Guideline Adoption in Safety-net Care: *Understanding the Prevention, Screening, and Management of Cervical Cancer in Safety-Net and Health Resources and Services Administration-Supported Settings of Care*

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Executive Summary

Background

The 2022 estimates for new cases and deaths for cervical cancer in the United States are 14,100 and 4,280, respectively. The percentage of women screened for cervical cancer in the US in 2018 (81 percent) remained below the Healthy People 2020 target (93 percent).[1] Persistent human papillomavirus (HPV) infections of the cervix are a necessary cause of cervical cancer, though most individuals with HPV infections do not develop cervical cancer.[2] Cervical precancer, when detected via screening, can be successfully treated, which prevents cancer in most cases. Invasive cancer is rare in the US with more than 90 percent of potential cases prevented by screening.[3] The 2010 Affordable Care Act eliminated cost as a barrier to cervical cancer screening. However, 19 percent of women in the US are not up to date with established screening guidelines, and disparities persist among medically underserved populations.[4-6] Reasons for underscreening are multifactorial, including (1) belief that screening is unnecessary, (2) lack of insurance or medical access, (3) socioeconomic, and (4) cultural barriers.[7-11]

As an offshoot of the Cancer Moonshot℠ effort to Accelerate Cervical Cancer Control, a multi-agency federal partnership, represented by multidisciplinary expertise, formed the *Federal Cervical Cancer Collaborative* to realize the aims of the Cancer Moonshot and reduce disparities in cervical cancer and improve equitable cervical cancer screening among geographically isolated and economically, and medically vulnerable populations. The Federal Cervical Cancer Collaborative aims to implement the outcomes and realize the vision of the Cancer Moonshot℠ in safety-net settings of care.

Multi-agency partnership

A trans-federal partnership of clinical, research, and health communications expertise from the Health Resources and Services Administration (HRSA) Office of Women's Health (OWH), National Institutes of Health (NIH) National Cancer Institute (NCI), NIH Office for Research on Women's Health (ORWH), HHS Office of Population Affairs in the Office of the Assistant Secretary for Health (HHS OASH OPA), HRSA Office of Intergovernmental and External Affairs

(IEA), and Centers for Disease Control and Prevention Division of Cancer Prevention and Control (CDC DPCP), was formed to address delays in the implementation of evidence-based screening and management guidelines in clinical practice. This trans-federal partnership seeks to develop cervical cancer technical assistance materials for providers to support equitable adherence to innovations and cervical cancer screening guidelines, such as the 2019 ASCCP (formerly American Society for Colposcopy and Cervical Pathology) Risk-Based Management Consensus Guidelines[12], and other priorities for cervical cancer prevention, screening, and management. Successfully implementing technical assistance materials will improve health outcomes for populations served by federally supported healthcare clinics and reduce morbidity and mortality from cervical cancer. This goal is particularly important given the interruption of elective health services, including cancer screening, due to the COVID-19 pandemic. Finally, this partnership supports a range of high-priority areas recommended in the *2016 Cancer Moonshot Blue Ribbon Panel Report* and the 2019 Policy Brief and Recommendations to the HHS Secretary, *Examining Rural Cancer Prevention and Control Efforts*.

This report summarizes findings of a landscape analysis describing the facilitators and barriers to effective cervical cancer screening in low-resource settings and for impoverished populations. These findings will inform expert roundtable exchanges and the development of technical assistance materials for HRSA-supported settings of care.

Three overarching questions guided the landscape analysis:

1. What is the current range of approaches used to manage abnormal cervical cancer screening test results and other evidence of cancer precursors in safety-net settings of care, including HRSA-supported settings of care?
2. What is the readiness of safety-net settings of care, including HRSA-supported settings of care, to implement ASCCP Risk-Based Management Consensus Guidelines for abnormal cervical cancer screening tests and cancer precursors?
3. What are the patient, provider, and system-level barriers and facilitators for safety-net settings of care, including HRSA-supported settings of care, to accept and adopt new clinical guidelines?

