

Reproductive and Sexual Health Benefits in Private Health Insurance Plans in Washington State

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Context: Although unintended pregnancy and sexually transmitted diseases (STDs) are considerable problems in the United States, private health insurance plans are inconsistent in their coverage of reproductive and sexual health services needed to address these problems.

Methods: A survey administered to a market-representative sample of 12 health insurance carriers in Washington State assessed benefit coverage for gynecologic services, maternity services, contraceptive services, pregnancy termination, infertility services, reproductive cancer screening, STD services, HIV and AIDS services, and sterilization, as well as for the existence of confidentiality policies. "Core" services in each category were defined based on U.S. Preventive Services Task Force and other recommendations.

Results: Of the 91 top-selling plans on which data were collected, 8% were indemnity plans, 14% were point-of-service plans, 21% were preferred-provider organization plans and 57% were health maintenance organization (HMO)-type products; they had a combined enrollment of 1.4 million individuals. Coverage of core services varied widely by type of plan. While a high proportion of plans covered core gynecologic, maternity, reproductive cancer screening, STD and HIV and AIDS services, nearly half of plans did not cover any kind of contraceptive method. Approximately 13% of female enrollees did not have core coverage for gynecologic services, 19% for maternity services, 75% for contraception, 37% for sterilization and 53% for pregnancy termination; 98% of women and men were not covered for infertility treatment. Most carriers did not have specific policies for maintaining privacy of sensitive health information. Overall, benefit coverage was lower for indemnity, preferred-provider organization and HMO plans in Washington State than has previously been seen nationally.

Conclusions: A sizable proportion of women and men in Washington State who rely on private-sector health insurance lack comprehensive coverage for key reproductive and sexual health services.

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The ability to manage one's fertility, have healthy pregnancies, avoid sexually transmitted diseases (STDs) and obtain screening services for early detection of reproductive cancers is important for the reproductive and sexual health of adolescents and of adult women and men. Reproductive health pertains to pregnancy termination, obstetric care and cancer screening services. Sexual health—i.e., contraceptive and safer sex services, including counseling and surgical, hormonal and barrier methods—is relevant to sexually active men and women as well.

Having insurance is associated with higher use of prevention services.¹ However, private health insurance plans in the United States do not always cover the range of specific services that are needed across individuals' lives.² Since all five methods of reversible contraception approved by the Food and Drug Adminis-

tration (FDA) are used only by women, a lack of coverage of reproductive and sexual health services may disproportionately affect women. Women use more health services than men during the child-bearing years (ages 15-44),³ and according to a 1993 estimate spend 68% more on out-of-pocket health expenses than do their male counterparts.⁴ Documenting the insurance coverage levels of these benefits in private and employer-sponsored plans is useful because at least half of reproductive-aged women in the United States rely on these sources to pay for their health care.⁵ Coverage influences whether individuals are able to obtain routine reproductive health services in a timely and effective manner.⁶

Given the shift in the health market to managed care, it is useful to be able to distinguish whether coverage varies by type of insurance plan. Most insured individuals are now enrolled in a type of managed care health plan, rather than in the kinds of indemnity (fee-for-service) plans common in the past. A recent survey of employer-based coverage found that 9%

of Americans are enrolled in indemnity plans, 38% in preferred-provider organization plans, 25% in point-of-service plans and 28% in health maintenance organization (HMO) plans.⁷ We set out to measure overall and plan-type-specific reproductive and sexual health benefit coverage for the nearly two-thirds of Washington State residents with private health insurance,* to compare this with previously established national levels and to estimate the absolute impact of any shortfall in such coverage.

Data from a single state inevitably are more limited than national data. Nonetheless, Washington State is an illustrative case study, for several reasons. One is that its levels of private insurance coverage are similar to those of the country as a whole, with 72% of Washington State residents having private insurance in 1995, compared with 70% of U.S. citizens. While managed care has had a longer history in the Pacific Northwest than in other U.S. regions, market penetration of HMOs was similar in 1995: 16% in Washington versus 15% in the United States. The two populations' demographic characteristics also are similar, with 63% of the Washington

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*Estimates range from 60% (source: see reference 47) to 70% (source: Stevenson J, 1/9/98 estimates of covered lives, Olympia, WA: Office of the Insurance Commissioner, unpublished data).

State population and 59% of the U.S. population aged 19–54.⁸ Finally, Washington State has been a bellwether in terms of health policy, having passed comprehensive health reform in 1993, only to see the legislation dismantled the following year.

This article is the first to provide detailed descriptions of specific service coverage at the state level. We move beyond documenting private insurance benefit gaps to estimating the potential population impact of such gaps, in terms of the proportions and numbers of women and men who may be adversely affected by shortfalls in insurance coverage.

Reproductive and sexual health coverage falls into different patterns, depending on the type of insurance plan, four of which are considered here. Indemnity plans traditionally reimburse the policyholder for health care costs incurred. Preferred-provider organization plans provide members with incentives to use providers within the network. Point-of-service plans encourage, but do not require, members to choose a primary care provider. Finally, “gatekeeper” managed care plans (which are referred to here as HMOs) require enrollees to use a primary care provider for specialty referrals; coverage and coinsurance levels are usually based on whether the provider is in-network.

