Spring 2022 Provincial Colposcopy Community of Practice (CoP)

Webinar 1

MAY 26, 2022, 5:30 - 7:00 P.M.

Recommended browser for Microsoft Teams: Google Chrome



With Thanks





Housekeeping items

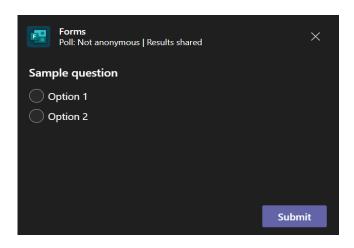
- Please mute yourself when you are not speaking
- Please turn off your webcam to minimize connection issues
- Please use the chat box to ask questions or share comments; do not use the "raise hand" option
- During the case studies, polls will appear on your screen or in the chat box



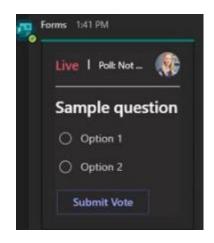
Poll options

- Polls will either pop up on your screen, appear in the chat box, or both
- You can respond in either location

Poll pop-up



Poll in chat box





Accreditation

- Today's session is a Royal College of Physicians and Surgeons Accredited Group Learning Activity
- To receive a letter of accreditation for 1.5 credit hours, you must:
 - Participate in today's event
 - Be registered as a member of the CoP
 - Complete and submit the post-webinar evaluation survey



Thank you to our CoP Planning Committee

Dr. Robert DiCecco

Dr. Hélène Gagne

Dr. Nadia Ismiil

Dr. Felice Lackman



Recording of CoP spring webinar is underway

Please note that this session will be recorded and will be available on the Colposcopy CoP Resources Hub in the coming weeks. You can access the hub here:
www.cancercareontario.ca/en/colposcopy-resources-hub



New Provincial Clinical Lead for the OCSP: Dr. Dustin Costescu





Agenda

Item	Presenter	Time
Welcome and IntroductionsUpdate on HPV testing implementation	Bronwen McCurdy	5:30-5:37 pm
Ontario Cervical Screening Program (OCSP) update: • Update on impact of COVID-19 • Interval for repeat cytology after low- grade result	Dr. Dustin Costescu	5:37-5:55 pm
Case studies:Follow-up of HPV+ patient and low-grade cytologyPost-treatment management	Dr. Rachel Kupets	5:55-6:25 pm
Cervical screening and colposcopy quality reporting	Dr. Rachel Kupets	6:25-6:45 pm
Questions from the field	Dr. Dustin Costescu	6:45-6:55 pm
Concluding remarks	Dr. Dustin Costescu	6:55-7:00 pm



Learning objectives

Following this meeting, participants will better understand:

- The impact of the COVID-19 pandemic on cervical screening and colposcopy services in Ontario
- Risk-based recommendations for discharge from colposcopy for treated and untreated patients
- What to communicate to primary care providers when discharging people from colposcopy
- The impact of endocervical gland extension on persistence/ recurrence of cervical dysplasia
- What to expect for the 2022 quality reports and how to ensure they are able to benefit from quality reporting activities



Update on HPV testing implementation

Bronwen McCurdy

Approach to updating OCSP's cervical screening and colposcopy recommendations

Recommendations are being updated to support future implementation of HPV testing

Draft content for expert panel

Expert panel meetings

National / international review

- Jurisdictional scan
- Evidence review (guidelines and/or primary literature)
- Ontario data

