



Economic Impact Analysis Virginia Department of Planning and Budget

12 VAC 30-135 – Department of Medical Assistance Services Family Planning Waiver Services January 23, 2003

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.G of the Administrative Process Act and Executive Order Number 21 (02). Section 2.2-4007.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

The Department of Medical Assistance Services proposes to make permanent its emergency family planning regulations, which were implemented on October 1, 2002. The proposed regulations extend the family planning services provided by Medicaid to eligible women from 2-month postpartum to 24-month postpartum.

Estimated Economic Impact

These regulations establish a Medicaid family planning waiver. Family planning services are services necessary to prevent or delay a pregnancy and do not include abortion (terminated pregnancy) services. The services provided include family planning education and counseling, physician office visits, annual gynecological exams, sexually transmitted disease screens, pap tests, contraceptives, and sterilizations. Currently, Medicaid provides full coverage to eligible women 60 days postpartum. At the end of the 60-day period, the coverage is terminated. With the proposed change, women who continue to meet eligibility requirements will receive family planning waiver services for an additional 22-month period.

Pursuant to 1999 Acts of Assembly, HB 2717, the Department of Medical Assistance Services (the department) sought an approval of a family planning demonstration and research waiver from Centers for Medicare and Medicaid Services (CMS) under section 1115(a) of the federal Social Security Act to cover family planning services for a longer postpartum period. The approval was obtained in July 2002 for a five-year period and the waiver was implemented under emergency regulations on October 1, 2002.¹

Demonstration and research waivers are granted to formally investigate an issue. With this waiver, the department aims to evaluate the effects of extending coverage for an additional 22-months postpartum on poor birth outcomes, birth spacing and rates, and the costs of delivery/newborn/infant care. Demonstration waivers must not raise costs for approval. To obtain approval, the department must show that the proposed program will not increase the cost of providing care. In the following discussion, this will be referred to as “budget neutrality.”

Based on the available research, the department anticipates that the fiscal benefits of providing postpartum family planning for a longer period will be at least equal to or more than the costs of providing the family planning services, and has already successfully demonstrated the budget neutrality of this waiver to CMS. The budget neutrality demonstration relied on research showing that every dollar spent on family planning services generates a \$3 savings in delivery and infant care.² Since family planning services and delivery/infant/newborn care costs are interrelated, a brief snapshot of both Medicaid programs in fiscal year (FY) 2002 is provided below.

Last year, it cost \$486 to provide family planning services per person and approximately \$17.9 million was spent for about 37 thousand recipients. There were fewer delivery/infant/newborn care recipients, but the per capita cost was seventeen times higher. As a result, approximately \$239 million was spent in this program. Although per capita expenditures give an idea about average costs, it is subject to significant variation as the service mix for every recipient is not the same. For example, a recipient may be receiving a low-cost contraceptive while another may be receiving a relatively expensive birth control method or a combination of methods.

¹ Extensions in three-year increments may be awarded by Centers for Medicare and Medicaid Services.

² Forrest and Samara, 1996, “Impact of Publicly Funded Contraceptive Services on Unintended Pregnancies and Implications for Medicaid Expenditures,” *Family Planning Perspectives*, 28(5).

Table 1: Program Summary Statistics

<i>Program</i>	<i>FY 2002</i>	
Family Planning	Persons	36,896
	Per Capita	\$486
	Expenditures	\$17,941,292
Delivery, Infant, Newborn Care	Persons	28,848
	Per Capita	\$8,293
	Expenditures	\$239,223,067

Source: The Department of Medical Assistance Services

Under this waiver, the family planning services are available to low-income childbearing women who are 9 to 57 years old, who were enrolled in Medicaid during their most recent pregnancy and received Medicaid funded pregnancy related service, and who have an income at or below 133% of the federal poverty level. All local departments of social services will be required to determine the initial eligibility of women for the family planning waiver as well as conduct eligibility re-determinations for waiver enrolled women at least every 12 months until the women reach 24 months postpartum at which time they will be no longer eligible for waiver services. The department assumes that approximately 15,000 women may choose to use the extended family planning services over a five-year demonstration period (or approximately 3,000 recipients per year). The funds for family planning services have a 90% match rate. The services will be provided by Medicaid providers on a fee-for-service basis and Medicaid rates will be paid.