Several employer-based and managed care association surveys have reported that HMOs tend to focus on mammography, Pap smears and other routine screenings and on the provision of prenatal and abortion⁹ services, while indemnity plans tend to have lower coverage rates for preventive and reproductive services.¹⁰ Both managed care plans and traditional indemnity plans are more likely to pay for gynecologic care than to cover contraceptive services or supplies.¹¹ Coverage of maternity services is federally mandated for employers with 15 or more employees. One-third of private insurance plans do not cover abortion services, or do so only under limited circumstances.¹² In 1999, one-fourth of all employers purchased health plan coverage for infertility treatment.¹³

While Medicaid mandates coverage for family planning services and supplies, private insurance generally excludes some types of contraceptives (and many plans exclude all),¹⁴ despite these methods’ demonstrated cost-effectiveness.¹⁵ A 1993 Alan Guttmacher Institute (AGI) survey of commercial and Blue Cross companies and HMOs found that almost half (49%) of the typical large-group indemnity plans did not cover *any* contraceptive services. Fewer than 20% of large-group indemnity

plans or preferred-provider organizations and fewer than 40% of point-of-service plans and HMOs surveyed covered all five FDA-approved methods of reversible contraception (oral contraceptives, the hormonal injectable, the implant, the IUD and the diaphragm).¹⁶

Moreover, a recent five-state survey of managed care organizations found that 15% of HMOs did not cover all five of these methods, and that 25% of women in commercial plans were unsure about whether their plan covered oral contraceptives.¹⁷ A national probability survey of public and private employer-sponsored health plans showed that 32% of HMOs and 56% of indemnity plans excluded contraceptive drugs; more than half of HMO and two-thirds of indemnity plans also excluded contraceptive devices.¹⁸

The Institute of Medicine has concluded that one of the reasons for the nation’s high rates of unintended pregnancy is the lack of contraceptive coverage in private insurance plans. While not precluding access, this lack of coverage requires women who want these services to go out-of-plan and pay out-of-pocket, use cheaper but less effective over-the-counter methods, or possibly forgo method use altogether.¹⁹ The recommendation that more private insurers cover contraceptives has been established as a Healthy People 2010 goal.²⁰

STDs, including HIV, are a serious but “hidden” epidemic²¹ in the United States. An estimated 15.3 million cases²² of STDs occur annually, resulting in more than \$17 billion in direct and indirect costs²³ and lifetime costs of up to \$88 billion.²⁴ It is estimated that by age 24, at least one individual in three has acquired an STD.²⁵ The serious consequences of STDs include cervical, hepatic and other cancers; infertility; ectopic pregnancy; chronic pelvic pain; reproductive and neonatal sequelae; and premature death. Insurance plans seldom cover condoms—the single most effective method for preventing STDs among sexually active individuals—as these are over-the-counter devices. Private health plan coverage for STD diagnosis, treatment and prevention is recommended by the Institute of Medicine,²⁶ and is particularly relevant given that almost half of respondents to the National Health and Social Life Survey who reported ever having an STD had sought treatment at a private practice.²⁷

Data and Methods

Survey

The survey originated in response to a number of complaints from consumers and constituent groups to the Washington

State Office of the Insurance Commissioner (OIC) regarding coverage of reproductive health services. The sampling universe for this survey was the approximately 40 health insurance carriers—commercial and Blue Cross companies and managed care organizations—licensed in Washington State. In summer 1998, the OIC sent surveys to 12 carriers purposively selected to be representative of all carriers in the state according to geographical distribution, plan and carrier type, enrollment size and share of the private health insurance market. The response rate was 100%.

We adapted the survey tool from an instrument developed by AGI. We asked carriers to describe the benefits in each of their five best-selling group plans and two best-selling individual plans. (The AGI survey had asked insurers to describe the coverage included in the “typical” plan of each type.) Our survey asked about a range of services. Carriers specified copayment, coinsurance and deductible requirements for each plan. Where specific services were not part of the standard benefit package, carriers reported whether they offered these services as a rider. If so, they estimated what proportion of enrollees without the basic benefit had the rider.

We designated a subset of services as “core” services, based on national guidelines from the U.S. Public Health Service, the National Institutes of Health and the Institute of Medicine, and on professional associations’ recommendations for “standard of care,” where relevant.²⁸ By core services, we meant a minimum set of services needed for quality health care in a given category.

For statistical comparisons of state versus national coverage levels, we used Stata 6.0 software (StataCorp, College Station, Texas) to calculate odds ratios and χ^2 tests of significance, stratified by plan type.

Given the sensitive nature of much reproductive and sexual health information in patient records, we included questions regarding the privacy policies of health insurance carriers. At least six statutes in Washington State require confidentiality with respect to certain kinds of health care records and to the provision of sexual, reproductive and addiction care. However, these statutes vary in their degree of specificity or in their restrictions on disclosure of health information for purposes of insurance coverage. Carriers were asked to supply copies of health information privacy policies and procedures, and these were analyzed for relevant content using the model guidelines for health information privacy developed by the National Association of Insurance Commissioners.²⁹

Sample

The 12 carriers provided complete data on 83 plans: 63 group plans and 20 individual plans. Two carriers reported data on selected service categories for an additional eight plans (with a total enrollment of 11,277 individuals), so the total number of plans in the survey was 91. Because of this incomplete reporting on additional plans, slightly different denominators are used in some of the service categories.