Key areas under review

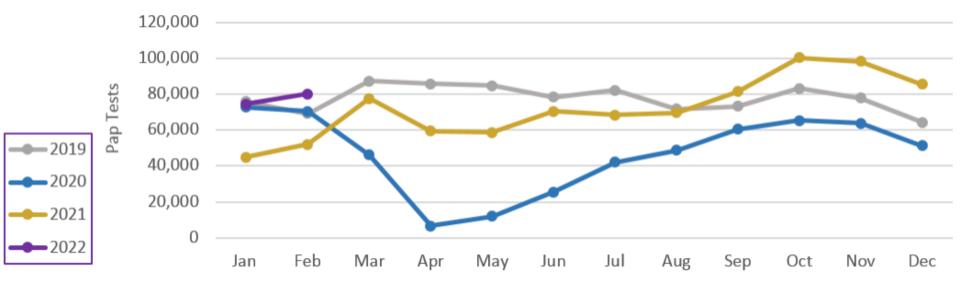
- ✓ HPV-based algorithms for screening and colposcopy
 - People at average risk
 - People at elevated risk (e.g., immunocompromised, some people post-discharge from colposcopy)
- ✓ Screening cessation
- Management of people under age 25 in screening and colposcopy
- ✓ Repeat testing post-unsatisfactory cytology and/or invalid HPV test result
- √ Vaginal vault testing for patients with total or radical hysterectomy



Ontario Cervical Screening Program updates: Cervical screening during COVID-19

Dr. Dustin Costescu

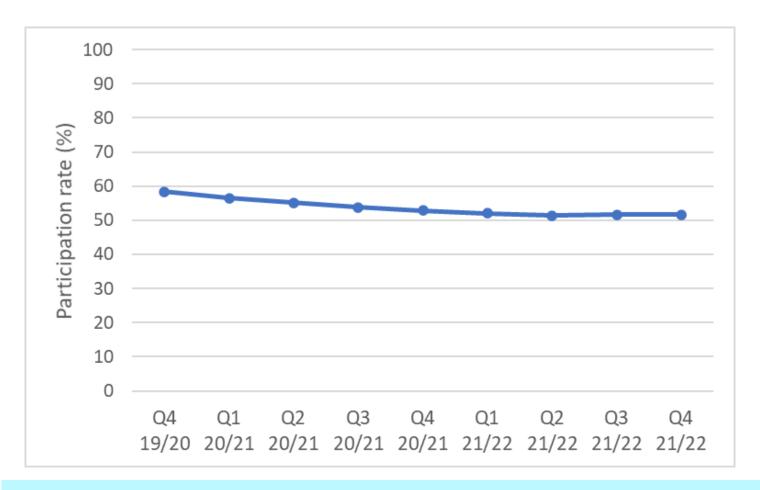
Pap tests volumes by month and year



Pap tests volumes have been at (or exceeded) pre-pandemic volumes since September 2021

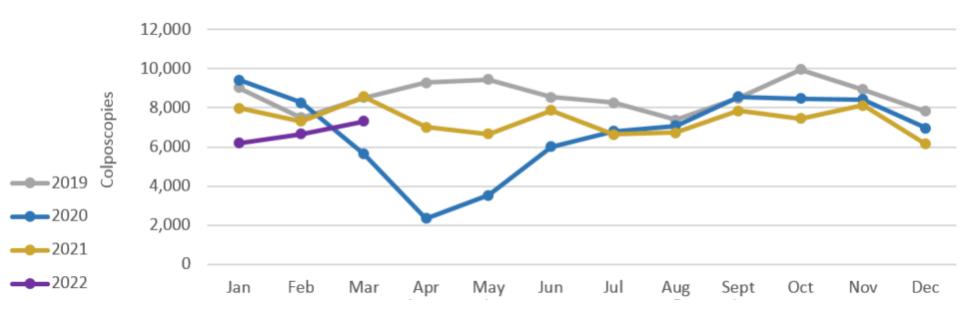


Cervical screening participation rate by quarter



- Cervical screening participation rates declined in the early-mid stages of the pandemic
 - Since Q2 21/22, rates have stabilized around 51%

Colposcopy volumes by month and year



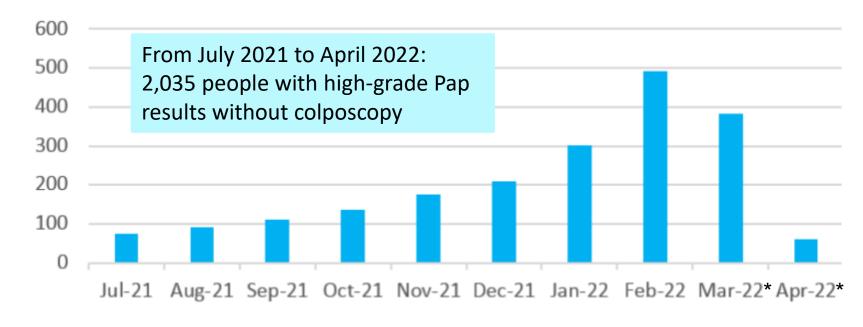
The latest month of colposcopy data is incomplete due to OHIP lag