According to available data, 841,080 Virginian women are estimated to be in need of contraceptive services and supplies.³ Of these, 386,690 women (including 125,950 teenagers) are estimated to be in need of publicly provided contraceptive services. The Commonwealth is reported to have 176 publicly supported family planning clinics, which serve 127,900 women.

This report uses cost-benefit analysis to identify potential economic effects of the proposed Medicaid waiver. The cost-benefit analysis is concerned with the economically efficient allocation of resources. This technique requires consideration of all possible economic costs and benefits associated with a project and are used to determine whether the project represents a gain or loss to the society as a whole. Therefore, all costs and benefits to the society

³ Contraceptive Counts: Virginia, The Alan Guttmacher Institute, downloaded from www.agi-usa.org on January 9, 2003.

as well as to the individuals, firms, and public entities must be separately taken into account and aggregated. However, in practice, the economic value of some benefits or costs may not be easily quantified, or cannot be quantified at all. This is especially the case for many social costs or benefits. Nonetheless they must be identified, stated, and considered.

The social costs and benefits of family planning are much more significant than any of the other potential economic effects. As explored later in detail, family planning services reduce unintended pregnancies. Some of these unintended pregnancies would have ended in births while some others would have ended in terminated pregnancies and miscarriages.

The fact that many social costs and benefits of family planning cannot be accurately quantified, but must be considered in an economic evaluation, creates another layer of difficulties. It is simply beyond the scope of this analysis to estimate or attach an economic value to the anticipated averted births and terminated pregnancies. However, in order to better understand the potential effects of the extended family planning, a simple model is developed to estimate the number of unintended pregnancies averted.⁴ The model uses contraceptive profiles of women to estimate likely economic effects, as contraceptive use is one of the most important determinants of pregnancy rate. The results are provided below first for ease of the explanations that follows.

This exercise considers all available reversible contraceptives as well as nonreversible methods (i.e., sterilization). First, assumptions about the number of each contraceptive method used by 3,000 low-income women (who are expected to enroll in the program) without public assistance for extended family planning are made under column (a) from available research data and associated proportions are provided in parentheses.⁵ This data represents the type of contraceptive used by women prior to their first publicly funded visit to a planning clinic. Under the assumed scenario, no woman who is sterilized within two months postpartum continues to use family planning services for the extended 22-month period. The model also assumes that these women are unlikely to use diaphragm and spermicides. The number of low-income eligible women who are assumed to use the pill if they do not receive extended family planning

⁴ The Alan Guttmacher Institute reviewed an earlier version of this model and suggested updating of some of the data elements with most recent data available, which are incorporated in this report.

⁵ Source: Darroch, Ranjit, and Frost, "Impact of Publicly Funded Contraceptive Services on Unintended Pregnancies," presented at APHA, Nov. 2000; and personal communication, Jennifer Frost, 1/15/03.

Table 2: Estimated number of unintended pregnancies averted for a 12- month period

Contraceptive Method	Estimated Users (percent of total in brackets)		First Year Failure Rate (c)	Unintended Pregnancies		Change in Unintended Pregnancies(f) (e-d)
	Without waiver (a)	With waiver (b)		Without waiver(d) (axc)	With waiver(e) (bxc)	
Tubal Sterilization	0 (0%)	90 (3%)	0.5%	0	0	No change
Pill	690 (23%)	1,590 (53%)	7.5%	52	119	Increase by 68
IUD/injectable/Implant	270 (9%)	630 (21%)	3.5%	9	22	Increase by 13
Diaphragm	0 (0%)	0 (0%)	13.1%	0	0	No change
Condom	1,600 (32%)	1,050 (21%)	13.7%	132	86	Decrease by 45
Spermicides	0 (0%)	0 (0%)	27.6%	0	0	No change
Periodic Abstinence	240 (8%)	30 (1%)	22.9%	55	7	Decrease by 48
Withdrawal	30 (1%)	30 (1%)	24.5%	7	7	No change
None	810 (27%)	0 (0%)	85.0%	689	0	Decrease by 689
TOTAL	3,000 (100%)	3,000 (100%)	NA	944	242	Decrease by 701

