**Cervical Cancer Screening**

Supporting Research and Best Practices

Cervical cancer was once one of the most fatal cancers in the U.S. Over the last 30 years, the cervical cancer death rate has been reduced by more than 50% (American Cancer Society, 2015). The main reason for this change was the increased use of the Pap test. This screening procedure can find changes in the cervix before cancer develops and can also find cervical cancer early − in its most curable stage (American Cancer Society, 2015). However, screening tests for cervical cancer remain underutilized despite their proven effectiveness in reducing morbidity and mortality. SFHP’s cervical cancer screening rate (based on HEDIS guidelines) was just 74% in 2015, with the national 90th percentile for Medicaid not much higher at 76%. The national cervical cancer screening 90th percentile is 82% for commercial plans.

For patients in whom precancerous lesions are detected, the likelihood of survival is nearly 100% with appropriate evaluation, treatment, and follow-up. Patients diagnosed with localized cervical cancer also have high survival rates (five-year relative survival of 91%). However, almost half of all cervical cancers are diagnosed at a regional or distant stage for which the five-year survival rate is 57% or 16%, respectively, and most (60-80%) patients diagnosed at these later stages have not had a Pap test in the past five years. (American Cancer Society, 2015)

One key factor in reducing cervical cancer illness and death is adherence to clinical guidelines. The US Preventive Task Force released Grade A recommendations in 2012, which are reflected in current HEDIS measure specifications.[[1]](#footnote-1) Research indicates that “over-screening, under-screening, losing track … in follow-up, and poor management … abnormal test results have all contributed to approximately 12,000 new cases and 4,000 deaths from cervical cancer annually[[2]](#footnote-2).” The table below further illustrates the benefits of adhering to the clinical guidelines for cervical cancer screening.[[3]](#footnote-3)

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| --- | --- | --- |
| **Intervention**  **(compared with no screening)** | **Percent Drop in Cervical Cancer Incidence** | **Percent Drop in Cervical Cancer Mortality** |
| Current screening practice | 48.5% | 58.4% |
| Cytologic screening every 3 years | 80.9% | 86.7% |
| HPV co-testing every 5 years | 91.1% | 93.5% |

There is strong evidence that client reminders increase screening rates for cervical cancer (CDC). Research also indicates that physicians’ communication style has a strong impact on patient likeliness to receive the HPV vaccination, an outcome potentially applicable to cervical cancer screening as well. Factors such as strong recommendation of the vaccine, suggesting same-day vaccination, and consistency in recommendation regardless of individual patient risk, all had an important impact on whether a patient received the HPV vaccine. [[4]](#footnote-4)

In fact, the most important risk factor for cervical cancer is infection by the human papilloma virus (HPV). HPV is a group of more than 150 related viruses, and about two-thirds of all cervical cancers are caused by HPV 16 and 18 (American Cancer Society). It is important to note that patients who receive the HPV vaccine should still follow recommended screening guidelines because the vaccines do not protect against all types of HPV.

Health disparities in cervical cancer screening (CCS) persist in racial and ethnic minorities and those residing in rural and poor communities. This is particularly important because the burden of cervical cancer is heavier among individuals in some racial/ethnic groups – Latin@[[5]](#footnote-5) patients have the highest rate of developing cervical cancer, and African Americans die from cervical cancer at a much higher rate than other groups. [[6]](#footnote-6)In San Francisco, large disparities in cervical cancer screening rates exist across SFHP’s provider network. While each medical group has different racial/ethnic groups facing cervical cancer screening disparities, this was the most prevalent trend across all groups. It is also important to note that the disparities often occurred in the most “different” group(s) from the medical group’s primary population. The table below illustrates the largest racial/ethnic disparities in cervical cancer screening by blinded medical group in HEDIS measurement year 2014 (differences above 5% indicated in red).

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SFHP HEDIS - MY 2014** | **Group A** | | **Group B** | | **Group C** | | **Group D** | | **Group E** | |
| *% Diff* | *n* | *% Diff* | *n* | *% Diff* | *n* | *% Diff* | *n* | *% Diff* | *n* |
| **GROUP’S OVERALL CCS RATE** | 55.33% | 3117 | 70.67% | 1316 | 45.76% | 7587 | 56.36% | 1597 | 68.16% | 826 |
| **ASIAN/ PACIFIC ISLANDER** | 3.98% | 2594 | 1.70% | 1158 | 2.82% | 2262 | 3.10% | 370 | -9.39% | 228 |
| **AFRICAN AMERICAN** | -21.68%\* | 116 | -47.94%\* | 22 | -0.64% | 1547 | 0.82% | 488 | 9.45% | 201 |
| **LATIN@5** | -9.40%\* | 69 | -15.11% | 9 | 4.79% | 1547 | -2.21% | 205 | 4.57% | 165 |
| **CAUCASIAN** | -29.62%\* | 98 | -27.81%\* | 28 | -12.13%\* | 1118 | -5.61%\* | 268 | -9.67% | 106 |