Generally, colposcopy volumes have not yet recovered to pre-pandemic volumes



Cumulative number of individuals with highgrade Pap results without colposcopy





^{*} Most recent two months of data may be incomplete due to data lag

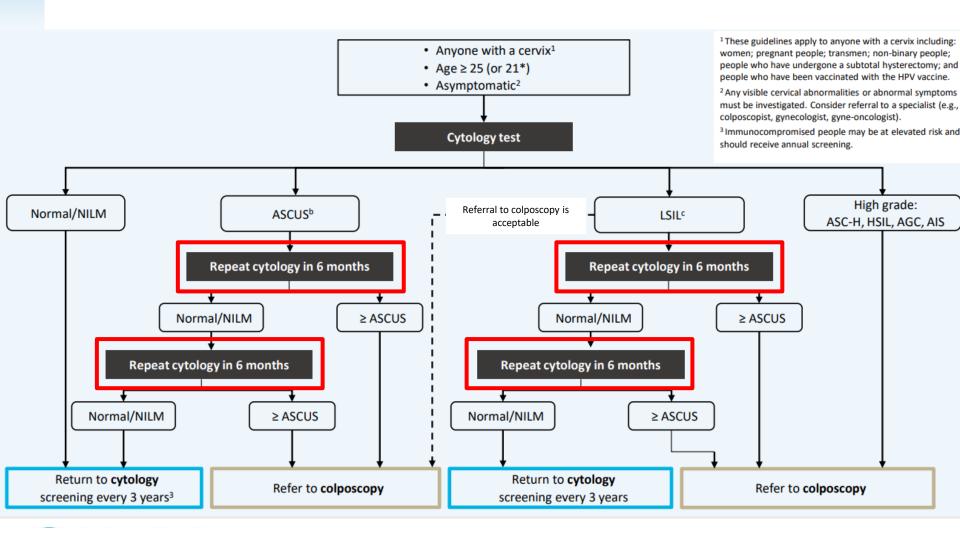
Colposcopists and primary care providers should continue to collaborate to ensure that people with high grade results have a follow-up colposcopy



