

**LEGISLATIVE RESEARCH UNIT**

PATRICK D. O'GRADY, EXECUTIVE DIRECTOR

September 20, 2006

**BREAST AND CERVICAL CANCER SCREENING COST PROJECTIONS**

asked for 10-year projections of the costs to screen all uninsured, low-income women in Illinois for breast and cervical cancer. After receiving our September 8 letter responding to his request, asked us to do the following: (1) update its Table 1 to reflect the September 1 increase in the Illinois Breast and Cervical Cancer Program (IBCCP) income limits; (2) try to find data on low-income, uninsured women aged 40-64; and (3) try to find data on numbers of women being screened by IBCCP and Stand Against Cancer. This letter supersedes our September 8 letter.

original request also asked about costs to screen several described populations, including all uninsured, low-income women who are over age 40; are under age 40 but symptomatic or have family histories of breast cancer; and aged 35 to 40 and African-American. We were unable to find data in those specific categories. A spokeswoman for the Illinois Department of Public Health also knew of no source for such specific data.<sup>1</sup> But we did find how many uninsured, low-income Illinois women are between ages 18 and 64; obtained data on the costs of these kinds of screening under the Medicare and Medicaid programs; and made 10-year cost projections based on those numbers. We report our findings below.

**Women Eligible**

The Kaiser Family Foundation, a nonprofit health care research organization,<sup>2</sup> estimated in 2004 that 429,692 Illinois women aged 18 to 64 lacked health insurance and had incomes below 200% of the federal poverty guidelines (FPG).<sup>3</sup> The age group chosen is 18 to 64 because we presume that breast and cervical cancer preventive screenings are not usually necessary before age 18, and we assume that women 65 or older are eligible for Medicare.

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Specifically, the National Women's Law Center estimates that 175,465 women in Illinois aged 45-64 lack health insurance.<sup>4</sup> The number of low-income women in that age range is not available. Although Mr. Tenner wanted data on low-income, uninsured women aged 40-64, the available sources have data only for the larger group consisting of low-income, uninsured women aged 18-64.

Table 1 shows the annual incomes that represent 200% of the 2006 FPG,<sup>5</sup> and the current income limits for the IBCCP.<sup>6</sup>

**Table 1: Comparison of 2006 Federal Poverty Guidelines and IBCCP Income Limits**

<i>Household size</i>	<i>200% of FPG</i>	<i>IBCCP income limit</i>
1	\$19,600	\$24,500
2	26,400	33,000
3	33,200	41,500
4	40,000	50,000
5	46,800	58,500
6	53,600	67,000
7	60,400	75,500
8	67,200	84,000
	(Add \$6,800 per additional person)	(Add \$8,500 per additional person)

The income limits for IBCCP as of September 1, 2006 are 250% of FPG. The cost projection estimates in this letter use data based on 200% of the FPG because those were the closest data we could find to the IBCCP income limits.

In state fiscal year 2005, the IBCCP provided 20,896 breast and/or cervical cancer screenings, serving 17,736 women. In state fiscal year 2006 it provided 19,773 screenings for 17,303 women.<sup>7</sup> Stand Against Cancer (SAC) provided over 17,000 breast and/or cervical cancer screenings in state fiscal year 2005; the number of women screened has not been reported.<sup>8</sup> (The number of screenings exceeds the number of women screened because some women may receive both types of screenings in one fiscal year.)

### **Population Trends**

Table 2 shows changes in the numbers of uninsured, low-income women from 2000-2001 to 2003-2004 (the numbers were reported as two-year averages of pooled data). We used these data to calculate the compound annual rate of increase in this number over the three-year interval shown.

**Table 2: Estimates of Uninsured, Low-Income Illinois Women Aged 18-64**

<i>Year</i>	<i>Low-income women</i>	<i>Uninsured, low-income women</i>	<i>% change in uninsured, low-income women</i>
2000-2001	1,124,000	415,880	-
2001-2002	1,185,000	402,900	-3.1%
2002-2003	1,251,000	419,085	4.0
2003-2004	1,207,000	429,692	2.5
<b>Compound annual rate of increase</b>			<b>1.10%</b>

Source: Henry J. Kaiser Family Foundation, "Health Insurance Coverage of Women Ages 18-64, by State" (March 2006; downloaded from Kaiser Family Foundation Internet site).

### **Screening Costs**

Appendix A to this letter shows average costs of breast and cervical cancer screening based on the most recent IBCCP payment rates. Its first section shows the average costs of normal-result cervical or breast screenings, or for both screenings in the same office visit. The second section is for screenings that have abnormal results, and shows average costs for necessary diagnostic procedures after an abnormal screening result.