\*Statistically significant difference when compared to the Asian/Pacific Islander reference group, Chi-Sq p<0.05

**Best Practices**

|  |  |
| --- | --- |
| **In-Reach** | **Outreach** |
| * Robust chart scrubs and huddles for same-day cervical cancer screenings   + Review list of patients scheduled that day who are due for a pap, then conduct screening during that visit   + MAs and other staff identify patients due for screenings during chart prep and share at huddle * Workflows/ protocols for nurses or medical assistants to schedule follow-up appointments or share any information needed for referrals prior to patients leaving an appointment * Schedule in “regular template” * Verbal and/or printed educational material for patients | * Day-before robust confirmation calls are critical   + Don’t schedule too far in advance   + Have a strong no-show policy * Letters – e.g. follow- up call, then send letter * Texting – some vendors are CareMessage or TigerText * Flyers to community-based organizations and housing sites * Small member incentive: t-shirts, canvas bags, raffle, etc. |
| **Staffing and Training Models** | **Increasing Service Accessibility** |
| * Panel management assistance (MAs, health educators, care coordinators)   + Get room setup for pap prior to patient going into exam room   + If the provider is on-time, the MA can instruct the patient to change after being roomed * Staff recognition – Kaiser’s “I saved a life” campaign * Training to improve provider perception of screening (very quick procedure) * Training on cultural humility, patient communication, and motivational interviewing especially as they relate to populations that have experienced trauma * Provider or care team scorecards * Topic at QI meetings with medical directors and QI nurses * Encourage patients to allow providers of any sex to perform pap (when appropriate) | * Enable nurse practitioners, physician assistants, and general internists to conduct Pap tests to increase health center capacity to conduct screenings * Increase efficiency by doing the pelvic exam first and pap immediately after * Offer extended hours on weekends or evenings * “Pap cart:” Stock every exam room with pap materials, in identical way so it’s easy for the provider team to find. Include a “second to last one” sign and create a regular restocking protocol * Helpful materials: thin prep, plastic speculums with a light |

**Additional Resources**

Below are some additional resources that may be helpful in your efforts to improve performance in cervical cancer screening:

* National Academy State Health Policy June 20, 2013 Webinar, What You Can Do Today (and Tomorrow!) to Improve Cervical Cancer Screening available at: <http://www.nashp.org/webinar/what-you-can-do-today-and-tomorrow-improve-cervicalcancer-screening>
* Cervical Cancer Prevention and Early Detection (American Cancer Society): <http://www.cancer.org/acs/groups/cid/documents/webcontent/003167-pdf.pdf>
* The Chronic Care Model provides an evidence based organizational framework for improving care delivery: <http://www.improvingchroniccare.org/index.php?p=The_Chronic_CareModel&s=2>
* US Preventive Task Force Grade A Recommendation on Cervical Cancer Screening: <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/cervical-cancer-screening>

1. US Preventive Task Force, Cervical Cancer Screening Recommendations, March 2012: <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/cervical-cancer-screening> [↑](#footnote-ref-1)
2. Kim J, et al. Inefficiencies and High-Value Improvements in U.S. Cervical Cancer Screening Practice: A Cost-Effectiveness Analysis. [Ann Intern Med. 2015;163(8):589-597.](http://annals.org/article.aspx?articleid=2446187) [↑](#footnote-ref-2)
3. Adapted from: Kim J, et al. Inefficiencies and High-Value Improvements in U.S. Cervical Cancer Screening Practice: A Cost-Effectiveness Analysis. [Ann Intern Med. 2015;163(8):589-597.](http://annals.org/article.aspx?articleid=2446187) [↑](#footnote-ref-3)
4. Gilkey B, et al. Quality of Physician Communication about Human Papillomavirus Vaccine: Findings from a National Survey. [Cancer Epidemiol Biomarkers Prev. Oct 15: 24(11); 1–7.](http://cebp.aacrjournals.org/content/early/2015/10/13/1055-9965.EPI-15-0326.abstract) [↑](#footnote-ref-4)
5. While HEDIS and other data sources use the category “Hispanic,” we are using the often preferred and gender-neutral category of “Latin@” [↑](#footnote-ref-5)
6. Miller J, Plescia M, Ekwueme D. Public Health National Approach to Reducing Breast and Cervical Cancer Disparities. [Cancer. 2014 Aug 15; 120(0 16): 2537–2539.](http://www.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?dbfrom=pubmed&retmode=ref&cmd=prlinks&id=25099895) [↑](#footnote-ref-6)