Interval for repeat cytology after low-grade result

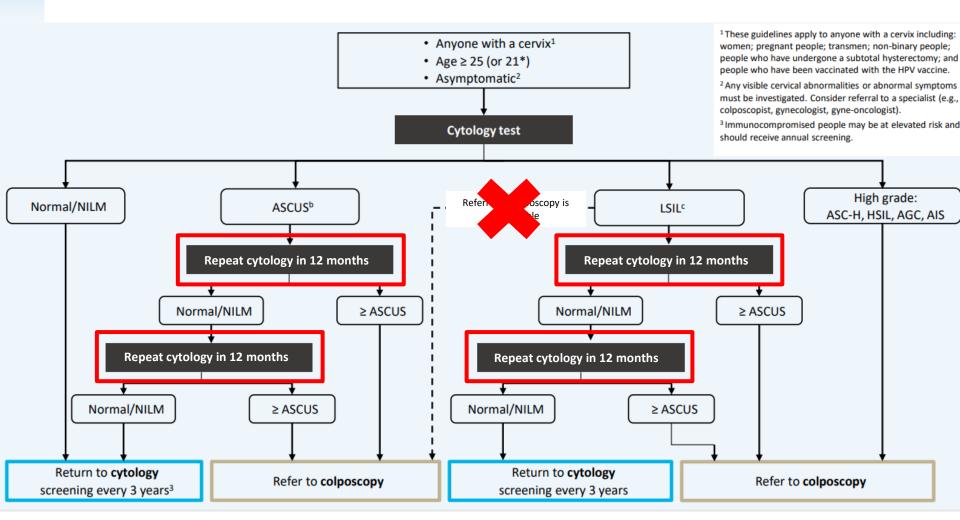
Dr. Dustin Costescu

OCSP's previous screening pathway



Definitions: NILM (normal) – no intraepithelial lesion or malignancy seen; ASCUS – atypical squamous cells of undetermined significance; LSIL – low-grade squamous epithelial lesion; ASC-H – atypical squamous cells, cannot rule out high-grade; HSIL – high-grade squamous intraepithelial lesion; AGC – atypical glandular cells; AIS – adenocarcinoma in-situ

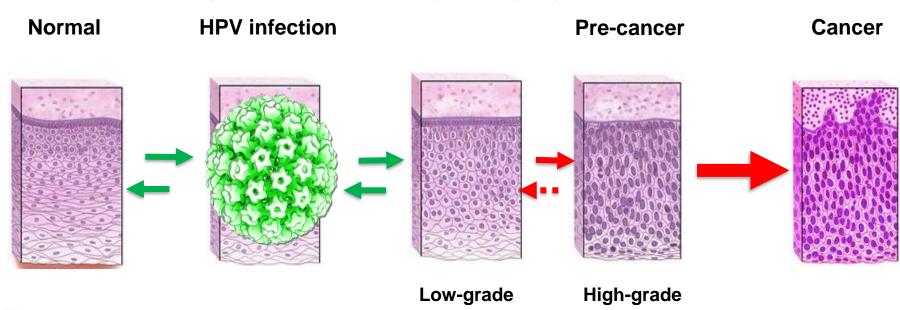
OCSP's updated screening pathway





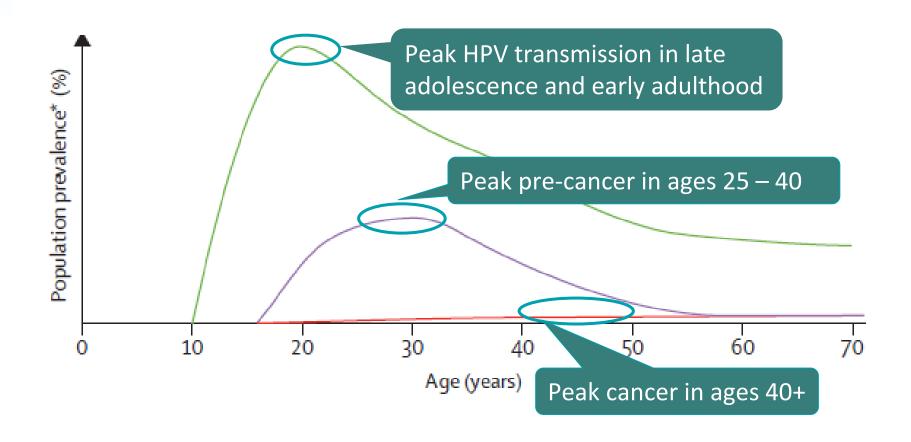
Natural history of cervical cancer

- Almost all cervical cancer cases are caused by persistent infection with high-risk types of HPV
 - Majority of these pre-cancers can be detected through screening
- Cervical pre-cancer progresses slowly
 - 15 20 years in immunocompetent people



