

Colposcopy Issues in the HPV Era

Colposcopy in the United States: Changes for the 21st Century?

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Faculty Disclosure

- In the past 12 months...
- Hologic: Research supplies for anal cytology
- Roche: Honorarium and travel expenses

Objectives

- Current state of cervical cancer prevention in U.S.
- Key Challenges
- ASCCP Colposcopy Standards Project

Cervical Cancer Screening in U.S.

- Pap test
 - Best cancer screening test in medicine in 20th century
- In U.S.
 - Opportunistic screening
 - No national registry
 - Single state screening registry
 - The New Mexico HPV Pap Registry
- Screening coverage ~80%
- Adherence to guidelines → poor



What are the current US standards?

	USPSTF	ACS/ASCCP/ASCP
When to start?	21yo	21yo
How often?	Q3y Insufficient data on HPV tests < 30 yrs but recs co-testing ≥ 30 years q 5 yrs	Q3y Paps ages 21-29 Q5y co-testing ages 30-65 Q3y Paps remain an option
When to stop?	65 if adequate prior screens	Age 65 if 3 negative Paps or 2 negative co-tests after hysterectomy for benign disease

Current options for cervical cancer screening

	Cytology	HPV	Cotesting (Cytology and HPV)
Sensitivity for precancer	Lowest	Higher	Highest
Repeat interval for negative screen	Shortest (lowest NPV)	Longer (greater NPV)	Longest (greatest NPV)
Triage test required	For equivocal cytology results	For all positive results	For HPV-positive, cytology-negative results
Diagnostic test	Colposcopic biopsy		

Cervical Cancer Screening

20th Century
Morphology Model
Cytology

21st century
Hybrid model
HPV + Pap

U.S.



21st century
Molecular model
HPV only

Australia

HPV Vaccination rates in U.S.

- 3 doses: ~40% girls
- Received at least one dose of HPV vaccine
 - Six out of 10 teen girls (63 percent)
 - five out of 10 teen boys (50 percent)

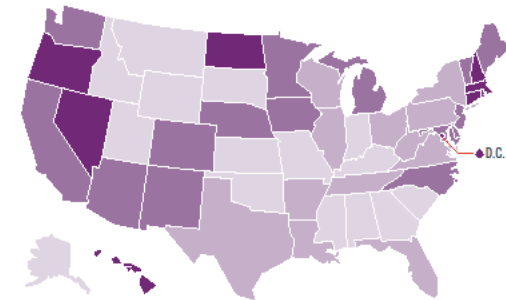
Reagan-Steiner S, Yankey D, Jeyarajah J, et al. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2015. MMWR Morb Mortal Wkly Rep 2016;65:850–858. DOI: <http://dx.doi.org/10.15585/mmwr.mm6533a4>

HPV VACCINATION IS THE BEST WAY TO PREVENT MANY TYPES OF CANCER

NATIONWIDE
6 OUT OF 10
GIRLS HAVE STARTED THE HPV VACCINE SERIES

National coverage is 63%
Coverage by state:
59% or less
60–64%
65–69%
70% or greater

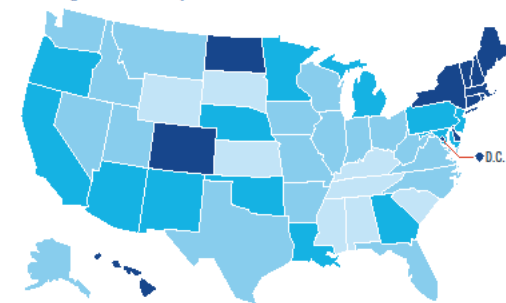
Percentage of adolescent girls who have received one or more doses of HPV vaccine*



NATIONWIDE
5 OUT OF 10
BOYS HAVE STARTED THE HPV VACCINE SERIES

National coverage is 50%
Coverage by state:
39% or less
40–49%
50–59%
60% or greater

Percentage of adolescent boys who have received one or more doses of HPV vaccine*



IMPROVING HPV VACCINATION RATES WILL HELP SAVE LIVES.
A high national Tdap vaccination rate of 86% shows that it is possible to achieve high HPV vaccination coverage.

