

Out-of-Pocket Costs for Colposcopy Among Commercially Insured Women From 2006 to 2019

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INTRODUCTION

The ability of screening to decrease cervical cancer morbidity and mortality is well-established.¹ The Affordable Care Act requires that cervical cancer

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screening modalities, including Pap testing and human papillomavirus testing, be covered without consumer cost sharing for average-risk, age-eligible women. However, coverage without patient cost sharing is not mandated for colposcopy—an evidence-based, recommended procedure for women with an abnormal initial cervical cancer screening test result.^{1,2} Cost barriers for care required to complete the cervical cancer screening process may lead to delays in or deferrals of clinically indicated care and may create financial hardship for individuals. Thus, our objective was to describe out-of-pocket costs for colposcopy and related services among age-appropriate, commercially insured women from 2006 to 2019.

METHODS

We used a national commercial claims database (Clinformatics) with individual-level demographic information and inpatient, outpatient, and pharmacy claims for plan members residing in all 50 U.S. states (Appendix 1, available online at <http://links.lww.com/AOG/C473>). Women aged 21–65 years, enrolled in a single, employer-based health plan between 2006 and 2019 who underwent at least one colposcopy and were continuously enrolled for at least 6 months after the index colposcopy episode were included in the study. Colposcopy episodes were categorized into three groups: colposcopy alone, with biopsy, or with additional procedures (ie, loop electrode excisional procedure or conization). We included colposcopy episodes associated with excisional procedures that are both diagnostic and therapeutic, because all colposcopies are aimed at cancer prevention and shortening time to diagnosis and treatment of cancer. Out-of-pocket spending (ie, deductible, co-payments, and co-insurance) for colposcopy and related care, including biopsy, conization, and

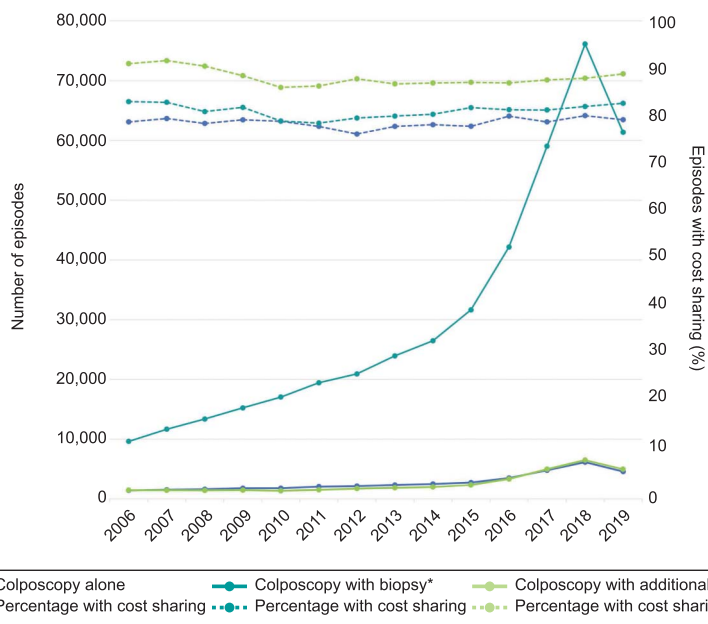


Fig. 1. Number of colposcopy episodes and percentage of colposcopy episodes requiring out-of-pocket costs, 2006–2019. *Includes colposcopy episodes with evidence of biopsy, with or without endocervical curettage, with or without endometrial biopsy within 60 days of index colposcopy. †Includes colposcopy episodes with evidence of loop electrode biopsy, with or without loop electrode excision, with or without conization within 60 days of index colposcopy.

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pathology services, incurred within 60 days of the colposcopy procedure was quantified. This study using de-identified data was deemed not regulated by the University of Michigan Institutional Review Board (HUM00164685).