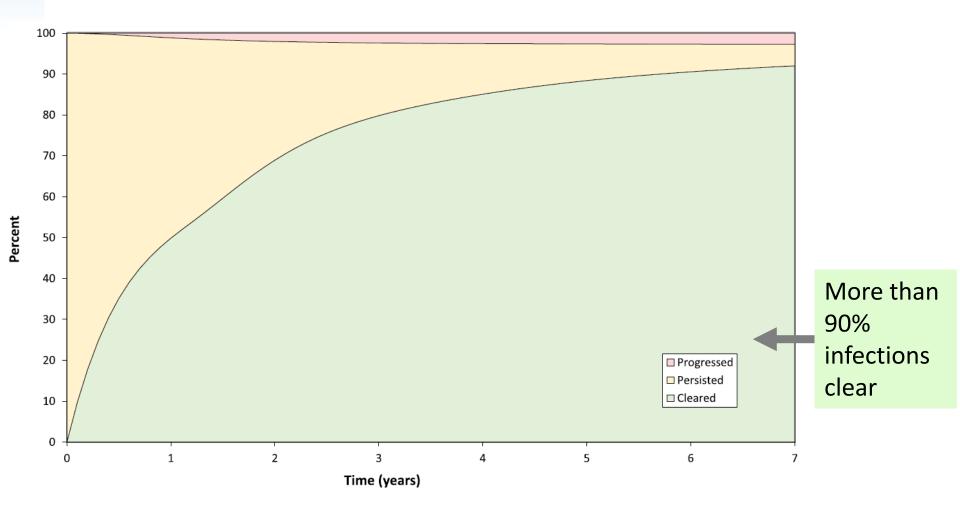


Progression to cervical cancer: Long natural history





Natural history of HPV progression



Ontario data: 5-year incidence rates of pre-cancers by referral profile

Profile**	N (%)	# of in- situ cases	SIR All ages (%)	95% CI	SIR <30 years (%)	SIR >30 years (%)
А	2105 (16.9)	51	2.2	[1.5-2.8]	2.9	2.0
AN	1961 (15.7)	7	0.3	[0.1-0.5]	0.6	0.2
L	2499 (26.2)	177	7.3	[6.0-8.6]	5.6	7.7
LN	1099 (11.5)	<5	0.4	[0-0.8]	0.1	0.4



Regression after an initial low grade cytology result

Table 4. Cytologic diagnosis on repeat cytology of initial low-grade dysplasia and colposcopic referral pattern

Follow-up cytology diagnosis	Repeat cervical cytology followed by colposcopy	Repeat cervical cytology No colposcopy	Total
Initial = ASCUS	n = 8810 n (%)	n = 22 063 n (%)	30 873 n (%)
Normal	1162 (13.2)	19 885 (90.0)	21 047 (68.2)
ASCUS	4481 (51.0)	1478 (7.0)	5959 (19.3)
LSIL	2704 (31.0)	571 (2.6)	3275 (10.6)
HSIL	383 (4.3)	46 (0.2)	429 (1.4)
Other	77 (0.9)	83 (0.4)	160 (0.5)
Initial = LSIL	n = 8404	n = 9979	18 383
Normal	712 (8.5)	8169 (82.0)	8881 (48.3)
ASCUS	2456 (29.2)	859 (9.0)	3315 (18.0)
LSIL	4775 (56.8)	884 (8.0)	5659 (30.8)
HSIL	436 (5.3)	39 (0.4)	475 (2.6)
Other	25 (0.3)	28 (0.3)	53 (0.03)

Early cervical cell changes (i.e., LSIL or ASCUS results) are likely to resolve within 24 months

Impact of extending the interval for cervical screening

- In 2012, the OCSP switched to a 3-year screening interval from a 1-year screening interval
- Extending the screening interval did not have a significant impact on cervical cancer incidence or mortality in Ontario

Indicator	Year	Rates per 100,000 (95% CI)
Cervical cancer incidence	2010	9.2 (8.3 – 9.8)
	2018	8.4 (7.8 – 9.1)
Cervical cancer mortality	2007 – 09	2.2 (2.0 – 2.4)
	2016 –18	2. 0 (1.8 – 2.2)

Data source: Ontario Cancer Profiles: https://cancercareontario.ca/ontariocancerprofiles



Take home messages

- Repeating the cytology test after 12 months allows more time for clearance of the HPV infection and avoids unnecessary interventions
 - Approximately 48% of HPV infections will resolve in 12 months and 70% of HPV infections will resolve in 24 months
- The risk of cervical cancer is very low for people with first time low-grade cytology results
- Extending the interval for repeating cytology after a lowgrade result is safe and acceptable