A comparison of carrier respondents with statewide carrier-license distributions showed that the study sample was closely representative of the health insurance market in Washington in 1998. The surveyed carriers represented 88% of the statewide health insurance market at the time of the survey. The respondents included the majority of the state's largest carriers, with an overall combined market enrollment of more than 2.5 million Washington residents, or around half of the state's entire population.

The number of enrollees in the specific plans described in the survey was approximately 1.4 million, more than half of whom (52%) were female. This represents one in four Washington State residents, and nearly half (44%) of "covered lives" with employer-based or individual health insurance (excluding employer self-insured plans, as these do not fall under the Insurance Commissioner's oversight authority).

We asked all carriers to provide basic demographic information on enrollees in each plan. Most provided plan-specific gender breakdowns, but none were able to give a breakdown of plan beneficiaries by requested age categories. Therefore, we imputed age distributions for the sampled plans based on Washington State census projections.³⁰ We used these estimates to quantify the numbers of "hypothetically eligible" females and males in relevant age categories (e.g., women aged 15–44 represent enrollees who would need maternity services if pregnant). These "estimated eligible" numbers allowed us to calculate coverage gaps.*

We also compared our results with the 1993 AGI national survey of reproductive health coverage.³¹ Our categories of preferred-provider organizations, point-of-service plans and HMOs matched the AGI-defined plan types. The AGI survey categorized indemnity plans into three levels of enrollment by workplace size: those with 15 or fewer employees, those with fewer than 100 employees and those with 100 or more employees. We used a mean value of these AGI results to compare with our indemnity data.

Results

Overall Enrollment

In Washington State, 57% of plans were HMOs, 21% were preferred-provider organizations, 14% were point-of-service plans and 8% were indemnity plans. Most health plan enrollees were in HMOs (70%), with the remainder in preferred-provider organization (nearly 18%) or point-of-service (9%) plans, and very few (less than 4%) in indemnity-type plans (Table 1).

An overview of core service coverage by type of plan appears in Table 2 (page 156). For details regarding service restrictions, rider availability and cost-sharing patterns, see the Appendix.

Routine Gynecologic Care

Core services in gynecologic care included cervical cancer screening (Pap smears), chlamydia screening, mammography, clinical breast exam, and an annual exam. An additional noncore service was sexual health counseling. Seventy-six of 83 plans (92%) covered all five of these core services—72% of preferred-provider organization plans, 96% of HMOs and 100% of indemnity and point-of-service plans (Table 2). All plans covered screening and diagnostic mammography, as mandated by state law. Pap smears, chlamydia screening and clinical breast exams were covered by 72% (among preferred-provider organization) to 100% (point-of-service) of plans. Many carriers had their own guidelines or utilized national guidelines for mammography screening. Some plans were restricted to an overall wellness benefit limit capped at \$200–250 per year.

Sexual health counseling generally was covered as part of the exam, at levels ranging from 78% of preferred-provider organization plans to 100% of indemnity plans.

Maternity Services

Core maternity services included diagnosis of congenital fetal disorders, prenatal care (including coverage for pregnancy complications), hospital delivery, and postpartum and newborn care. Noncore services included preconceptional counseling, use of a birth center and home delivery. More than nine in 10 plans (93%) covered all core services, ranging from 86% of indemnity plans to 92–94% of the others (Table 2). Prenatal care for enrollees' teenage dependents was much less likely to be covered (not shown), being a ben-

Table 1. Number and percentage distribution of health insurance plans and total number of enrollees, all by type of plan, Washington State, 1998

Type	Plans		Enrollees	
	No.	% distribution	No.	% distribution
Total	91	100	1,399,650	100
HMO	52	57	977,813	70
Preferred-provider org.	19	21	245,231	18
Point-of-service	13	14	127,379	9
Indemnity	7	8	49,227	3

efit in only 14% of indemnity plans, 24% of preferred-provider organization plans, 31% of point-of-service plans and 62% of HMOs. In three of 20 individual plans, overall maternity benefits were limited by dollar amounts, such as \$1,300 per vaginal delivery, \$700 for office visits or \$500 for hospital fees.

Coverage of preconceptional counseling ranged from 29% of indemnity plans to 82% of HMOs. Home delivery was covered by 54% of point-of-service plans, 69% of HMOs, 94% of preferred-provider organization plans and 100% of indemnity plans. Delivery at a birth unit was covered by 84% of HMOs, 92% of point-of-service plans, 94% of preferred-provider organization plans and 100% of indemnity plans.

Contraception

Core contraceptive services included the IUD, the diaphragm, the hormonal implant, the hormonal injectable and the pill. Noncore services included contraceptive counseling, over-the-counter methods, cervical cap devices and fittings, and emergency contraception. Only half of the plans (51%) covered at least one contraceptive service or device. Thirty percent of plans covered all five core FDA-approved reversible methods, with this core coverage varying widely by plan type, from 0% of indemnity plans and 6% of preferred-provider organization plans to 15% of point-of-service plans and 50% of HMOs (Table 2). Twenty of 63 group plans (32%) and five of 19 individual plans (26%) covered all core services.

