Agenda
Welcome and Introductions
• Robert Smith, PhD, SVP, Cancer Screening, ACS
Guideline Overview
• Robert Smith, PhD
• Debbie Saslow, PhD, Managing Director, Cancer Control Interventions-HPV/GYN Cancers
Questions & Answers
Guideline Overview
ACS Guideline Development Process

- **Staff**: Systematic Evidence Review & Modeling Reports [existing (and supplemented) or Commissioned]
- **External Expert Advisors**
- **Guideline Development Group & Cervical Sub-group**
- **Mission Outcomes Committee**
- **External Review** (External Review and Stakeholder Organizations)
- **ACS Board**
- **Publication**

Guideline Development Group – GDG
The 2020 ACS updated recommendations for cervical cancer screening apply to:

• All asymptomatic individuals with a cervix

• The recommendations DO NOT apply to individuals at increased risk for cervical cancer due to immunosuppression
ACS 2020 Recommendations for Cervical Cancer Screening

• The ACS recommends that individuals with a cervix initiate cervical cancer screening at **age 25 years** and undergo **primary HPV testing every 5 years through age 65 years (preferred)**. If primary HPV testing is not available, individuals aged 25 to 65 years should be screened with cotesting (HPV testing in combination with cytology) every 5 years or cytology alone every 3 years (acceptable) (**strong recommendation**).
ACS 2020 Recommendations for Cervical Cancer Screening

• Cotesting or cytology-alone testing are acceptable options for cervical cancer screening because access to an FDA-approved primary HPV test may be limited in some settings.

• As the United States makes the transition to primary HPV testing, the use of both cotesting and cytology for cervical cancer screening will not be included in future guidelines.
ACS 2020 Recommendations for Cervical Cancer Screening

The ACS recommends that individuals with a cervix can discontinue screening at age 65 if:

• They have documented adequate negative prior screening in the 10-y period before age 65 y (qualified recommendation), and

• There is no history of CIN 2+ within the past 25 y.

*Older than age “65 years” means that cervical screening is not recommended in women age 66 years and older
ACS 2020 Recommendations for Cervical Cancer Screening

Individuals older than age 65 y* without conditions limiting life expectancy for whom sufficient documentation of prior screening is not available should be screened until criteria for screening cessation are met.

Cervical cancer screening may be discontinued in individuals of any age with limited life expectancy.

*Older than age “65 years” means that cervical screening is not recommended in women age 66 years and older
What Changed? (2020 vs 2012)

• HPV testing alone every 5 years is the preferred screening strategy
  ✓ In 2012, Cotesting (HPV test + cytology) every 5 years was preferred. *Now, cotesting is acceptable*
  ✓ In 2012, Cytology every 3 years for aged 21-29y was acceptable. *Now, cytology alone every 3 years is acceptable after age 25*

• Starting cervical cancer screening at age of 25y
  ✓ Age 21y in 2012
What has not Changed?

Recommendation to exit cervical cancer screening at age 65y

• Criteria for exiting screening based on 10 years of prior adequate negative screening with the most recent test occurring within the recommended interval for the test used:
  ✓ 2 consecutive, negative HPV tests or
  ✓ 2 negative cotests or
  ✓ 3 negative cytology tests
What Informed the GDG* Decisions?

- Quality of evidence
- Balance between desirable and undesirable effects
- Values and preferences

*GDG Guideline Development Group
Recent Developments in Cervical Cancer Prevention

Introduction of HPV testing for cervical cancer screening, first for cotesting with cytology and subsequently as a stand-alone screening test.

✓ 2 primary HPV tests approved by FDA
✓ USPSTF recommends primary HPV testing for cervical screening starting at age 30y (2018).
Recent Developments in Cervical Cancer Prevention

Introduction of the human papillomavirus (HPV) vaccine (2006)

- NHIS 2016 data--48.5% of females aged 19-26 years reported having previously received of at least one dose of HPV vaccine.
  - 51.6% among females aged 19-21 years.
- NIS-Teen Survey 2017-2018 data--Among adolescents aged 13–17 years, coverage with ≥1 dose of vaccine increased from 65.5% to 68.1%.
### Rationale – Disease Burden of Cervical Cancer

**Distribution of Cervical Cancer Cases by Age at Diagnosis, United States, 2012 to 2016**

<table>
<thead>
<tr>
<th>Age at Diagnosis</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>85+ years</td>
<td>2%</td>
</tr>
<tr>
<td>80-84 years</td>
<td>2%</td>
</tr>
<tr>
<td>75-79 years</td>
<td>3%</td>
</tr>
<tr>
<td>70-74 years</td>
<td>5%</td>
</tr>
<tr>
<td>65-69 years</td>
<td>7%</td>
</tr>
<tr>
<td>60-64 years</td>
<td>9%</td>
</tr>
<tr>
<td>55-59 years</td>
<td>11%</td>
</tr>
<tr>
<td>50-54 years</td>
<td>11%</td>
</tr>
<tr>
<td>45-49 years</td>
<td>12%</td>
</tr>
<tr>
<td>40-44 years</td>
<td>12%</td>
</tr>
<tr>
<td>35-39 years</td>
<td>11%</td>
</tr>
<tr>
<td>30-34 years</td>
<td>9%</td>
</tr>
<tr>
<td>25-29 years</td>
<td>4%</td>
</tr>
<tr>
<td>20-24 years</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Fontham ETH, Wolf AMD, Church TR, et al. Cervical Cancer Screening for Individuals at Average Risk: 2020 Guideline Update from the American Cancer Society. CA Cancer J Clin. 2020; 0: 000-000 [epub ahead of print]. URL to be:
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Starting at age 25 y

Why not screen at age 21-24y?

