



## The Challenge of Cancer Screening Part Two – Breast Cancer and Cervical Cancer

*Integrated Oncology Consulting Solutions  
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### Part Two – Breast Cancer and Cervical Cancer

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As reported in our previous article “The Challenges of Cancer Screening: Part One – Prostate Cancer and Lung Cancer Screening”, cancer screening is an important element in the cancer care continuum. Very little in clinical cancer care engenders so much controversy. Not only is there concern about not finding cancers early, but over-testing carries serious cost considerations. This article will focus on Breast Cancer and Cervical Cancer screening.

#### Cervical Cancer

For many years, cervical cancer screening guidelines after a woman’s results showed three normal exams were ambiguous. The guidelines were:

- Annual Pap test and pelvic exam for all women who are 18 or are sexually active.
- After three or more consecutive satisfactory examinations with normal findings, the Pap test can be performed less frequently. This was usually left to the discretion of the patient’s physician.

Typically, women continued to receive annual screening for the rest of their lives. And some organizations’ standards were not congruent with the “rule of thumb” calling for less frequent screening after three normal findings.

In October of 2011, the USPSTF (US Preventative Services Task Force) proposed new guidelines for cervical cancer screening. At the same time, the American Cancer Society (ACS) teamed up with the American Society for Colposcopy and Cervical Pathology (ASCCP) and the American Society for Clinical Pathology (ASCP) to announce their proposed guidelines. They differed slightly in the inclusion of HPV testing.

Finally, on March 15, 2012, a collaborative group issued simultaneous guidelines/recommendations. The USPSTF published in Annals of Internal Medicine and the joint group of ACS, ASCCP and ASCP published in CA; A Journal of Clinicians, Journal of Lower Genital Tract Disease and The American Journal of Clinical Pathology. These guidelines, in detail, can be found on the CDC website ([www.cdc.gov/cancer/cervical/pdf/guidelines.pdf](http://www.cdc.gov/cancer/cervical/pdf/guidelines.pdf)).

In summary the screening guidelines state<sup>1,2</sup>:

1. Cervical cancer screening should not begin prior to age 21, regardless of sexual activity.
2. Women 21-65 should be screened every 3 years with cytology.
3. HPV co-test should begin at age 30 and continue through age 60 every 5 years (note, USPSTF stated the HPV testing interval could be extended at a woman’s request).
4. When to stop screening:
  - a. Women over age 65 with an adequate negative screening history and not at high risk for cervical cancer should stop screening. (However, the ACS, ASCCP and ASCP refined this recommendation to read “[women] over 65 should continue screening for at least 20 years after appropriate management or spontaneous regressing of CIN (Cervical intraepithelial neoplasia) 2 or 3]).
  - b. Women who have had a total hysterectomy (**with removal of cervix**) should stop screening unless there is a history of a high-grade precancerous lesion of cervical cancer.

5. There is no difference in screening recommendations for those who received the HPV vaccine.

Noticeably absent from these guidelines statements was the American College of Obstetricians and Gynecologists (ACOG). However, on the day the collaborating organizations issued their new guidelines, AGOG issued the following statement,

“ACOG participated in the development of both recommendations either by partnering or sending official representatives when the guidelines were determined. The College applauds the work of these organizations in integrating the significant new evidence that has become available into the revised guidelines. Each set of recommendations was developed under a separate work plan, with its own policies and procedures for evidence collection and analysis. The very similar recommendations are reassuring because although they were developed independently and by different methodology, they drew on a common evidence base, which was interpreted the same way by different groups of experts. The College encouraged and facilitated collaboration among the groups, ***urging that consistency of message would benefit American women and the clinicians who care for them.*** This message was clearly heard. The College now moves to its final phase of evaluating the recommendations. They will be evaluated by committees that make the College’s recommendations on screening for cervical cancer. Any new guidelines from the College will be published in *Obstetrics & Gynecology*.<sup>3</sup>” Note the italicized phrase.

### Breast Cancer

As with so many screening recommendations, breast cancer screening has changed repeatedly in the last decade. Screening technologies have included Xeroforms, film screen and, most recently, digital mammograms. The timing and frequency recommendations for screening mammography have also changed with the times.

Up until the last decade, the ACS and radiology associations recommended the following:

- Women aged 40 and older should have a screening mammogram every year.
- Between the ages of 20 and 39, women should have a clinical breast examination by a health professional every three years, increasing to yearly after age 40.
- Women aged 20 and older should perform breast self-examination (BSE) every month.