Considerations for people with a known HPV status

- Currently, HPV testing is not an insured test in Ontario. However, HPV testing is available in Ontario though patient-pay or in some hospitals
- HPV testing for someone with a first time ASCUS or LSIL is not required (repeat cytology in 12 months is safe and acceptable)
- However, those who make an informed decision to have an HPV test after a low-grade cytology result can follow these management recommendations:
 - People who are HPV 16/18 positive can be referred directly to colposcopy
 - People who are HPV non-16/18 positive should repeat their cytology in 12 months
 - People who are HPV negative should return to routine screening with cytology in 3 years

Communications

- A communication sharing this update has been sent been sent to:
 - Regional Cancer Programs
 - Colposcopy associations, primary care associations and the Association of Ontario Midwives
- Ontario Health (Cancer Care Ontario) is working with Ontario labs that provide cervical screening testing to update cytology result reports so they reflect this recommendation change

Case study 1: Follow-up of HPV+ patient with low-grade cytology

Dr. Rachel Kupets

Reminder: HPV testing in Ontario

- OCSP will continue to recommend cytology testing for cervical screening until HPV testing is implemented as part of the program
 - Providers and participants should be assured that cytology alone is a safe and effective test for cervical screening
- Recognizing that HPV testing may be available for some participants, the OCSP provides some guidance on HPV testing and managing people with HPV test results on our website



Case study 1

- A 35-year-old patient is referred to colposcopy after 2 LSILs one year apart
- Patient is seen in colposcopy 8 weeks later

Should a repeat cytology test be performed in colposcopy?

- A. Yes
- B. No



ON data: Cytology results for participants who had a repeat test

Repeat	Time from index	% (n) agreement with index cytology result by index cytology result					
cytology result	cytology	ASCUS	LSIL	ASC-H	HSIL	AGC	AIS
Low-grade / normal cytology	<90 days	95.0% (614)	94.1% (593)	47.5% (104)	29.1% (72)	70.1% (61)	50.0% (<5)
	3-6 months	97.6% (4040)	96.7% (2375)	62.3% (91)	47.4% (83)	84.5% (71)	0% (0)
High-grade cytology	<90 days	5.0% (32)	5.9% (37)	52.5% (115)	70.9% (175)	29.9% (26)	50.0% (<5)
	3-6 months	2.4% (98)	3.3% (87)	37.7% (55)	52.6% (92)	15.5% (13)	0% (0)

Key takeaways

- High agreement for low-grade/normal result
- Despite lower agreement for high-grade results, management should be based on the higher risk result for patient safety

Case study 1

Colposcopy is performed and patient pays for HPV test

Result: colposcopy did not detect a high-grade lesion (i.e., HSIL), HPV 16/18+

What is the appropriate next step?

- A. Follow-up in colposcopy in 6 months
- B. Follow-up in colposcopy in 12 months
- C. The next visit should be in primary care



Case study 1

- 12-month colposcopy visit
 - Result: colposcopy did not detect a high-grade lesion (i.e., HSIL),
 cytology ASCUS, HPV+



ON data: Risk for HSIL/invasive cancer for people referred with normal/low grade cytology, ≤LSIL in colposcopy

HSIL incidence rate

Invasive cancer incidence rate

By index cytology

	3-year rate (%)	5-year rate (%)
Normal	0.69	0.93
ASCUS	4.31	5.60
LSIL	5.85	7.23

	3-year rate (%)	5-year rate (%)
Normal	0	0.02
ASCUS	0.08	0.11
LSIL	0.04	0.07

By index biopsy

	3-year rate (%)	5-year rate (%)
No Biopsy	4.11	5.20
Negative	2.85	3.81
LSIL	7.09	8.32

	3-year rate (%)	5-year rate (%)	
No Biopsy	0.05	0.08	
Negative*	0	0.05	
LSIL^	0	0	

^{*}There were <5 cases of invasive cervical cancer (ICC) during 5-year follow-up of negative biopsy



[^]There were zero cases of ICC during 5-year follow-up of biopsy confirmed LSIL Reference: Ontario Health data analysis

Egemen et al.