Approximately two in three point-of-service plans (62%) and HMOs (70%) covered IUDs, compared with no indemnity plans and very few preferred-provider organization plans (6%). Similar levels were

*To estimate the plan type proportions, we used the formula $\sum [(e_{cc})(p_{i,m})] / \sum [(E_T)(P_{i,m})]$, and to estimate the enrollee numbers, we used the formula $\sum [(E_T)(P_{i,m})] - \sum [(e_{cc})(p_{i,m})]$. In both cases, e_{cc} represents the enrollees in those plans providing core coverage, E_T represents the total enrollment by plan type and $p_{i,m}$ and $P_{i,m}$ are the population weights for age and sex, adjusted for the known percentage of uninsured persons in each age category.

Table 2. Percentage of Washington State health insurance plans offering core reproductive and sexual health care coverage, by type of service, according to plan type

Service	HMO	Point-of-service	Preferred-provider organization	Indemnity
Routine gynecology	96	100	72	100
Maternity	93	92	94	86
Contraception	50	15	6	0
Abortion (elective)	76	85	67	86
Infertility	20	8	28	86
Reproductive cancer screening	100	100	94	100
Sexually transmitted diseases	100	100	94	100
HIV/AIDS	100	100	100	100
Sterilization	80	83	65	71

seen with diaphragm coverage, although only 38% of point-of-service plans covered it. Plans sometimes charged higher-than-standard copayments for IUDs.

The extent to which different types of plans covered selected hormonal methods varied substantially. Carriers frequently excluded hormonal implants, which were covered by no indemnity plans, 6% of preferred-provider organization plans, 31% of point-of-service plans and 52% of HMOs. Likewise, no indemnity plans, 6% of preferred-provider organization plans, 59% of HMOs and 62% of point-of-service plans covered injectables. The pill typically was available when a prescription drug benefit was purchased. Oral contraceptive coverage was available in no indemnity plans, 11% of preferred-provider organization plans, 84% of HMOs and 92% of point-of-service plans. Service coverage restrictions in some plans included higher-than-standard copayments for office or pharmacy visits (e.g., \$100 for the implant), coverage for insertion or removal but not for the implant or the IUD itself, or coverage only for certain methods, such as the pill.

Emergency contraception was not widely available in most health plans: No indemnity plans, 6% of preferred-provider organization plans, 38% of point-of-service plans and 41% of HMOs covered this service. Only two plans covered over-the-counter contraceptive devices (male or female condoms and spermicides), with one restricting this benefit to enrollees aged 12–17. Most plans would not reimburse the provider for contraceptive counseling as a separate service, but only as part of a general office visit or as a mental health visit.

Induced Abortion

Both elective and medically necessary pregnancy terminations were considered core services. All plans covered medically necessary procedures (i.e., those con-

ducted to preserve the life or health of the woman). Sixty-seven percent of plans also covered elective procedures: 67% of preferred-provider organization plans, 76% of HMOs, 85% of point-of-service plans and 86% of indemnity plans. However, in some instances these services were available only if an employer group purchased a rider.

Most carriers allowed employers to exclude this benefit from their employee offerings. Carriers also allowed individual providers to opt out of performing this service, in accordance with state law, but respondents were not asked to document whether they require purchasers or providers to meet the legal criteria of religious or moral tenet. Washington State’s abortion conscience clause legislation mandates that if a provider refuses to perform a termination, the enrollee is supposed to receive written information from the provider describing how she may directly access services in an expeditious manner. In practice, our survey found that some carriers themselves arrange the referral when a woman calls indicating that a provider has refused. One carrier required “prior authorization” for elective termination beyond the first trimester. Most plans (73 of 82) cover termination services as part of the basic benefit rather than through a rider.

Infertility

Core services were infertility diagnosis and treatment. Specific services included endometrial biopsy, endometriosis treatment, semen analysis, assisted reproductive technologies such as in vitro fertilization, and fertility drugs. These were among the least covered of any services reported. Twenty-five percent of all plans covered the core services on a restricted-only basis: 8% of point-of-service plans, 20% of HMOs, 28% of preferred-provider organization plans and 86% of indemnity plans (Table 2).

While some carriers covered infertility diagnosis, all excluded the routine treatment of infertility. Five carriers provided restricted coverage for infertility treatment, such as paying at a 50% rate. Assisted reproductive technologies were not covered by any plan, and fertility drug exclusions were common. Some carriers covered the treatment of specific conditions

that contribute to infertility, such as endometriosis, but did so only for treatment of the medical condition itself rather than to reverse infertility.

Reproductive Cancer Screening

Core services of prostate, testicular, cervical and ovarian cancer screening had one of the highest coverage levels of any survey category: Ninety-nine percent of all plans covered them—94% of preferred-provider organization plans and 100% of the other plans (Table 2). Service coverage restrictions pertained to overall wellness or preventive screening benefit limits, such as \$45 per outpatient visit or caps of up to \$200–250 per year.

Noncore services included breast cancer mastectomy and lumpectomy, breast reconstruction and postoperative physical therapy rehabilitation. In all plans, breast cancer mastectomy, lumpectomy and postmastectomy breast reconstruction were covered on a routine basis. (The latter is required by federal mandate.) Most (93%) covered postoperative rehabilitative care, with several doing so under a rehabilitation benefit.