*Estimated coverage with ≥1 dose of human papillomavirus (HPV) vaccine among adolescents aged 13–17 years, National Immunization Survey–Teen (NIS–Teen), United States, 2015
Source: MMWR August 26, 2016

www.cdc.gov/hpv

NORDIG604 | August 26, 2016



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Key Challenges in the USA

- **Opportunistic screening program**
 - Compliance: Healthy People 2020 Target of 93%
- **Multiple screening options to choose from**
 - No “winning strategy” yet; cotesting is “preferred”
- **Low HPV vaccination uptake**
 - Multiple steps being taken to improve this
- **Expectations and Litigation**
 - Perfection expected from screening
 - High profile area for medicolegal issues

Key Challenges in the USA

- **Workforce shortage**
 - Negative press regarding “demise of the Pap Test”
 - 24 active CT schools, only filled at 60% of capacity
 - Potential change in cytotechnologists scope of practice (Mid Level Pathology Practitioner)
- **Colposcopy**
 - No required formal training/ quality assurance
- **Access**
 - 50% of cervical cancers diagnosed in women who were never screened, an additional 10% among those not screened in the past 5 years.

Colposcopy Challenges

- Since the new screening guidelines, we're doing fewer colposcopies.
- As more teens are vaccinated against HPV:
 - We will see fewer high grade lesions.
 - Anticipate smaller, less clinically obvious lesions
- Our challenge will be to maintain expertise in the face of the decreasing colposcopy caseload.