services is 690, or 23% of the total. Similarly, research indicates that 1,600 (32%) of eligible women would use condoms, 270 (9%) would use intrauterine devices (IUD), injectable, or implants, 240 (8%) would use periodic abstinence, and 810 (27%) would not use any method of contraception if public funds are not provided.

Column (b) mimics the expected contraceptive use upon receiving extended Medicaid services.⁶ Endowed with the publicly provided family planning services, a significant change in contraceptive use is expected. A number of women (90 or 3%) are expected to use sterilization. There is also a significant increase (from 690 to 1,590) in pill use. The uses of some contraceptive methods such as condom and periodic abstinence are expected to decrease. A significant expected change is that of the 810 women who are assumed to use no methods would start using a contraceptive method.

Column (c) provides information about the expected failure rates within the first 12-month period associated with each method of choice.⁷ Not surprisingly the highest failure rate

⁶ Source: AGI, Family Planning Annual Report: 2001 Summary, submitted to OPA, DHHS, Aug. 2002, page 32, Table 3-FP; column 4 - data for Region III. Assumes distribution of 4% of unknown method users into pill-2%, condom-1%, injectable-1%. This is the distribution of contraceptive users at all clinics funded by Title X in 2001 in Region III.

⁷ Source: Ranjit, et al. Contraceptive Failure in the First Two Years of Use, Family Planning Perspectives, vol. 33, no. 1, Jan/Feb 2001, Table 3.

(85%) is associated with using no method of contraception. The next highest failure rates are for spermicides (27.6%), withdrawal (24.5%), condom (13.7%), and diaphragm (13.1%).

Columns (d) and (e) present the number of unintended pregnancies estimated in two scenarios: without and with the family planning services that are provided under this waiver, respectively. The highest number (689) of unintended pregnancies is expected to occur due to not using any contraceptive methods if planning services are not provided. This is followed by the condom, periodic abstinence, and pill users who are estimated to have 132, 55, and 52 unintended pregnancies, respectively, if the Medicaid family planning services are not extended. With the waiver, most unintended pregnancies are likely to occur to pill users (119), to condom users (86) and to IUD/injectable/implant users (22). No unintended pregnancies is estimated to occur to those who do not use any contraceptives simply because everyone who is enrolled is expected to use a publicly funded method.

The last column (f) reveals the expected change in the number of unintended pregnancies by type of contraceptive. The number of unintended pregnancies is estimated to increase for the pill (68) and IUD/injectable/implant (13) methods only because more women are assumed to use these methods with the family planning waiver. On the other hand, the number of unintended pregnancies is expected to decrease by 689 for those enrollees who would not have used a contraceptive method without the waiver. Similarly, substitution away from condoms and periodic abstinence and towards more effective methods will cause the number of unintended pregnancies to decrease by 48 for periodic abstinence and by 45 for condom methods. The total expected reduction in unintended pregnancies during the 12-month period starting from the third month of postpartum is 701.

The accuracy of this estimate is uncertain due to several factors. (1) The data describing contraceptive use prior to and after receiving public assistance as well as data on failure rates are not specific to Virginia. Thus, there exists the possibility that these statistics may not accurately describe the potential changes in contraceptive use and failures in Virginia. (2) Additionally, the data used here is estimated for women who did not receive public assistance prior to their first visit. Since the proposed regulations extend coverage by an additional 22-month over the first two months postpartum, the use of contraceptives among the affected Virginian women who already benefited from them may be higher because they may be more willing to continue to use

a contraceptive method they are already familiar with by privately paying for them relative to those who never received any publicly funded family planning services. This would result in over estimation of the number of unintended pregnancies averted under this waiver program. Unfortunately, there is no available data to make adjustments in order to improve the precision of the estimates.