STDs

Core services were STD screening, diagnosis and treatment, while noncore services included sexual history-taking and sexual health counseling. Ninety-nine percent of all plans covered the core services: 94% of preferred-provider organization plans and all of the remaining plans (Table 2). STD screening was covered in 94% of point-of-service plans and in all of the other plans, while STD treatment was covered by all plans. STD counseling was covered by 29% of indemnity plans, 89% of preferred-provider organization plans, 92% of point-of-service plans and 100% of HMOs.

While most plans routinely covered STD screening, some did so on a restricted basis; for example, two carriers had limits of \$200–250 per service per year. Several plans offered by one carrier imposed a three-month benefit waiting period on people with preexisting conditions, although these products would cover 60% of costs incurred during the waiting period. Some plans limited the number of counseling visits, which were considered to be under a mental health benefit if billed as a service separate from the office visit.

HIV and AIDS

Core services of HIV counseling, testing and treatment were covered by all plans. (One carrier’s plans covered HIV testing but not counseling.) We included an item

asking specifically about the availability of coverage for protease inhibitors. In some plans, protease inhibitors were covered only if the enrollee purchased the optional prescription benefit. No plans imposed a benefit waiting period.

Sterilization

Core sterilization services included vasectomy, as well as laparoscopic and vaginal or abdominal tubal ligation. Noncore services included hysterectomy and counseling. Seventy-six percent of all plans covered the core services: 65% of preferred-provider organization plans, 71% of indemnity plans, 80% of HMOs and 83% of the point-of-service plans (Table 2). The most commonly mentioned restriction was related to age, with coverage for those younger than the age of consent (sometimes defined as age 21) restricted to medical necessity. Some plans required a higher-than-standard copayment (\$50 for vasectomy and \$150 for tubal ligation). Most plans covered these services as part of the basic benefit.

Confidentiality and Privacy Policies

While all carriers surveyed had a general privacy policy, the degree of health information privacy protection varied widely. Some insurers had only limited policies, or none at all, on critical issues such as compliance with state laws guaranteeing minors' confidential access to health care services such as STD diagnosis and treatment. Only two carriers had developed comprehensive health care information procedures and had given notice to the public of these practices. None of the respondents had written privacy policies ensuring that routine insurance transactions avoid inappropriate disclosure of health information. Almost no carriers had any specific procedures in place to prevent inadvertent disclosure of sensitive health information through operational practices.

The Coverage Gap

Our goal in this analysis is to extrapolate from the reported figures on plan coverage levels to estimate the actual impact on individual enrollees—that is, how many privately insured people who might need these services would have to pay out-of-pocket to get them? We assumed that women aged 15–44 were likely to use gynecology, maternity, contraception and abortion services, that men and women in this same age-group might use infertility and sterilization services, and that women and men aged 15 and older could use cancer screening and STD and HIV or AIDS services.

We applied adjusted state census proportions to the reported total numbers of male and female enrollees, to estimate the number of individuals in relevant age ranges in each plan. Dividing the number of those who were in plans that covered all core services by the reported number of all enrollees calculated to be in the relevant age ranges yields the estimated proportion of enrollees lacking core coverage. Subtracting the core plan enrollees from the total enrollees produces an absolute number of enrollees estimated to be without core service coverage.

While the preceding sections described *plan* percentages, here we examine *enrollee* percentages and numbers. As shown in Table 3, we estimate that sizable numbers of enrollees were not covered for many core services. One in eight women in the plans surveyed did not receive core cov-

Table 3. Estimated number of age-specific enrollees in all health plans, number of age-specific enrollees in health plans providing core coverage, and number and percentage of all age-specific enrollees lacking core service coverage

Service age	No. in all plans	No. in plans providing core coverage	Lacking core cover-	
			No.	%
Routine gynecology	270,138†	235,475	34,663	12.8
Maternity	258,774†	210,761	48,013	18.6
Contraception	255,244†	63,381	191,863	75.2
Abortion	269,955†	127,002	142,993	52.9
Infertility	524,805‡	11,116	513,689	97.9
Reproductive cancer screening	949,647§	901,767	47,880	5.0
Sexually transmitted diseases	949,647§	901,767	47,880	5.0
HIV/AIDS	949,647§	949,647	0	0.0
Sterilization	522,236‡	328,979	193,257	37.0

†Women aged 15–44. ‡Women and men aged 15–44. §Women and men aged ≥15. Note: Numbers of women and men in each age category were estimated by applying adjusted

erage for gynecologic services (13%), one in five for maternity services (19%), three out of four for contraceptive services (75%), more than one in three for sterilization services (37%) and half for pregnancy termination services (53%). Ninety-eight percent of women and men did not receive coverage for infertility treatment.