- The incidence of cervical cancer in 21-24y very low.
- Observational studies show small if any potential benefit of screening.
- High incidence of transient infections, and risk of adverse reproductive outcomes of treatment in young women.
- Increasing vaccinated screening-age population.
  - Observational studies on screening outcomes from countries with higher vaccine uptake and early US data show a protective effect in vaccinated women.
  - Cytology-based screening less efficient in vaccinated populations.
Starting at age 25 y

Why not screen at age 21-24y?

✓ Starting screening at 21y has a much higher burden of additional colposcopies per life-year gained, and there was a favorable benefit-to-harm balance for beginning screening at age 25 years.

GDG considered recommendation for screening 21-24y based on vaccine status. However,

✓ Ascertaining vaccine status is problematic:
  o Concerns about variability in access to vaccine registries.
  o Challenges in transfer of records from pediatric to adult care.

GDG judgement that the small potential benefits do not outweigh the potential harms for this age group.
Evidence for Testing Strategy

Primary HPV testing every 5 years is the preferred cervical cancer screening strategy.

• Based on superior sensitivity, the ability to better predict future risk of disease, and reduced performance of cytology in an increasingly vaccinated population.

• Cotesting every 5 years (the preferred option in the 2012 guideline update) and cytology alone every 3 years remain acceptable options for now, if primary HPV testing is not available.

• Cotesting and cytology alone are expected to be phased out as the US makes the transition to full implementation of primary HPV testing for screening.
Cessation of Screening

Though rare relative to other cancers, still substantial disease burden in women aged > 65y, with significant disparities.

• Uncertain what proportion of disease is attributed to adequately screened women, but it is low.
• Women with an increasing number of negative tests have low risk for future precancers (subsequent cervical cancer).
• Sparse evidence but studies indicate that inadequate screening or not meeting exit criteria is associated with developing cervical cancer > 65y.
Cessation of Screening

GDG judged that the benefit-to-harm balance favors discontinuing screening in women aged > 65 years who meet exiting criteria.

- Consensus that there is little benefit to continue screening in those who have been adherent to regular screening and meet exit criteria.
- The guideline stresses adherence to screening in decades leading up to age 65y and attentiveness to the criteria for exiting screening.
- If documentation of criteria insufficient to validate, then cervical screening should be performed toward the fulfillment of the exiting criteria.
<table>
<thead>
<tr>
<th>Recommendations</th>
<th>ACS, 2020</th>
<th>USPSTF, 2018</th>
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<tbody>
<tr>
<td>Age to start screening</td>
<td>Aged 25y (S)</td>
<td>Aged 21y (A)</td>
</tr>
<tr>
<td><strong>S-strong Q-Qualified</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening Strategy</td>
<td>Aged 25y to 65y (S)            Primary HPV test every 5y – preferred</td>
<td>Aged 21 to 29y – Cytology every 3y (A)</td>
</tr>
<tr>
<td></td>
<td>Cytology 3y or Cotest 5y – acceptable</td>
<td>Aged 30 to 65 years – Cytology 3y or primary HPV 5y or Cotest 5y (A)</td>
</tr>
<tr>
<td>Exiting screening</td>
<td>Aged &gt;65y – Discontinue screening if exit criteria are met. (Q)</td>
<td>Aged &gt;65 y – Discontinue if adequate prior screening and are not otherwise at high risk for cervical cancer. (D)</td>
</tr>
<tr>
<td></td>
<td>Exit criteria - 2 consecutive negative HPV tests, or 2 consecutive negative cotests, or 3 consecutive negative cytology tests within the past 10 y, with the most recent test occurring within the recommended interval for the test used.</td>
<td>Adequate screening defined as 3 consecutive negative cytology results or 2 consecutive negative HPV results within 10 y before stopping screening, with the most recent test performed within 5 years.</td>
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<tr>
<td>Hysterectomy – with removal of cervix</td>
<td>Screening not recommended</td>
<td>Screening not recommended</td>
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Guideline Resources

• Cancer.org
  - Materials for patients/consumers
  - Materials for health professionals
  - Guidelines paper and patient page

Guideline:

Patient Page:

- Updated guidelines presentations for professional and lay audiences as needed
Implementation—Change is a Challenge

• New difference in the starting age – ACS & USPSTF
• Need to increase public awareness of HPV vaccination and the HPV test.
• Need to increase health care providers awareness of the screening tests.
• Insurance coverage for HPV based testing in persons 25-29y.
Implementation—Change is a Challenge

• The transition from cotesting to primary HPV testing faces a number of challenges:
  - Financial and other resource interests of manufacturers and laboratories
  - Some cytotechnologists and cytopathologists have opposed deemphasizing the Pap test
  - We are uncertain about the barriers faced by clinics that serve low income individuals
  - Inertia---change is not hard, it is just too much trouble
Policy and Insurance Implications
Insurance Coverage for Screening (Minimum Coverage)

• Affordable Care Act requires insurers across the country to cover – with no cost sharing - screening services with a USPSTF A or B rating.

• Cervical cancer screening for ages 21-29 y with cytology alone every 3y receives an A rating.

• Insurers can voluntarily offer broader coverage than USPSTF guidelines; but not required.
Insurance Coverage for Screening (State Mandates)

• Some states require private insurers and/or state Medicaid programs to use ACS guidelines to inform cervical cancer screening requirements (automatic).

• Some states *consult* ACS guidelines; those states will require additional steps to require a coverage change.

• Bottom line: Some insurance may not cover HPV testing for screening in persons 25-29y.
Insurance Coverage for Screening

• Very low possibility of HPV test for screening not covered by insurance.

• Consumers should understand what their insurance policy will cover and what out-of-pocket expenses they may incur.