Note that the estimated reduction in the number of unintended pregnancies is for a 12-month period following the second month of postpartum whereas the services will be available for an additional 22-month period from the second month. Thus, the estimated 701 unintended pregnancies averted do not take into account the pregnancy outcomes during the additional 10-month period. If all assumptions remain the same during the additional 10-month period, the estimated number of reductions in unintended pregnancies would be 1.83 times higher. However, failure rates are reported to decrease in the second year of use by 36% on average.⁸ Thus, the expected reductions in unintended pregnancies during the second year of use calculated using the appropriate failure rates and the adjustment factor of 0.83 is applied to the results to obtain the estimate for a 10-month period. The results suggest that 1,278 unintended pregnancies would be averted during the whole 22-month period. In addition, the agency's estimated enrollment of 3,000 may be somewhat conservative. To give an idea of how these numbers would change if enrollment exceeds the agency's expectations, we estimate the number of unintended pregnancies for 5,000 recipients per year as well. Under this assumption, the estimated number of unintended pregnancies increases to 2,131 for the 22-month period.

Although these estimates are subject to significant uncertainty, what is more important is the distribution of these unintended pregnancies among averted births, averted terminated pregnancies, and averted miscarriages as they represent social costs and benefits that may be expected from the proposed family planning services. In other words, our conclusions are not sensitive to the errors in estimating the participation rate. They are more sensitive to estimates of expected outcomes of any unintended pregnancies that do occur. The following table aims to make this point explicitly clear. The table is prepared from the national data indicating that of these unintended pregnancies, 44% would end in births, 43% would end in terminated

⁸ Ranjit, Nalini, et al., 2001, "Contraceptive Failure in the First Two Years of Use: Differences Across Socioeconomic Subgroups," *Family Planning Perspectives*, v. 33, No. 1, pp. 19-27.

Table 3: Unintended Pregnancy Outcomes for 3rd month of Postpartum through 24th month

Enrollment		Total Unintended Pregnancies	Births (44%)	Abortions (43%)	Miscarriages (13%)
3,000	<i>Without the Waiver</i>	1,666	733	716	217
	<i>With the Waiver</i>	388	171	167	50
	<i>Estimated Decrease</i>	1,278 (77%)	562 (77%)	550 (77%)	166 (77%)
5,000	<i>Without the Waiver</i>	2,777	1,222	1,194	361
	<i>With the Waiver</i>	646	284	278	84
	<i>Estimated Decrease</i>	2,131 (77%)	938 (77%)	916 (77%)	277 (77%)

pregnancies, and 13% would end in miscarriages.⁹ This indicates that the probability of a live birth once an unintended pregnancy occurs (44%) is much lower than the probability of unintended pregnancy ending in a terminated pregnancy or miscarriage (56%).

The table shows that without publicly funded family planning services approximately 1,666 unintended pregnancies would occur during the 22-month extended Medicaid coverage if 3,000 women are enrolled in the program and 2,777 unintended pregnancies would occur if 5,000 women are enrolled. For the 3,000-enrollment level, of the unintended pregnancies, 733 would end in live births, 716 would end in terminated pregnancies, and 217 would end in miscarriages. With the waiver, the number of unintended pregnancies and consequently the number of births, terminated pregnancies, and miscarriages are much lower (approximately 23% of pre-waiver level). Thus, the proposed regulations are estimated to decrease total unintended pregnancies by 1,278, unintended births by 562, unintended abortions by 550, and unintended miscarriages by 166. Note that the number of unintended births averted (562) is much lower than the total number of terminated pregnancies and miscarriages averted (716). Similarly, for the 5,000-enrollment level, the number of unintended pregnancies averted would be 2,131, the number of births averted would be 938, the number of terminated pregnancies averted would be 916, and the number of miscarriages averted would be 277.