**ASCCP:
Colposcopy Standards Project**

**Developing evidence-based colposcopy standards
for the United States**

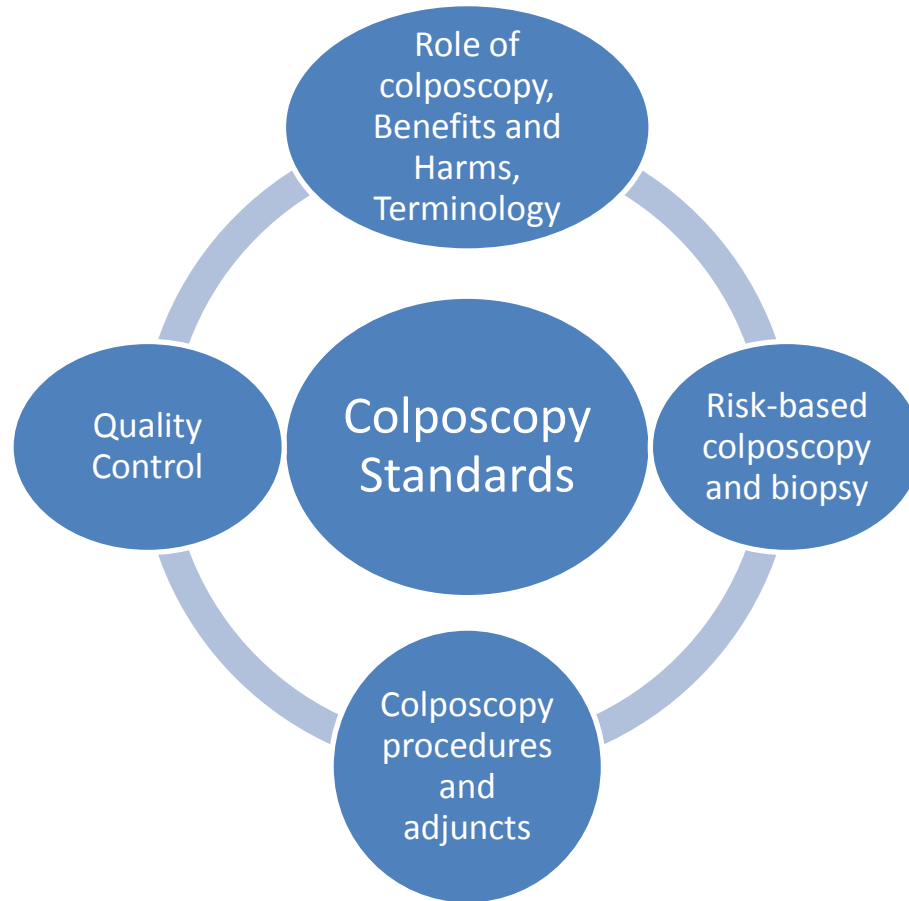
Colposcopy in the US

- Thousands of procedures performed every year
- Performed by Ob/Gyn, Family Practice, Internists, NPs, PAs
- Training is obtained from residency, courses (like ASCCP courses), mentorship type training, and self-education
- Unclear exactly how many are being done/year? Trends?
- Unclear exactly who is doing them
- Unclear how often clinicians are doing colposcopy
- Training is uneven and inconsistent and difficult to measure

Why Now?

- Previous teaching and education was largely based on expert opinion and experience
- Accumulation of peer-reviewed data that are central to the practice and performance of colposcopy
 - More biopsies, increased detection of disease (Gage et al, Pretorius et al)
 - Disease detection with random biopsies (Huh et al, Pretorius et al, Song et al)
 - Evaluation of colposcopic scoring and grading systems (Massad et al, Hong et al, Bowring et al)
 - Adjuncts to colposcopy (Alvarez et al, Twiggs et al, Tidy et al, Richards-Kortum et al)
 - Training and Quality (Murphy et al, Sideri M et al, Leeson et al)

ASCCP Colposcopy Standards Working Groups



Some important topics that will be covered

- Colposcopy terminology
- Colposcopic biopsies: When, where, how many?
- Role of endocervical sampling
- Impact of HPV screening on colposcopy
- The role of colposcopy adjuncts
- Quality assurance measures, quality control indicators

Evidence-based approach

- Literature search terms have been provided centrally for all working groups
- Each working group is organizing review and data abstraction for their charges
- Some areas have very limited data, we will need to rely on expert opinion
- For some charges, systematic reviews and meta-analyses are being conducted (e.g. risk-based colposcopy-biopsy)