Table 4. Percentage of health insurance plans with routine plus restricted coverage, by service, according to plan type, United States (1993) and Washington State (1998)

Service	Indemnity plan†		Preferred-provider organization†		Point-of-service plan		HMO†	
	U.S.	WA	U.S.	WA	U.S.	WA	U.S.	WA
Gynecology								
Annual exam	48	100**	68	72	90	100	100	96*
Pap test	76	100	86	72	95	100	100	96*
Chlamydia test	78	100	85	72	100	100	100	96*
Mammogram	84	100	90	100	95	100	100	100
Maternity care								
Obstetric care	96	86	99	94	95	92	99	100
Reversible contraception								
IUD insertion	25	0	25	6	46	62	86	70*
IUD device	17	0	21	6	33	62	47	70*
Diaphragm fitting	21	0	23	6	46	46	81	68
Diaphragm device	15	0	17	6	33	38	52	70*
Implant insertion	26	0	29	6*	54	38	62	52
Implant device	23	0	27	6	48	31	47	52
Implant removal	36	0	37	11*	59	46	65	52
Injectable	41	0*	42	6**	75	62	80	59*
Oral contraceptives	41	0*	48	11**	63	92*	86	84
Sterilization								
Tubal ligation	90	86	90	88	98	83	94	84*
Vasectomy	89	86	90	88	95	83	94	84*
Abortion								
Average availability	87	93	86	83	88	92	90	88
Infertility								
Endometrial biopsy	80	86	79	50*	81	77	94	51***
Semen analysis	64	14*	60	44	71	46	95	27***
In vitro fertilization	16	0	17	0	19	0	24	0***
Medication	45	14	45	28	51	8**	75	24***

*Difference is statistically significant, χ^2 p<.05. **Difference is statistically significant, χ^2 p<.01. ***Difference is statistically significant, χ^2 p<.001. †Washington coverage is significantly lower than U.S. coverage, p<.001 (odds ratio 0.55, 95% confidence interval 0.48–0.63). Source: U.S. data (1993)—see reference 16.

National Comparison

The 1993 AGI study³² provided national data regarding private-sector insurance coverage of reproductive health benefits. Since our questionnaire items were based on that survey instrument, we felt that it would be useful to compare Washington State coverage with national coverage—with the caveat that significant changes in the health insurance market make a direct temporal comparison problematic. During the years 1993 and 1998, Washington State mirrored much of the rest of the nation in seeing an accelerated move away from indemnity plans and into managed care plan enrollment.

Coverage of gynecologic services was higher in Washington State in 1998 than in the United States as a whole in 1993 (Table 4, page 157). Maternity care, sterilization and abortion coverage were largely similar across plan types in Washington State and nationally. Infertility coverage was lower in Washington HMO-type plans. Contraceptive services generally were covered at lower levels in Washington State than was true nationally.

Overall, reproductive and sexual health benefit coverage in Washington State was lower than the national average for indemnity plans, preferred-provider organization plans and HMO plans (Mantel-Haenszel odds ratio, 0.55, $p < .001$). There was no statistically significant difference between Washington State and national coverage with regard to point-of-service plans (odds ratio, 1.00).

Discussion

It is important to delineate levels of private insurance coverage for key services needed by sexually active individuals. This is especially true for women, as they are the direct consumers of most reproductive and reversible contraceptive services, and since as many as two-thirds of American women of reproductive age rely on private insurance.³³ Federal data indicate that 85% of married women and 59% of unmarried women have employer-based insurance.³⁴

We have identified a wide range in coverage of the services most often of concern to sexually active women and men in Washington State. Both core and noncore coverage varied by type of plan and by specific service. These findings strongly suggest that key reproductive and sexual health care benefits are not part of stan-

dard health insurance market offerings. While having insurance coverage is not in itself synonymous with access, coverage may affect levels of out-of-pocket expenditure, which may in turn present barriers to obtaining these services for some individuals. Further work would be helpful to establish the independent risk for adverse reproductive and sexual health outcomes associated with lack of comprehensive insurance benefits.

The HMOs tended to have the highest rates of total coverage for reproductive health services, while indemnity plans and preferred-provider organization plans had the lowest coverage. Point-of-service plans covered gynecologic, maternity, pregnancy termination and sterilization services at a relatively high rate, but provided less adequate coverage for contraceptive services. These patterns echo those seen in national studies.

All plans offered HIV, STD and reproductive cancer screening services, and most (though not all) covered gynecologic and maternity services. However, there were widespread restrictions or outright exclusions on many types of specific contraceptive services, on infertility treatment and on counseling related to reproductive and sexual health concerns. Coverage of prenatal care for teenage dependents of enrollees was low among all plans.

The most striking finding is the degree to which coverage for contraceptive and safer sex methods lags behind that for other health services. Despite the popularity of sterilization as a birth control method, 13–18% of all plan types surveyed did not cover sterilization procedures. The near-universal lack of over-the-counter contraceptive coverage may contribute to STD transmission. Comprehensive contraceptive care—routine coverage of all five FDA-approved reversible methods—was a covered benefit in fewer than one in three plans. On average, 27% of 291 large-group indemnity plans, preferred-provider organization plans, point-of-service networks and HMO plans in the United States covered all five FDA-approved methods of reversible contraception in 1993.^{35*}

Low levels of contraceptive coverage are worrisome, because financial barriers to contraceptive use, such as facing high copayments or having to pay out-of-pocket entirely, may reduce effective method use and thus increase the numbers of mistimed or unintended pregnancies.³⁶ Seven percent of American women at risk of unintended pregnancy who do not use contraceptives account for more than half of

all unplanned pregnancies.³⁷ In Washington State, 53% of all pregnancies were unintended in 1998.³⁸

Several state-level studies suggest a direct association between payment source and contraceptive use, at least for lower-income populations. Arizona's Medicaid system did not provide contraceptive services in 1984, but had added them by 1989; low-income women were 2.3 times more likely to have received services in 1989 than in 1984.³⁹ When Colorado's Medicaid program added coverage of the implant late in 1991, a cohort analysis of women giving birth in 1991 and 1992 found a 25% drop in the rate of repeat births in 1992, and attributed the change to the subsidized availability of this additional contraceptive method.⁴⁰ The relationship between low levels of contraceptive coverage and adverse reproductive and sexual health outcomes among individuals with private insurance sources remains unknown.