RESULTS

We identified 374,169 women with 503,335 colposcopy episodes over the study period. A substantial percentage of colposcopy episodes were associated with biopsies (85.1%) or additional procedures (7.2%) (Fig. 1). Over the entire study period, at least 79% of colposcopy episodes had some cost sharing (Fig. 1).

Out-of-pocket costs (Fig. 2) were nontrivial, increased throughout the study period, and were higher when a biopsy or additional procedure was performed (2019, colposcopy alone: median [interquartile range] \$112 [\$20–184]; with biopsy: \$155 [\$31–293]; with additional procedure: \$702 [\$220–1,499]; Appendix 1, <http://links.lww.com/AOG/C473>).

DISCUSSION

Our findings suggest that, among commercially insured women aged 21–65 years, out-of-pocket costs for colposcopy were very common and significant and have increased over time. Approximately 59 million

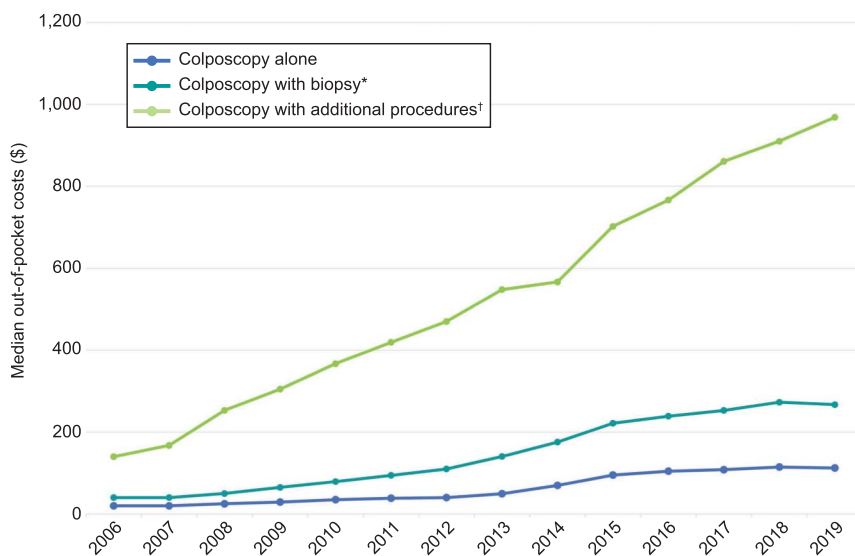


Fig. 2. Median out-of-pocket costs for colposcopy episodes with and without additional services, 2006–2019. *Includes colposcopy episodes with evidence of biopsy, with or without endocervical curettage, with or without endometrial biopsy within 60 days of index colposcopy. †Includes colposcopy episodes with evidence of loop electrode biopsy, with or without loop electrode excision, with or without conization within 60 days of index colposcopy.

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women aged 19–64 years (61%) receive their health coverage from employer-sponsored insurance, including more than a quarter with income 100–200% of the federal poverty level and more than half with income 200–400% of the federal poverty level, who may be highly sensitive to out-of-pocket costs for medical care.³ Notably, the reported out-of-pocket costs for cervical cancer screening–related care, such as office visits, were not included; our findings may thus underestimate patients' total financial burden.

It is well-established that consumer cost sharing is associated with decreased utilization of evidence-based medical care.⁴ It is possible that the substantial and growing levels of cost sharing for recommended services after an initial cervical cancer screening test could deter women from undergoing necessary diagnostic evaluation or from future screening participation, ultimately leading to delays in diagnosis and treatment of cervical cancer—a highly preventable and morbid disease. Plan benefit design must better take into account that cervical cancer screening often requires multiple steps and should remove financial barriers to completing the entire process. Reducing utilization of unnecessary cervical cancer screening (eg, younger than age 21 years, too frequent intervals, older than age 65 years) is one strategy for offsetting

the health plan's expense for eliminating cost sharing for colposcopy and associated services.

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