Whether a pregnancy is intended or not makes a significant difference in the expected pregnancy outcome. The birth rates would be higher than terminated pregnancy rates for intended pregnancies although there is no data for the expected outcomes for intended pregnancies. The data is available however for all pregnancies. According to Virginia specific

⁹ Contraceptive Use, Facts in Brief, The Alan Guttmacher Institute, downloaded from www.agi-usa.org on January 9, 2003.

data of all pregnancies (intended plus unintended), 63% end in live births, 23% end in terminated pregnancies, and 15% end in miscarriages. In other words, the likelihood of a live birth is significantly higher than the likelihood of either a terminated pregnancy or miscarriage (63% vs. 38%) when all intended and unintended pregnancies are considered. As presented already, the opposite is true for unintended pregnancies. Among unintended pregnancies, the probability of a live birth is much lower than the probability of either a terminated pregnancy or miscarriage (44% vs. 56%).

The following discussion focuses on the potential changes in the public spending on family planning services and on economic effects on individuals as well as their families. The proposed waiver is expected to change the composition of the services for which Medicaid dollars are spent. With this waiver, Medicaid pays for family planning services for an extended 22-month postpartum period. Table 1 shows that per capita expenditures are \$486 per enrollee for a 12-month period. When extrapolated for a 22-month period using the 1.83 adjustment factor, per capita expenditures become \$891 per enrollee. Similarly, per capita delivery/newborn/infant care expenditures become about \$15,204 per enrollee over the 22-month period. This indicates that Medicaid family planning expenditures would increase by \$2,672,951 for 3,000-enrollment level, and by \$4,454,919 for 5,000-enrollment level. Additionally, the department will incur approximately \$100,000 in one time information system modification costs, approximately \$100,000 in one time project evaluation costs, and an additional \$100,000 in ongoing administrative costs for eligibility determinations, public awareness, etc. Thus, expected ongoing costs should be adjusted upward by the additional \$100,000 in administrative costs and by the annualized costs for other one-time expenditures (assuming 10 year project horizon, translates to approximately 20,000 annually).

On the other hand, Table 3 indicates that 562 and 938 births would be averted at the 3,000 and 5,000 enrollment levels, respectively. This produces \$8,554,399 and \$14,260,936 in estimated cost savings in Medicaid delivery/newborn/infant care expenditures for 3,000 and 5,000 enrollment levels, respectively. These estimates indicate that for every Medicaid dollar spent on family planning produces about a \$3.20 cost savings in Medicaid delivery/newborn/infant care expenditures. This derived cost benefit ratio is consistent with the earlier research finding that every Medicaid dollar spent on family planning, a \$3 dollar savings is realized in other Medicaid expenditures, which is also used by the department to illustrate the

budget neutrality of the proposed project to federal CMS. In addition to cost savings in delivery/newborn/infant care expenditures, there would also be cost savings in prenatal care expenditures and/or medical/surgical expenditures for miscarriages, which are not included due to lack of data.

The net effect of the additional costs and benefits on the Commonwealth is complicated by the fact that Medicaid expenditures for family planning services have a 90% federal support for majority of the expenditures and 75% and 51% match for some other expenditures. The following table breaks down the expected Medicaid costs and cost savings among the state and federal dollars.