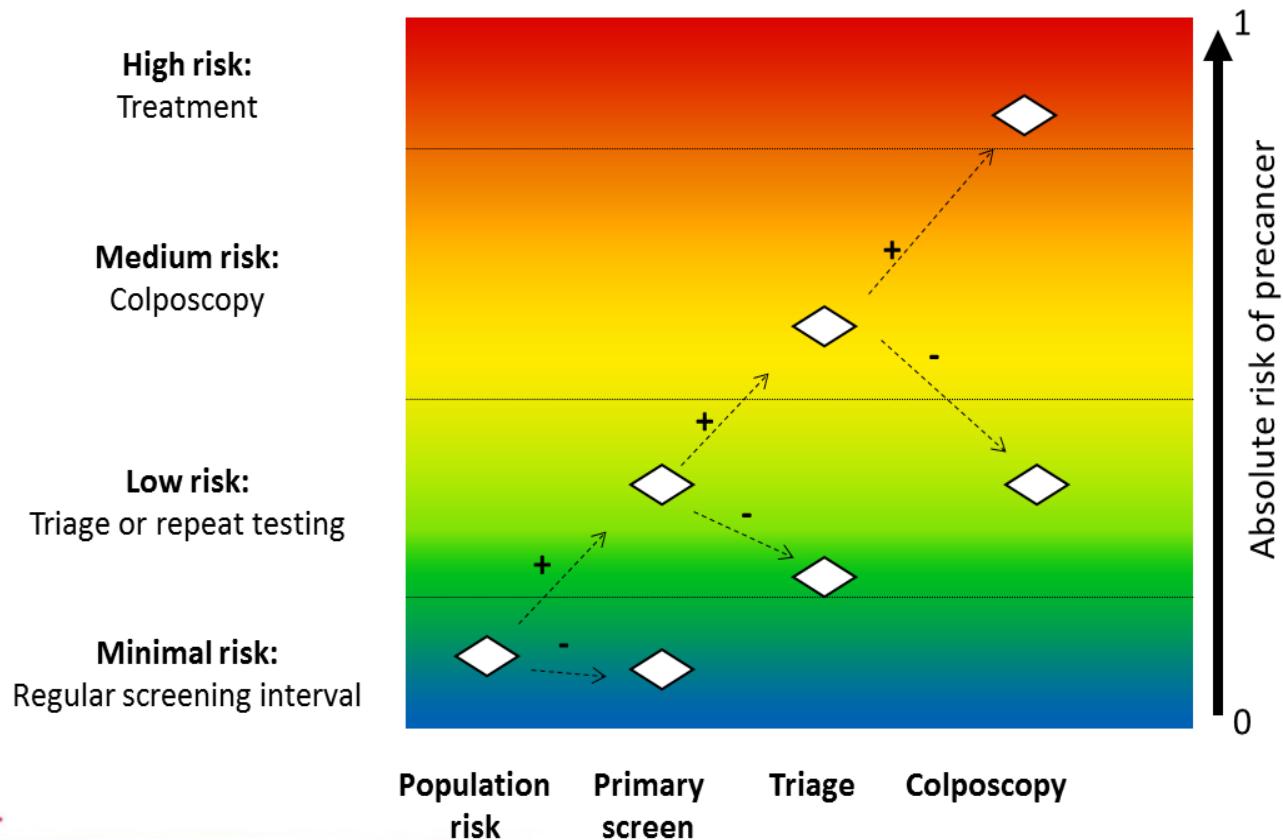
Focus on implementation

- Need to balance precision and complexity
- Approaches need to be robust and reproducible
- As much as possible, try to harmonize with other programs
- Dynamic process:
 - Some recommendations may need to be updated when screening practice, vaccination coverage change
 - Additional topics will be addressed in the future