It is particularly limiting that coverage of a comprehensive set of core contraceptive methods is often unavailable, as many women change methods over time or need to use several methods simultaneously. We found that many women are in plans that cover no methods or just a few, but only 25% are in plans covering all five core FDA-approved reversible methods. A recent statewide random digit-dial survey of 331 people regarding willingness to pay for a contraceptive insurance benefit confirmed this observation: Based on people's report of their plan benefits, 24–54% of 18–65-year-old individuals with health insurance have contraceptive coverage.⁴¹

We also found that 15–25% of surveyed plans did not cover elective abortions. Moreover, pregnancy termination was covered by plans at a higher rate than pregnancy prevention methods.

Few of the plans that we surveyed included infertility treatment as a covered benefit, although because of demographic changes and trends in delayed child-bearing, there is a growing market demand for such services. The surveyed plans in Washington State tended to cover infertility services at a much lower rate than did plans in the 1993 national data. It may be that the national market has changed also, with fewer carriers now covering infertility services.

The Institute of Medicine's recommendation that managed care organizations take a population-based approach to their "covered lives" by encouraging providers to routinely screen for and treat STDs⁴² ap-

*This is a weighted average calculated from the plan numbers presented in Appendix Table 1, p. 31, and coverage levels presented in Figure 3, p. 14 (see reference 16).

pears to be followed with some consistency in Washington State. The fact that sexual health and STD prevention counseling were not covered as a separately billable service but only as incidental to an office visit or as a separate mental health visit may serve as a disincentive for providers, however.

HIV and AIDS services were the only category covered by 100% of all types of plans. It is unclear whether this is because such services are perceived as essentially "medical" services, rather than primarily reproductive or preventive services, or because of other factors. Washington State law requires health providers to ensure that pregnant women seeking prenatal care receive HIV counseling,⁴³ but does not otherwise mandate provision of HIV services.

The widespread lack of specific health information privacy policies is a matter of concern, since individuals may delay seeking time-sensitive services if they do not feel confident that the care they receive will be kept confidential. Routine insurance transactions and procedures, such as sending billing statements or explanation of benefits notices to parents or spouses, can violate privacy laws and undercut clinicians' and clinics' efforts to maintain confidentiality.⁴⁴ Victims of domestic violence may be in personal danger if the abusing partner or spouse is given information regarding the victim's health care utilization, or they may avoid seeking care altogether. The adverse health effects of these delays can include unintended pregnancy, increased health risks associated with later pregnancy termination, STD transmission and sequelae, low birth weight and other neonatal problems related to delayed prenatal care.⁴⁵

Our survey had several limitations. For example, the nonprobability sampling of carriers may call into question the representativeness of the study population. While the number of total enrollees in surveyed plans was large, it did not constitute the majority of covered lives in the state. Only seven indemnity plans were included in the sample, although this reflects the actual market: Two carriers were estimated by the OIC to be selling indemnity insurance policies in Washington State in 1998. Nonetheless, this represents a potentially serious limitation to study findings based on comparing types of plans, especially when indemnity coverage presentations may be misleading due to small denominators and sampling variability.

In addition, we assumed when making estimates for hypothetically eligible en-

rollees that they were similar in their age and sex distributions to the general population. The accuracy of these assumptions does not affect the proportions, but would change the absolute number of enrollees estimated to be without services. These assumptions also may lead to significant bias if age and sex distributions differed between the core and noncore coverage plans.

The generalizability of these state-level findings may be limited to regions of the country with similar health insurance markets. The comparison of national and state plan coverage involved different time frames, during a period in which the markets were changing rapidly. In Washington State as nationally, the shift was towards point-of-service and other managed care plans, where preventive health benefits tend to be higher than under fee-for-service. This might suggest that the later Washington State coverage should have compared favorably to the earlier national data. That it did not suggests that these estimates may represent a lower bound to national estimates of insurance coverage for reproductive and sexual health services. Because the state parameters were nearly always lower than the 1993 national ones, this likely remains true whether national coverage levels increased or stayed the same between 1993 and 1998. However, Washington State's coverage levels might have compared favorably if national coverage decreased dramatically by 1998.

Our findings are likely to be relevant to advocates, business leaders, policymakers and lawmakers in Washington State, where legislative bills mandating insurance coverage of contraceptive and infertility service are being debated and legal cases are being filed. (On June 12, 2001, a landmark case—*Ericksen v. Bartell Drug Co.*—was won when the federal district court in Seattle ruled that exclusion of prescription contraception from an employer's health plan constitutes sex discrimination, in violation of Title VII of the Civil Rights Act of 1964.⁴⁶) The survey methodology and data likewise may be of interest to other states considering issues of equity in reproductive and sexual health insurance benefit coverage.