The reimbursement rates for the IBCCP are based on rates set for Current Procedural Terminology (CPT) Codes by the U.S. Department of Health and Human Services (HHS). HHS sets CPT rates annually for both Medicare and Medicaid services. The IBCCP allows billing based on the Medicare rates set for Cook County, which are the highest Medicare and Medicaid reimbursement rates in Illinois.<sup>9</sup>

### **Cost Projections**

We did a 10-year cost projection by calculating how much the cost of each kind of screening (cervical, breast, or combined) with a normal result would be if it rose by 4% (compounded) each year. (We assumed a 4% annual inflation rate because the medical cost component of the Consumer Price Index has recently been rising at nearly that rate.<sup>10</sup> However, no one can accurately predict future inflation rates.) We projected the number of women needing screening by taking the Kaiser Family Foundation survey data for 2004, and increasing it at a compound annual rate of 1.10% (the compound annual rate of increase in the Kaiser data from 2000-2001 to 2003-2004). The results are shown numerically in Appendix B and graphically in Appendix C.

By 2016, the projected cost to screen 489,972 uninsured women aged 18-64 who are below 200% of the FPG is about \$168 million annually. That projection is based on several assumptions:

- (1) all eligible women would participate in the program;
- (2) it would be possible to find medical providers to perform the services needed by all those women at the reimbursement rates set by the Department of Health and Human Services;
- (3) those rates will rise an average of 4% per year; and
- (4) the rate of increase in numbers of uninsured, low-income women will be similar to the compound rate of increase over the three-year interval from 2000-2001 to 2003-2004.

Any (or all) of these assumptions could be in error due to the inability to predict future changes. Thus our results should be considered as extremely tentative.

#### **Breast Cancer Prevalence by Population Group**

In the United States, Caucasian women over age 35 have the highest overall rate of breast cancer; but African American women have the highest rate of breast cancer before age 35 and are more likely to die from breast cancer at every age. In Illinois, annual death rates per 100,000 women are 27.2 for Caucasians and 39.0 for African Americans. In 2005 and 2006, 97% of breast cancer deaths occurred in women who were 40 or older at time of death.<sup>11</sup>

We hope this information is helpful.

Sincerely,

*Diana Barnard*

Diana Barnard  
Research Assistant

*Victoria Smith*

Victoria Smith  
Research Assistant

*Renee Theiss*

Renee Theiss  
Research Assistant

*Melissa S. Cate*

Melissa S. Cate  
Research Associate

DB:VS:RT:MSC:ag

## Notes

1. Telephone conversation with Pamela Balmer, Division Chief, Women's Health Services, Illinois Department of Public Health, Sept. 5, 2006.
2. Kaiser Family Foundation, "Statehealthfacts.org" (downloaded Aug. 23, 2006 from Statehealthfacts.org Internet site).
3. Kaiser Family Foundation, "Health Insurance Coverage of Women Ages 18-64, by State, 2003-2004" (March 2006; downloaded from Kaiser Family Foundation Internet site).
4. National Women's Law Center, "Women's Health Report Card 2004: Illinois" (downloaded Sept. 18, 2006 from National Women's Law Center Internet site).
5. Department of Health and Human Services, "Annual Update of the HHS Poverty Guidelines," 71 Fed. Register pp. 3848-3849 (Jan. 24, 2006).
6. "Am I eligible to receive a free screening through the Illinois Breast and Cervical Cancer Program?" (downloaded Sept. 19, 2006 from IDPH's Breast-Cervical Cancer Screening Internet site).
7. E-mail message from Allen Griffy, Supervisor, Contracts and Data Management Section, Office of Women's Health, Illinois Department of Public Health, Aug. 25, 2006.
8. Governor's office, "Gov. Blagojevich urges women to register for free breast and cervical cancer screenings and treatment" (news release, Sept. 1, 2006, downloaded from IDPH Internet site).
9. Allen Griffy e-mail message.
10. U.S. Department of Labor, Division of Consumer Prices and Price Indexes, "Medical Consumer Price Index" (Aug. 16, 2006, downloaded from U.S. Bureau of Labor Statistics Index Internet site).
11. "Breast Cancer Facts & Figures 2005-2006" (downloaded Aug. 31, 2006 from American Cancer Society Internet site).