Table 4: Medicaid Costs and Cost Savings by State and Federal Support

<i>Enrollment</i>	<i>Category</i>	<i>State Share</i>	<i>Federal Share</i>	<i>Total</i>
3,000	Family Planning Costs	\$267,295 (10%)	\$2,405,656 (90%)	\$2,672,951
	System Costs	\$2,500 (25%)	\$7,500 (75%)	\$10,000
	Evaluation Costs	\$1,000 (10%)	\$9,000 (90%)	\$10,000
	Administrative Costs	\$9,800 (49%)	\$10,200 (51%)	\$20,000
	Total Costs	\$280,595	\$2,432,356	\$2,712,951
	Total Benefits (Delivery/Newborn/Infant)	\$854,440 (10%)	\$7,689,959 (90%)	\$8,544,399
	<i>Benefit/Cost Ratio</i>	3.05	3.16	3.15
	<i>Net Benefits</i>	\$573,845	\$5,257,603	\$5,831,448
5,000	Family Planning Costs	\$445,492 (10%)	\$4,009,427 (90%)	\$4,454,919
	System Costs	\$2,500 (25%)	\$7,500 (75%)	\$10,000
	Evaluation Costs	\$1,000 (10%)	\$9,000 (90%)	\$10,000
	Administrative Costs	\$9,800 (49%)	\$10,200 (51%)	\$20,000
	Total Costs	\$458,792	\$4,036,127	\$4,494,919
	Total Benefits (Delivery/Newborn/Infant)	\$1,426,094 (10%)	\$12,834,843 (90%)	\$14,260,936
	<i>Benefit/Cost Ratio</i>	3.11	3.18	3.17
	<i>Net Benefits</i>	\$967,302	\$8,798,716	\$9,766,017

The results indicate that the Commonwealth would incur approximately \$280,595 in its participation in Medicaid family planning services and save approximately \$854,440 in delivery/newborn/infant costs resulting a net benefit of \$573,845 for an annual enrollment of 3,000. If the annual enrollment is at 5,000 level, then estimated net cost savings in Medicaid expenditures to Virginia would be about \$967,302. Note that the impact on Medicaid expenditures does not cover the full range of cost effectiveness of the family planning services as

the cost savings from averted terminated pregnancies and miscarriages that would be paid privately or by indigent care funds are not taken into account.

One of the other economic effects expected from extended coverage for family planning services is the substitution of publicly funded healthcare for private spending on family planning. This is often referred to as “crowding out.” Crowding out occurs when rational individuals substitute a costless alternative provided by the government for an otherwise costly service. For instance, if the government provides free bread, individuals would not purchase bread out of their pocket, but would rather rely on the government. In other words, government funds spent on bread would crowd-out, or replace out-of-pocket expenditures on bread.

Similarly, the family planning waiver expenditures will likely replace, or crowd out some of the privately paid family planning services. For example, in Table 2 it is assumed that of the 3,000 enrollees, about 2,190 recipients would be already using a contraceptive method prior to receiving services under the waiver. Similarly, for the 5,000-enrollment level about 3,650 recipients are estimated to use family planning services in the absence of the waiver. With the waiver, almost all of these recipients would not be purchasing otherwise privately paid family planning services. Also, it is expected that this waiver will divert some recipients away from other publicly provided family planning services such as those provided with Title X funds. However, in the end, these Title X funds will be used to serve additional women who would not otherwise use family planning services. Therefore, the proposed waiver will likely first crowd out some family planning services provided through Title X funds, which in turn would crowd out about the same private spending on family planning services. This means that at the aggregate, the provided waiver services will likely crowd out private spending currently undertaken by 73% of the expected enrollees either directly or indirectly through the Title X program. However, there does not seem to be a solution in the current literature to eliminate this problem without creating inequities in access to coverage. Thus, some level of substitution of public coverage for private coverage is an unavoidable effect of any program designed to make sure that those eligible individuals who need health planning services get them.