This statewide survey of private health insurance documents important gaps in coverage for reproductive and sexual health benefits. The gap resulting from plans that do not offer these benefits but whose enrollees may need specific sexual and reproductive health support suggests that hundreds of thousands of indi-

viduals are left to pay for such services out-of-pocket, or to delay or forgo care entirely. Employers largely determine the availability of health plans: Three-quarters of Washington State employers offered only one health plan for their employees in 1993, slightly higher than the national average of 67%.⁴⁷ Given this reality, the notion of choice becomes limited even for those with the presumed safety net of "good" private-sector insurance. Having health insurance does not guarantee coverage of those services most needed by sexually active women and men.

Appendix

The following are the service coverage details of Washington State health insurance plans, arranged by type of service.

Routine Gynecology

- *Covered as a rider.* Of 83 plans, five covered routine gynecology by means of a rider and 78 as a basic benefit.
- *Average % of enrollees without basic benefit who have rider.* 78%.
- *Direct access/waiting period/restrictions.* All 83 plans allowed direct access.
- *Copayments/coinsurance/deductibles.* Most indemnity plans required none; most other plans required standard copayment.

Maternity Care

- *Covered as a rider.* Of 82 plans, seven covered maternity care by means of a rider and 75 as a basic benefit.
- *Average % of enrollees without basic benefit who have rider.* 85%.
- *Direct access/waiting period/restrictions.* All 82 plans allowed direct access; most had no waiting period.
- *Copayments/coinsurance/deductibles.* Most preferred-provider organization plans, point-of-service plans and HMOs did not require copayment; most indemnity plans did.

Contraception

- *Covered as a rider.* Of 82 plans, 12 covered at least one contraceptive method, but also offered coverage by means of a rider; 15 did not cover any contraceptive directly, but offered coverage through a rider; 40 of the 82 covered no services, and 55 offered no rider.
- *Average % of enrollees without basic benefit who have rider.* 51% (14% in indemnity, 27% in HMOs, 39% in preferred-provider organization plans and 54% in point-of-service plans).
- *Direct access/waiting period/restrictions.* Five plans did not allow direct access.
- *Copayments/coinsurance/deductibles.* Most preferred-provider organization plans, point-of-service plans and HMOs required copayment; no indemnity plans offered contraceptive coverage.

Abortion

- *Covered as a rider.* Of 82 plans, nine covered abortion by means of a rider and 73 as a basic benefit.
- *Average % of enrollees without basic benefit who have rider.* 80%.
- *Direct access/waiting period/restrictions.* All 82 plans allowed direct access. All point-of-service plans and most others allowed the provider to opt out. Eighty-two percent of HMOs, 76% of preferred-

provider organization plans, 50% of point-of-service plans and 29% of indemnity plans allowed the employer to exclude the benefit.

•*Copayments/coinsurance/deductibles.* Standard out-patient and inpatient copayments. Coverage in some plans was subject to overall maternity benefit limits.

Infertility

•*Covered as a rider.* Of 83 plans, 17 covered infertility services by means of a rider; none covered them as a basic benefit.

•*Average % of enrollees without basic benefit who have rider.* 17%.

•*Direct access/waiting period/restrictions.* Seventy-three of 83 plans allowed direct access for care related to endometriosis. Some preferred-provider organization plans, HMOs and indemnity plans required waiting periods. There were no age restrictions.

•*Copayments/coinsurance/deductibles.* Standard.

Reproductive Cancer Screening

•*Covered as a rider.* Of 83 plans, none covered reproductive cancer screening services by means of a rider; all covered them as a basic benefit.

•*Average % of enrollees without basic benefit who have rider.* Not applicable.

•*Direct access/waiting period/restrictions.* Women had direct access; men went through their primary gatekeeper.

•*Copayments/coinsurance/deductibles.* Twenty-nine percent of indemnity plans and most other plans required the standard copayment.

STDs

•*Covered as a rider.* Of 83 plans, none covered STD services by means of a rider; all covered them as a basic benefit.

•*Average % of enrollees without basic benefit who have rider.* Not applicable.

•*Direct access/waiting period/restrictions.* Two plans did not allow self-referral. There were no age restrictions.

•*Copayments/coinsurance/deductibles.* Most indemnity plans did not require the standard copayment; most other plans did.

HIV and AIDS

•*Covered as a rider.* Of 83 plans, 10 covered HIV and AIDS services by means of a rider, and 73 as a basic benefit.

•*Average % of enrollees without basic benefit who have rider.* 99%.

•*Direct access/waiting period/restrictions.* Of 83 plans, 77 allowed direct access. No plans imposed a waiting period.

•*Copayments/coinsurance/deductibles.* Most plans required the standard copayment.

Sterilization

•*Covered as a rider.* Six plans covered sterilization only through a rider; all of these were HMOs (gatekeeper managed care plans). All preferred-provider organization plans, point-of-service plans and indemnity plans covered sterilization as a basic benefit.

•*Average % of enrollees without basic benefit who have rider.* 90%.

•*Direct access/waiting period/restrictions.* All plans allowed direct access. Twelve plans required age restrictions (21 years of age and older). One carrier required a six-month waiting period.

•*Copayments/coinsurance/deductibles.* Copayments were required for most HMOs, point-of-service plans and preferred-provider organization plans; some were higher than standard copayment (e.g.,

\$50 for vasectomy, \$150 for tubal ligation). Some plans tied coverage to maternity benefit limit.

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