

TIP OF THE ICEBERG: FOLLOW-ON COSTS OF LOW VALUE PAP CYTOLOGY IN MASSACHUSETTS



LAURA NASUTI, MPH, PhD, ROSE KERBER, MPP, DANIELLE DICENZO, MS, MPH, VIDIT MUNSHI, MA, DAVID AUERBACH, PhD

INTRODUCTION

Reducing low value care has been identified as a strategy for both improving quality and reducing health care costs. Since the American Board of Internal Medicine (ABIM) launched Choosing Wisely in 2012, there has been an interest in both reducing the provision of low value care as well as studying the prevalence of low value care. Several states, including

Washington and Minnesota, have convened groups to report on and reduce low value care in their states. However, most of the low value care work to date focuses on the initial occurrence of low value care and does not look at downstream impacts (both costs and utilization) of a low value service.

OBJECTIVES

The Massachusetts Health Policy Commission (HPC) had previously identified provision of 800,000 low value services to Massachusetts residents amounting to \$80 million in spending in a two year study window. Because a low value care service (i.e. a non-recommended screening) may result in additional testing or procedures depending on the results of that initial

test, the HPC investigated cascading services and costs associated with an initial low value pap smear. The aim of this exploratory analysis is to quantify downstream services and health care spending that are likely the result of an initial low value pap cytology screen.

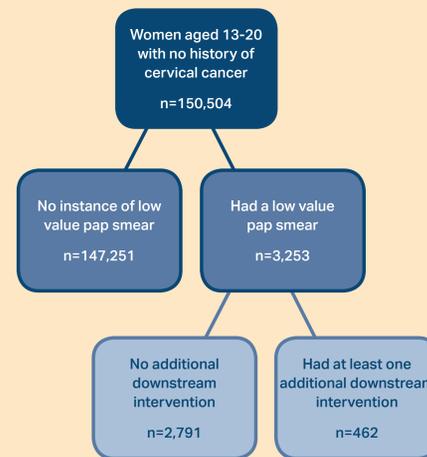
STUDY DESIGN

The HPC used specifications from the Washington State Choosing Wisely Task Force to identify in the Massachusetts All-Payer Claims Database (APCD) commercially insured women who had a low value pap test. The claims data was restricted to members who had at least one year of continuous eligibility, between Oct 1, 2013 and September 30, 2015, to allow a time window for exclusions as well as time to track potential follow-up care. All members who were women, age 13-20 during the study period, and had no history of cervical or related cancers were

included (n=150,504). After identifying women who received a low value pap smear, claims were examined for additional testing that was likely related the initial pap test. These services included additional pap cytology tests and procedures such as colposcopies, cervical biopsies, and cervicectomies. Spending was calculated by using only the claim lines for the low value procedure and downstream services. When an individual claim line did not have a value that was determined to be representative of the service (e.g., \$0), the median value of that service was imputed.

RESULTS

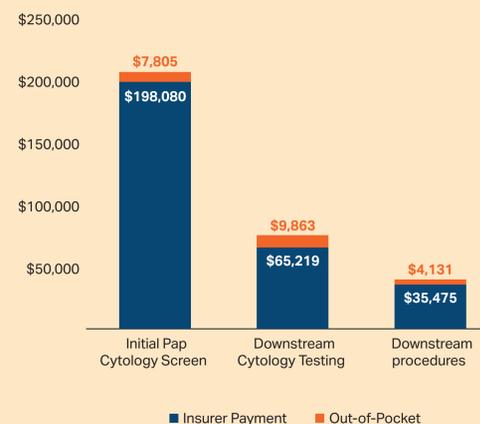
FIGURE 1: Flowchart of cervical cancer screening outcomes, 2013-2015



The HPC identified 3,253 women as having an initial low value pap test that cost \$205,885. After reviewing these women's claims for additional services that were likely tied to the initial LVC test:

- 2.2 per 100 eligible women were identified as having a low value pap cytology screen
- 14.2% of the women who had a low value screen had at least one additional downstream intervention that was likely related to the initial screen

FIGURE 2: Follow-up care for low value cervical cancer screening accounts for 36% of spending related to the this low value care procedure



- Patient cost sharing for the initial screen was \$7,805; total spending was \$205,885
- There was an additional \$113,377 in downstream spending.¹ The majority of this spending was tied to additional cytology testing (\$75,082).
- Out-of-pocket spending for downstream interventions was approximately \$14,000

CONCLUSIONS

By only examining the initial LVC service, the spending attributed to these low value screenings is likely being underestimated. In the case of low value pap testing, counting the initial service accounted for 64% of the \$319,262 in total spending that could be attributed to that initial LVC screen. When estimating the cost of LVC, incorporating cascading costs may

more accurately reflect the true spending associated with a low value service. Even then, these costs do not reflect lost time at work and the emotional toll that also accompany being subjected to additional procedures due to false positive or indeterminate screens.

POLICY IMPLICATIONS

- As alternative payment models incentivize providers to reduce LVC and as payers stop reimbursing for certain LVC, systems may see additional gains in cost savings due to elimination of cascading services.
- Although some payers have already stopped paying for specific LVC services (e.g., vitamin D testing), there is much more research that needs to be done on cascading costs before any part of the cascade

should factor into a payment decision. Studies of the cascading costs of LVC are complicated by at least two issues. First, accurate assessment of which services are truly attributable to that initial low value screen. Second, if there is a beneficial outcome from that initial "low value screen" (e.g., early detection), it is unclear if these costs should be counted.

CONTACT

Laura Nasuti
Senior Researcher, Research and Cost Trends
Massachusetts Health Policy Commission
Laura.J.Nasuti@mass.gov

David Auerbach
Director, Research and Cost Trends
Massachusetts Health Policy Commission
David.Auerbach@mass.gov

www.mass.gov/hpc

1. The total downstream spending is slightly lower than the sum of downstream out-of-pocket/insurer payment due to imputation methodology.