While crowding out occurs with almost any programs that offer public assistance, economic effects of family planning crowding out may not be tremendous for Virginia as suggested by the potential crowding out by 73% of enrollees. The 133% of federal poverty level

for waiver eligibility results in lower “acceptable” level of crowding out because, of the 73% low-income enrollees, probably most would be using “low-cost” family planning services or a limited range of services if public funds are not made available to them.¹⁰ If this is the case, then the magnitude of crowding out will likely be small. Also, under the waiver, potential crowding out of private family planning expenditures will be financed 90% from federal funds and the Commonwealth will finance only one tenth. One dollar crowding out in private insurance will save the eligible women exactly one dollar which will increase the federal dollars coming to the Commonwealth by 90 cents, and increase state expenditures by only 10 cents. These suggest that the adverse effects of crowding out may not be great for Virginia. Moreover, crowding out will likely provide some financial relief to low-income women, which could be considered as a form of subsidy to them.

There is also likely to be some financial savings to women who unintentionally get pregnant and who would otherwise terminate their pregnancies. As mentioned before, the department does not pay for abortion services unless the life or health of the mother is endangered if the fetus is carried to term. Thus, any abortion costs must be paid privately. Since the proposed waiver is expected to reduce the number of terminated pregnancies among unintended pregnancies, these women and/or their families are expected to realize some financial savings in abortion costs that would have otherwise occurred. Table 3 shows that estimated number of terminated pregnancies averted is 550 for 3,000-enrollment level and 916 for 5,000-enrollment level. In 1997, the average cost of a non-hospital abortion with local anesthesia at 10 weeks of gestation was \$316, but the cost ranged from \$150 to \$1,535.¹¹ The growth in consumer price index for medical care in the District of Columbia, Maryland, West Virginia, and Virginia was 11.5% from the beginning of 1998 to the end of 2002.¹² This implies that the average cost of surgical abortion would be approximately \$352 currently. Therefore, private cost savings in abortion related medical care is approximately \$193,600 at the 3,000-enrollment level and \$322,432 at the 5,000-enrollment level.

¹⁰ Potential recipients have budget constraints just like everybody. However, their incomes are low. A low-income family will spend less money on family planning services relative to that they would spend with public funds.

¹¹ The Alan Guttmacher Institute, Facts in Brief, “Induced Abortion,” downloaded from www.agi-usa.org on 01/12/2003.

¹² Source: www.economagic.com as of 01/12/2003.

Although financial aspects of averted births, abortions, and miscarriages are discussed first, non-financial economic effects of these events are probably much more significant. Eligible low-income women are probably at risk of unintended pregnancies because they are unlikely to have private insurance coverage or personal funds to purchase family planning services. The waiver services are expected to benefit the health and welfare of these women in their childbearing years, to reduce maternal mortality and morbidity, and to improve the health of children, by allowing women to plan their pregnancies, by decreasing their risk of experiencing poor birth outcomes, and by averting the unintended births.^{13 14} Adolescent women, women with several children, and women with existing health problems are particularly susceptible to health risks because their bodies may not be mature enough to handle a pregnancy and experience obstetrical complications, may not have gained sufficient strength following a previous pregnancy, or may face complication due to other health conditions, respectively. Closely spaced births (usually within 2 years) are more likely to be premature and low-birth-weight. By practicing family planning, women can avoid high-risk births and reduce their chances of having a baby who will die in infancy. Also, there are risks associated with normal childbirth, which would be reduced with the anticipated decrease in unintended pregnancies.

Poor birth outcomes may not only result in neonatal care, but also in expensive long lasting health care services for developmentally delayed children, which may not be covered by Medicaid. Thus, there is chance that families or the Commonwealth (through indigent care services) may have to incur these costs. Thus, the Commonwealth may experience decreased costs associated with caring for and educating children with development delays and disabilities. The reduction in unintended pregnancies may prevent welfare dependency as well.

This program will provide a choice to women who wishes to use publicly provided family planning services. Exercise of this option can only provide personal benefits to the decision maker. In this sense, the proposed waiver will likely benefit the women and the families who choose to use these services. For example, the impact of a long lasting poor birth outcome or an additional unplanned baby may significantly affect the quality of life for the whole family. Families' ability to adequately invest in healthcare, education, and time for

¹³ Trussell, James, et al., 1995, "The Economic Value of Contraception: A comparison of 15 Methods," *American Journal of Public Health*, v. 85 No. 4, pp. 494-503.