**Appendix A: Average Costs for Breast and Cervical Screenings by CPT  
(Current Procedural Terminology) Code (effective July 1, 2006)**

**Screenings with normal results**

CERVICAL SCREENING ONLY

CPT Code 99202 (Office visit, new patient, pelvic exam only)	\$71.43
CPT Code 88142 (Pap test, liquid-based)	<u>28.31</u>
<b>Total</b>	<b>\$99.74</b>

BREAST SCREENING ONLY

CPT Code 99201 (Office visit, new patient, breast exam only)	\$ 40.51
CPT Code 76092 (screening mammogram)	<u>96.57</u>
<b>Total</b>	<b>\$137.08</b>

COMBINED BREAST AND CERVICAL SCREENING

CPT Code 99203 (Office visit, new patient, breast and pelvic exam)	\$106.64
CPT Code 76092 (Screening mammogram)	96.57
CPT Code 88142 (Pap test, liquid-based)	<u>28.31</u>
<b>Total</b>	<b>\$231.52</b>

**Screenings with abnormal results**

CERVICAL SCREENING, ABNORMAL RESULT

CPT Code 87621 (HPV testing)	\$ 49.04
CPT Code 57454 (Colposcopy with biopsy)	180.30
CPT Code 88305 (Surgical pathology breast or colpo biopsy), 1st spec.	115.59
CPT Code 88305 (Surgical pathology breast or colpo biopsy), 2nd spec.	115.59
CPT Code 88305 (Surgical pathology breast or colpo biopsy), 3rd spec.	115.59
CPT Code 99242 (30-minute consultation visit)	101.56
Further diagnostic testing (average of CPT code 57522 (\$293.99) and LEEP and CPT code 57520 (\$359.34), conization)	<u>326.66</u>
<b>Total</b>	<b>\$1,004.33</b>

BREAST SCREENING, ABNORMAL CLINICAL BREAST EXAM RESULT

CPT Code 76645 (Ultrasound, bilateral or unilateral)	\$ 79.12
Consult visit (average of CPT codes 99241,99242,99243)	<u>97.53</u>
<b>Total</b>	<b>\$176.65</b>

Appendix A: Average Costs for Breast and Cervical Screenings by CPT (Current Procedural Terminology) Code (effective July 1, 2006) (cont'd)

BREAST SCREENING, ABNORMAL MAMMOGRAM RESULT

CPT Code 76090 (Diagnostic mammography, unilateral)	\$ 88.18
CPT Code 76645 (Ultrasound, bilateral or unilateral)	79.12
Consult visit (average of CPT codes 99241, 99242, and 99243)	97.53
Breast biopsy (average of CPT codes 19000, 19101, 19102, 19103, 19120, 19125, and 19126)	359.31
CPT Code 19290 (Preoperative placement of needle localization wire)	76.33
CPT Code 19295 (Image-guided placement of percutaneous metallic localization clip during breast biopsy)	115.92
CPT Code 88305 (Surgical pathology breast or colpo biopsy), 1st spec.	115.59
CPT Code 88305 (Surgical pathology breast or colpo biopsy), 2nd spec.	<u>115.59</u>
<b>Total</b>	<b>\$1,047.57</b>

Source: E-mail message from Allen Griffy, Supervisor for Contracts and Data Management Section, Office of Women's Health, Illinois Department of Public Health, Aug. 25, 2006.

**Appendix B: Projected Costs of Breast and/or Cervical Cancer Screening Program to 2016**

<i>Year</i>	<i>Breast cancer screening, per person</i>	<i>Cervical cancer screening, per person</i>	<i>Both tests, per person (combined price)</i>	<i>Uninsured, low-income women</i>	<i>Breast cancer screening, total cost (000 omitted)</i>	<i>Cervical cancer screening, total cost (000 omitted)</i>	<i>Combined screening, total cost (000 omitted)</i>
2005	-	-	-	434,419	-	-	-
2006	\$137.08	\$99.74	\$231.52	439,197	\$60,205	\$43,806	\$101,683
2007	142.56	103.73	240.78	444,028	63,302	46,059	106,914
2008	148.27	107.88	250.41	448,913	66,558	48,428	112,413
2009	154.20	112.19	260.43	453,851	69,982	50,919	118,196
2010	160.36	116.68	270.85	458,843	73,582	53,539	124,276
2011	166.78	121.35	281.68	463,890	77,367	56,293	130,668
2012	173.45	126.20	292.95	468,993	81,347	59,188	137,390
2013	180.39	131.25	304.66	474,152	85,531	62,233	144,457
2014	187.60	136.50	316.85	479,368	89,931	65,434	151,888
2015	195.11	141.96	329.53	484,641	94,557	68,800	159,701
2016	202.91	147.64	342.71	489,972	99,421	72,339	167,916

Note: The cost for both screenings at one time is slightly less than the sum of the costs of individual screenings, because a combined screening requires only one office visit.

Sources: Legislative Research Unit projections based on cost data e-mailed by Allen Griffy, Supervisor for Contracts and Data Management Section, Office of Women's Health, Illinois Department of Public Health, Aug. 25, 2006, and population data from "Health Insurance Coverage of Women ages 18-64, by State" (March 2006, downloaded from Kaiser Family Foundation Internet site). Costs per person were increased at an assumed 4% annual rate, and the number of uninsured, low-income women was increased at an assumed 1.10% annual rate.



Appendix C: Projected Costs of Breast and/or Cervical Cancer Screening Program to 2016