Introduction

Persistent racial, ethnic, and socioeconomic disparities in cervical cancer incidence and mortality exist across at-risk populations in low-resource settings of care[13]. A working group of subject matter experts from HRSA OWH, NIH NCI, NIH ORWH, HHS OPA OASH, HRSA IEA, and CDC DPCP, partnered to form the Federal Cervical Cancer Collaborative to strengthen approaches to cervical cancer prevention, screening, and treatment within select HRSA-supported and safety-net programs, including: Health Center Program; Rural Hospital Programs; Rural Health Clinic Program; and Ryan-White HIV/AIDS Program. This multi-agency partnership will co-sponsor a series of *Federal Cervical Cancer Collaborative* roundtable meetings to support the goal of accelerated cervical cancer control. Priority setting strategies of the roundtable meetings will be guided by the landscape analysis of the state of cervical cancer screening in low-resource settings. Outcomes of the roundtable meetings include the

development of priorities for federal funding opportunities, policies to improve women's health, and the development of technical assistance materials such as a provider toolkit to support the implementation of evidence-based approaches to cervical cancer control in relevant HRSA-supported settings of care.

Methods

A review of HHS funding in cervical cancer research with a particular focus on screening interventions in low resource settings and medically underserved populations in the United States was conducted. Evaluation activities included reviews of current funded grants in cervical cancer screening, summary reviews of demonstration programs and interviews with grantees and federal staff working to improve cervical cancer screening and management of abnormal results. Data sources from the NCI included its grant portfolio and the Evidence-Based Cancer Control Programs . Other data sources included The Community Preventive Services Task Force (CPSTF) Community Guide, the Patient-Centered Outcomes Research Institute reports on Cervical Cancer Screening Behavioral Intervention Studies in Low Resource Settings, and the Center for Disease Control and Prevention's National Breast and Cervical Cancer Early Detection Program screening program summaries. Consultations with NCI staff and grantees that conduct screening research filled gaps in knowledge of current approaches to adopting the 2019 ASCCP Risk-Based Management Consensus Guidelines for Abnormal Cervical Cancer Screening Tests and cancer precursors.

Highlights of Findings

Through the established methods to answer the overarching questions, we learned about the extent to which research studies and demonstration projects have improved the uptake of cervical cancer screening. We reviewed several interventions that included strategies at the patient, provider, and system-level that increased receipt of cervical cancer screening and management.

- Select patient strategies that supported receipt include culturally tailored messages, patient navigation, text and telephone appointment reminders, use of small and mass social media messages and technology, self-collection for HPV-based cervical screening, outreach workers, home visits, transportation service, client incentives such as reduced costs, group and one-on-one education.[12-13]
- Select examples of provider and system level interventions include using a monthly scorecard to show how well doctors are doing, computer reminders, creating standing orders for screening, identifying patients at high risk for cervical cancer, and provider incentives or provider assessment and feedback.[12-13]
- Select examples of interventions reducing structural and social barriers include reducing administrative barriers, assisting with appointment scheduling, setting up alternative screening sites, adding screening hours, addressing transportation barriers, offering childcare, and providing language translation services.[13]

Conclusion

Progress is being made to increase cervical cancer screening that includes the use of HPV testing, but utilization remains too low.[14] Over half of the new cervical cancer cases in the US are among individuals who have never been screened or who are infrequently screened, reflecting barriers presented by socioeconomic disparities, geographic inaccessibility, among other factors.[15] Factors related to persistent underscreening include missed opportunities to screen, complexity of screening guidelines, and limited resources to address the full spectrum of screening and follow-up after abnormal screening test results.

An expansion of groups defined as vulnerable populations is needed to close gaps in concordant screening and guideline-informed care for populations poorly represented in research and demonstration projects. Understudied populations include transgender and sexual minority individuals, women with a history of sexual assault, and those who only receive care for pregnancy and childbirth due to cultural and other reasons.

Lack of health insurance is a critical screening barrier. Eligibility to participate in federal cervical cancer screening and early detection and Medicaid programs varies by state and may fluctuate over time, resulting in gaps in care and missed opportunities throughout the continuum of care.[17] Importantly, even when screening is covered by insurance or state/federal programs, follow-up procedures and treatment may not be covered. Screening is much less effective in preventing cancer with adequate follow-up and treatment. Given the recency of the 2019 ASCCP Risk-Based Management Consensus Guidelines, patient-, provider-, clinic-, and health system-level factors that hamper or facilitate screening and disease management under these new guidelines is not completely understood. Finally, while self-sampling is gaining momentum in research trials as an effective screening approach for patients who do not/cannot access clinic-based/speculum-exam-based cervical cancer screening, there is no clinical guideline for self-sampling for HPV testing in the US, primarily due to lack of an FDA-approval of self-sampling for HPV testing as a standard of care or an alternative screening approach.[18]

Planning efforts by the federal partnership in the roundtable meetings will consider findings in this Executive Summary and full report on *Understanding the Prevention, Screening, and Management of Cervical Cancer in Low-Resource Settings* and commits to reducing morbidity and mortality from cervical cancer in the US.

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