¹⁴ Trussell, James et al., 1997, "Medical Care Costs Savings from Adolescent Contraceptive Use," *Family Planning Perspectives*, v. 29, No. 6.

preceding children as well as the chance of breast-feeding may be seriously limited. Unplanned births may also hurt the women's educational, career, and other goals in life, which in turn may hurt the family as a whole. However, it is also possible that some normal births that are not intended may significantly increase the family's quality of life in some other cases.

In case of averted terminated pregnancies and miscarriages, there may be significant personal costs for a woman or her family. Additionally, by averting terminated pregnancies, the risk of abortion complications to women would also be reduced. This risk is known to be less than 1% of all abortion patients.¹⁵ In short, averting terminated pregnancies and miscarriages may improve the quality of life for the women as well as for their families and may represent a significant benefit for the waiver services the recipients choose to use.

Some other additional benefits of expanding family planning services may stem from the use of contraceptives. In addition to controlling unwanted pregnancies, condoms offer protection against infection with HIV and STDs. Concerns about these diseases in the last decade prompted many women to use condoms in combination with other methods (particularly with the pill).¹⁶ Although Table 2 indicates a decrease in condom method with the waiver (1,600 vs. 1,050) it is somewhat misleading. Many women who use other methods, pill in particular, also use condoms as a secondary method, which is not captured in Table 2, as it reports primary method of contraception. It is highly unlikely that women who are concerned about HIV and STDs would stop using condoms especially when the condoms are provided with public funds free of charge. In all likelihood publicly funded family planning services is expected to increase or promote use of condoms among those who are concerned about sexual diseases which represents an additional benefit of the proposed waiver services.

Finally, to a lesser extent, spermicides and diaphragm may help prevent STDs and hormonal contraceptive methods may provide protection against iron deficiency, anemia, menstrual problems, and provide other similar benefits. Screening and testing may also help detect some potential life threatening conditions such as cervical or breast cancer early on and improve recipient women's health. There is also a chance that some contraceptives may increase

¹⁵ The Alan Guttmacher Institute, Facts in Brief, "Induced Abortion," downloaded from www.agi-usa.org on 01/12/2003.

¹⁶ Piccinino, Linda J. and William D. Mosher, 1998, "Trends in Contraceptive Use in the United States: 1982:1995," *Family Planning Perspectives*, v. 30, no. 1.

health risks to women in some cases. An assessment of these smaller, ancillary effects of contraceptive use is beyond the scope of this report, and, in any event, would be unlikely to change any of the principle conclusions of this analysis.

In summary, the proposed waiver is highly cost effective and will produce a net fiscal savings by avoiding future Medicaid expenditures that would otherwise occur. The waiver program will likely reduce births, abortions, and miscarriages because it will lower the number of women who would otherwise become unintentionally pregnant in the absence of these publicly provided family planning services. The averted abortions and miscarriages represent a significant social benefit of the proposed regulation. Providing indigent families with the option of having greater control over the timing of pregnancies can only benefit them, since they can choose not to use the services if they so desire. Thus, we can conclude that this waiver program is likely to have both a fiscal benefit for Virginia taxpayers, and an economic benefit to the families who choose to take advantage of it.

Businesses and Entities Affected

The department estimates that the proposed regulation will make available family planning services to an additional 3,000 recipients per year.

Localities Particularly Affected

The proposed regulation will not uniquely affect any particular locality.

Projected Impact on Employment

We can expect to see an increase in labor demand in the family planning area while the labor demand in delivery/infant/newborn care area would probably decrease marginally. The net employment effect on healthcare providers is unknown, but is likely to be rather small.

Effects on the Use and Value of Private Property

The proposed changes will likely positively affect the value of privately owned family planning service businesses while there is likely to be a more pronounced negative effect on private delivery/infant/newborn care businesses.