Use of BSE techniques came under attack and most clinical advisors noted BSE had no effect on breast cancer early detection.

Now the guidelines are relatively consistent among the ACS, ACR (American College of Radiology), ACOG and other breast health specific professional organizations. The AMA also endorsed screening starting at age 40 in June of 2012. Current guidelines endorse:

- Yearly mammograms, recommended starting at age 40 and continuing for as long as a woman is in good health.
- Clinical Breast Exam (CBE) about every 3 years for women in their 20’s and 30’s and every year for women 40 and over.

- Women should know how their breasts normally look and feel and report any breast change promptly to their health care provider. Breast self-exam (BSE) is an option for women starting in their 20's.
- Some women – because of their family history, a genetic tendency or certain other factors – should be screened with MRI in addition to mammograms. Guidelines urge each woman to talk with her physician about her personal medical history and whether she should have additional tests at an earlier age.<sup>4</sup>

However, once again, the USPSTF offers different standards. USPSTF currently recommends:

- Biennial screening mammography for women aged 50-74.
- Earlier screening should be an individual decision.
- Furthermore, the organization cautions that there is “Insufficient evidence to assess the additional benefits and harms of screening mammography in women 75 and older.”<sup>5</sup>

USPSTF guidelines are particularly important since payors often use these guidelines as the source for reimbursement justification.

Why the controversy? Mammograms are relatively inexpensive and involve only low dose radiation exposure. Moreover, they have proven to reduce death from breast cancer through early detection by 15-20% against those unscreened.<sup>6</sup>

An NCI report, however, details a number of risks inherent in mammography screening, These include:

- Treatment of insignificant cancers (33% of breast cancers detected by screening mammography);
- Additional testing for false positives (estimated to occur in 50% of women who receive annual screening for 10 years, 25% of whom will have biopsies); and
- Radiation induced mutations that can cause breast cancer if exposed before age 30 (between 9.9 and 32 breast cancers per 10,000 women exposed to a cumulative dose of 1SV (Seivert)).<sup>6</sup>

Cervical and Breast Cancer screening appears to be governed now by consistent guidelines, at least for the time being. For cancer program administrators and leaders, these consistent screening guidelines can assist them to identify and measure quality of care metrics within their local institutions/programs, educate the public about prevention/early detection self-care interventions and enable the cancer program to support Primary Care Practitioners in their cancer prevention efforts.

1. US Preventive Health Services Task Force Cervical Cancer Screening Recommendation [www.uspreventiveservicestaskforce.org/uspstf/uspstfcerv.htm](http://www.uspreventiveservicestaskforce.org/uspstf/uspstfcerv.htm). Accessed June 29, 2012
2. American Cancer Society Screening Guidelines for Cervical Cancer. [www.cancer.org/Cancer/news/new-screening-guidelines-for-cervical-cancer](http://www.cancer.org/Cancer/news/new-screening-guidelines-for-cervical-cancer). Accessed June 29, 2012
3. ACoG - New Cervical Cancer Screening Recommendations from the U.S. Preventive Services Task Force and the American Cancer Society/American Society for Colposcopy and Cervical Pathology/American Society for Clinical Pathology, released March 14, 2012.
4. Crawford, Jennifer. Leading Health Organizations Revise Cervical Cancer Screening Guidelines. [NCI Cancer Bulletin Online Edition 9 \(6\) \(March 20, 2012\) www.cancer.gov/ncicancerbulletin/032012/page2](http://www.cancer.gov/ncicancerbulletin/032012/page2)
5. American Cancer Society Guidelines for Breast Cancer Screening. [www.cancer.org/Healthy/FindCancerEarly/CancerScreeningGuidelines/american-cancer-society-guidelines-for-the-early-detection-of-cancer](http://www.cancer.org/Healthy/FindCancerEarly/CancerScreeningGuidelines/american-cancer-society-guidelines-for-the-early-detection-of-cancer). Accessed June 14, 2012
6. National Cancer Institute PDQ® Summary of Evidence of Risk and Benefit of Screening Mammography [www.cancer.gov/cancertopics/pdq/screening/breast/healthprofessional](http://www.cancer.gov/cancertopics/pdq/screening/breast/healthprofessional). Accessed June 29, 2012