, estimates the additional cost to the Plan's indemnity program to be $2,669,809 for fiscal year 1998-99 and $11,533,565 for fiscal year 1999-2000. The bill's additional cost can be adequately covered by reserves in the Plan's indemnity program for the 1998-99 fiscal year. However, reserves are not sufficient to cover the bill's cost after the 1998-99 fiscal year. For the 1999-2000 fiscal year, the bill is expected to cost the Plan's indemnity program an additional $11,000,000. Of this amount, $6,930,000 would be from the State's General Fund, $550,000 would be from the State's Highway Fund, $1,100,000 would be from other

employer funds available to the State, and $2,420,000 would come from funds paid by employees for their enrolled dependents and former employees that have not retired for their own coverage and that of their enrolled dependents. An additional cost to the State would be for employees enrolled in HMOs who receive the same employer contribution for their own coverage as do employees who enroll in the Plan's self-insured indemnity program. This additional cost for the 1999-2000 fiscal year would be $2,310,000 from the State's General Fund, $184,000 from the State's Highway Fund, and $336,000 from other employer funds available to the State. All totaled, the additional cost of the bill for fiscal year 1999-2000 would be $9,240,000 from the State's General Fund, $734,000 from the State's Highway Fund, and $1,436,000 from other employer funds available to the State. Additional costs to the Plan's self-insured indemnity program from enactment of the bill would be expected to be $11,900,000 for fiscal year 2000-2001, $12,900,000 for fiscal year 2001-2002, and $13,900,000 for fiscal year 2002-2003.

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 had only 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., $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. Employer-paid non-contributory premiums are only authorized for the indemnity program's coverage for employees and retired employees. Whenever employees and office holders first employed or taking office on and after October 1, 1995 become eligible for health benefits as retired employees, the amount of premium paid by the State for individual coverage will be based upon the retiree's amount of retirement service credit at the time of retirement. Only retired employees with 20 or more years of service credit at retirement will be eligible for non-contributory health benefit premiums. Retirees with 10 or more years of service credit at retirement will be eligible for 50% partially contributory health benefit premiums. Retired employees with 5 or more year of service credit at retirement will be eligible to continue their health benefits on a fully contributory basis. All other types of premium in the indemnity program are fully contributory. 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 twelve HMOs currently covering about 27% of the Plan's total population in about 88 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, 1997, include:

	Self-Insured Indemnity Program	Alternative HMOs	Plan Total
Number of Participants			
Active Employees	183,500	78,500	262,000
Active Employee Dependents	102,000	56,400	158,400
Retired Employees	87,100	6,400	93,500
Retired Employee Dependents	14,600	1,300	15,900
Former Employees & Dependents with Continued Coverage	2,700	900	3,600
Total Enrollments	389,900	143,500	533,400
Number of Contracts			
Employee Only	207,000	57,500	264,500
Employee & Child(ren)	29,000	17,200	46,200
Employee & Family	36,500	10,800	47,300
Total Contracts	272,500	85,500	358,000
Percentage of Enrollment by Age			
29 & Under	26.8%	44.5%	31.5%
30-44	20.6	27.2	22.4
45-54	20.5	18.2	19.9
55-64	14.3	7.6	12.5
65 & Over	17.8	2.5	13.7
Percentage of Enrollment by Sex			
Male	39.6%	39.7%	39.6%
Female	60.4	60.3	60.4