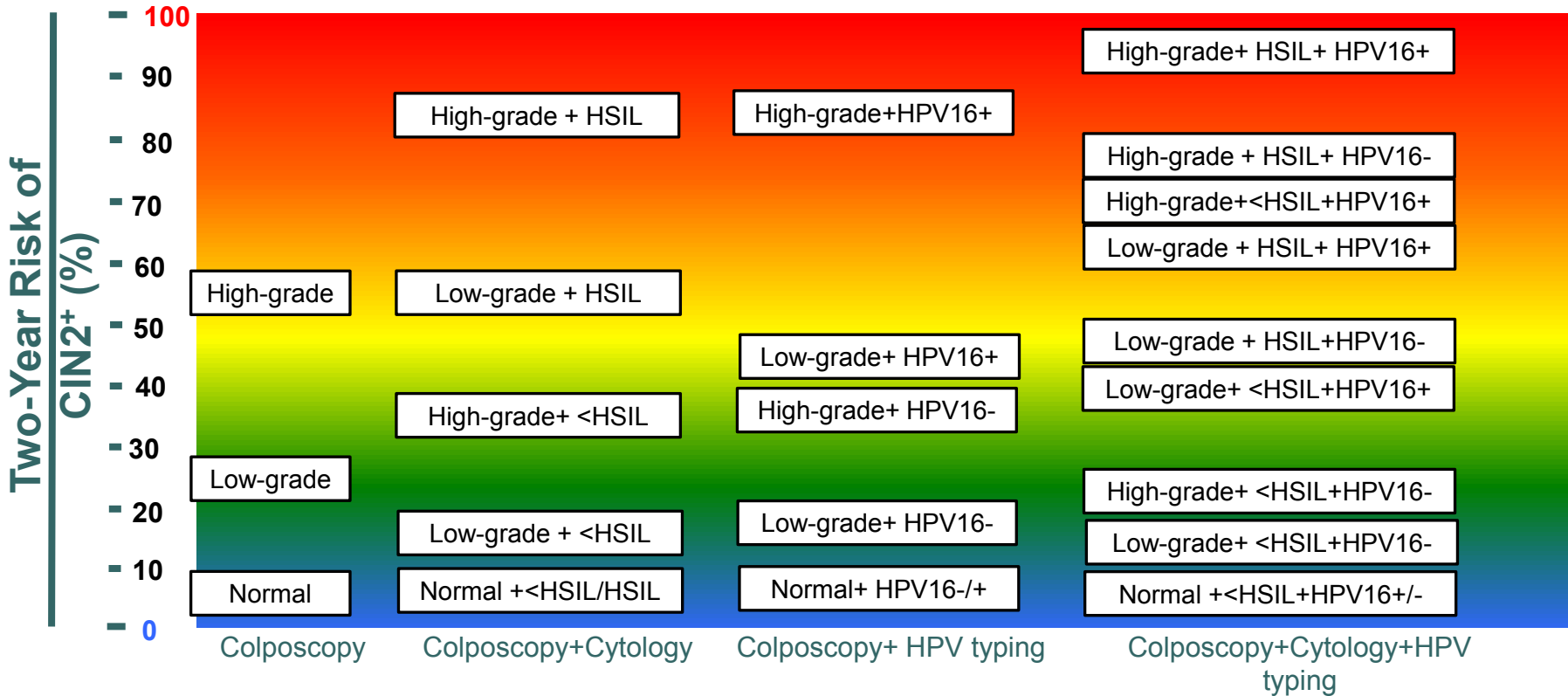
Interaction with other societies

- National and international
- We do not want to ‘reinvent the wheel’
- But there is no ‘one-size-fits-all’ international standard for colposcopy
- US situation
 - No organized screening
 - No national integrated health system
 - Wide range of providers performing colposcopy
 - Wide range of number of annual colposcopies performed
 - No colposcopy certification

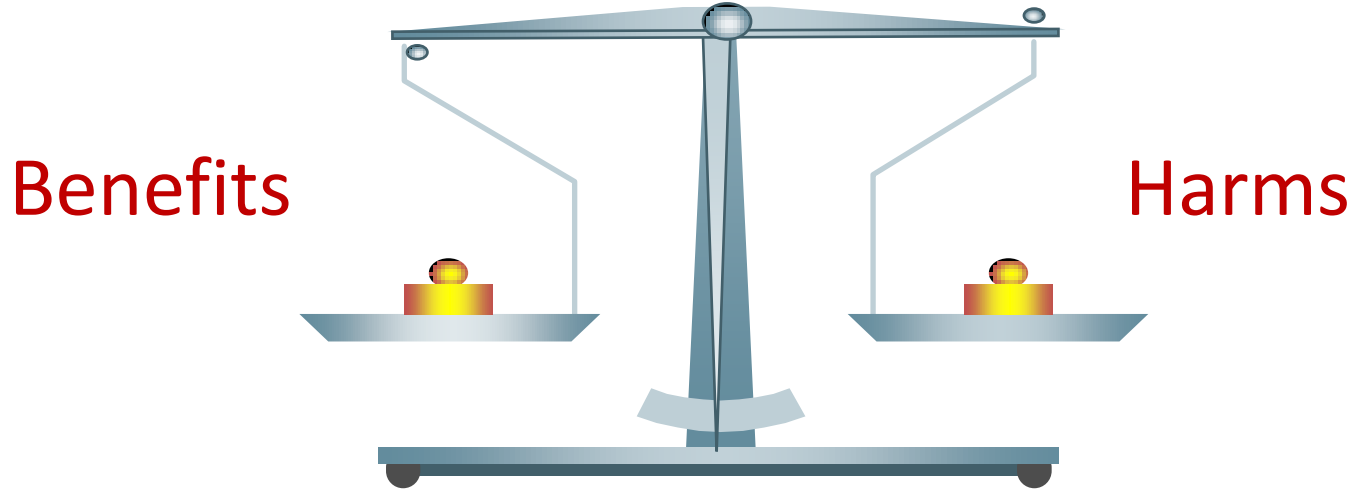
Risk thresholds in screening and management



Risk-based approach to colposcopy



Underlying principles: Cervical Cancer Screening & Management



Similar management for similar risk

You are invited!
Save the date!



IF CPC
16th World Congress
FOR CERVICAL PATHOLOGY
& COLPOSCOPY 2017

Orlando, FL
Hyatt Regency Orlando
April 2–7, 2017

hosted by **ASCP**

<http://www.ifcpc2017.com/>