Assumptions for the Self-Insured Indemnity Program: For the fiscal year beginning July 1, 1997, the self-insured program started its operations with a beginning cash balance of $384.9 million. Receipts for the year are estimated to be $580 million from premium collections, $25 million from investment earnings, and $15 million in risk adjustment and administrative fees from HMOs, for a total of $620 million in receipts for the year. Disbursements from the self-insured program are expected to be $640 million in claim payments and $18 million in administration and claims processing expenses for a total of $658 million for the year beginning July 1, 1997. For the fiscal year beginning July 1, 1998, the self-insured indemnity program is expected to have an operating cash balance of over $346 million with a net operating loss of $98 million for the 1998-99 fiscal year. For the fiscal year beginning July 1, 1999, the self-insured indemnity program is expected to have an operating cash balance of $248 million with a net operating loss of $170 million for the 1999-2000 fiscal year. The estimated cash balance for the self-insured indemnity program is expected to be $78 million at the end of the 1999-2000 fiscal year. The self-insured indemnity program is consequently assumed to be able to carry out its operations without any increases in its current premium rates or a reduction in existing benefits until the 1999-2000 fiscal year. This assumption is 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-of-stay 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 voluntary formularies, and

fraud detection) are maintained and improved where possible. Current non-contributory premium rates are $110.08 monthly for employees whose primary payer of health benefits is Medicare and $144.60 per month for employees whose primary payer of health benefits is not Medicare. Fully contributory premium amounts for employee and child(ren) contracts are $68.50 monthly for children whose primary payer of health benefits is Medicare and $90.12 monthly for other covered children, and $164.30 per month for family contracts whose dependents have Medicare as the primary payer of health benefits and $216.18 per month for other family contract dependents. Claim cost trends are expected to increase 8-10% annually. Total enrollment in the program is expected to decrease about one percent (1.0%) annually due to competition from alternative HMOs. The number of enrolled active employees is expected to show a 1-2% loss annually, whereas the growth in the number of retired employees is assumed to be 4% per year. The program is expected to lose about 3-4% of its number of active employee dependents each year, whereas the number of enrolled retiree dependents is assumed to show no appreciable change from year to year. Investment earnings are based upon a 5% monthly 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 Indemnity Plan's Infertile Employees and Spouses: Based upon 1995 data published by the National Center for Health Statistics, approximately 6.1% of females age 15-24 years suffer from impaired fertility; approximately 11.2% of females age 25-34 years suffer from the same condition; and 12.8% of females age 35-44 years suffer from impaired fecundity. The same data also shows that 1.6% to 45.3% of females in the same age bands are infertile from contraceptive surgery. If 20% of these females elect to reverse their surgical sterility, the total percentage of infertile females impacted by the bill would be 6.4% for those age 15-24 years, 15.6% for those age 25-34 years, and 21.9% for those age 35-44 years. The number of female employees and spouses in the Plan's indemnity program on December 31, 1997, was 4,432 for age 15-24 years, 22,870 for age 25-34 years, and 39,991 for age 35-44 years. Consequently, an estimated 400 to 600 members of the indemnity program are expected to be affected by the bill. The American Society for Reproductive Medicine estimates that 80-90% of infertility cases are treated with conventional therapies, such as drug treatment or surgical repair of reproductive organs. The remaining 10-20% of the cases would be treated with assisted reproductive technologies. Data published in 1995 by the Society for Assisted Reproductive Technologies and 1995 data published by the National Centers for Disease Control on assisted reproductive technologies indicate that approximately 80% of assisted technologies involves in vitro fertilization, another 10% involves in vitro fertilization with intracytoplasmic sperm injection, and the remaining 10% involves gamete and zygote intrafallopian placements and transfers. It is further estimated that some 25% of infertility treatments actually results in a delivery.

SOURCES OF DATA:

-Actuarial Note, Hartman & Associates, Senate Bill 1461, Section 1, June 11, 1998, original of which is on file in the General Assembly’s Fiscal Research Division.

-Actuarial Note, Aon Consulting, Senate Bill 1461, Section 1, June 26, 1998, 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: The first line of the proposed G. S. 135-40.6(8)u. should read: "u. Infertility: Infertility studies, fertility prescription drugs, surgery, intraurterine insemination and other forms of artificial insemination, in vitro fertilizations, ovum".

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Signed Copy Located in the NCGA Principal Clerk's Offices