Journal of Lower Genital Tract Disease • Volume 24, Number 2, April 2020

TABLE 4A. Immediate and 5-Year Risks of CIN 3+ Postcolposcopy at Which CIN 2+ Was Not Found, After Referral for Low-Grade Results

History: precolposcopy test result	History: colposcopy result	Current HPV result	Current cytology result	n	0/0	CIN 3+ cases	CIN 3+ immediate risk, %	CIN 3 + 5-y risk, %	Recommended management	Recommendation confidence score, %
Low grade ^a	<cin 2<="" td=""><td>HPV-negative</td><td>NILM</td><td>32,361</td><td>55</td><td>56</td><td>0.00</td><td>0.42</td><td>3-y follow-up</td><td>99</td></cin>	HPV-negative	NILM	32,361	55	56	0.00	0.42	3-y follow-up	99
Low grade ^a	<cin 2<="" td=""><td>HPV-negative</td><td>ASC-US/LSIL</td><td>2,937</td><td>5.0</td><td>14</td><td>0.05</td><td>0.92</td><td>1-y follow-up</td><td>93</td></cin>	HPV-negative	ASC-US/LSIL	2,937	5.0	14	0.05	0.92	1-y follow-up	93
Low grade ^a	<cin 2<="" td=""><td>HPV-negative</td><td>High grade^b</td><td>149</td><td>0.25</td><td>4</td><td>1.6</td><td>4.1</td><td>Colposcopy</td><td>Special situation</td></cin>	HPV-negative	High grade ^b	149	0.25	4	1.6	4.1	Colposcopy	Special situation
Low grade ^a	<cin 2<="" td=""><td>HPV-negative</td><td>ALL^c</td><td>35,603</td><td>60</td><td>74</td><td>0.01</td><td>0.51</td><td>3-y follow-up</td><td>73</td></cin>	HPV-negative	ALL^c	35,603	60	74	0.01	0.51	3-y follow-up	73
Low grade ^a	<cin 2<="" td=""><td>HPV-positive</td><td>NILM</td><td>9,352</td><td>16</td><td>272</td><td>2.1</td><td>5.2</td><td>1-y follow-up</td><td>100</td></cin>	HPV-positive	NILM	9,352	16	272	2.1	5.2	1-y follow-up	100
Low grade ^a	<cin 2<="" td=""><td>HPV-positive</td><td>ASC-US/LSIL</td><td>12,843</td><td>22</td><td>445</td><td>3.1</td><td>6.0</td><td>1-y follow-up</td><td>100</td></cin>	HPV-positive	ASC-US/LSIL	12,843	22	445	3.1	6.0	1-y follow-up	100
Low grade ^a	<cin 2<="" td=""><td>HPV-positive</td><td>High grade^b</td><td>1,294</td><td>2.2</td><td>276</td><td>23</td><td>31</td><td>Colposcopy</td><td>94</td></cin>	HPV-positive	High grade ^b	1,294	2.2	276	23	31	Colposcopy	94
			Total ^d	58,936	100	1,067				



Is the risk of HSIL sufficiently low for discharge from colposcopy?

- A. Yes, their risk for HSIL is low, therefore safe to discharge
- **B. No**, their risk for HSIL is not low enough to discharge

Yes, risk is low enough to discharge but given HPV+ result, discharge to **annual cytology screening** in primary care



 When discharging patients from colposcopy to primary care, we encourage colposcopists to indicate appropriate screening intervals in the discharge letter



Discharge letter

This patient is now discharged from colposcopy. She requires Pap screening by a primary care provider:
Every three years (routine cervical screening)
Every year (surveillance)
Re-referral to colposcopy in the future should be guided by her screening results.

According to the Ontario Cervical Screening Program's recommendations, whether or not a woman has been treated, further colposcopic examinations are not required and she can be discharged to primary care if:

HPV testing was <u>not</u> done	HPV testing was done
Colposcopy negative AND negative cytology on 3 consecutive visits. Pap screening every 3 years by a primary care provider.	☐ HPV test is negative AND normal or low-grade cytology. Pap screening every 3 years by a primary care provider.
These patients are at very low risk for high- grade dysplasia or cervical cancer.	These patients are at very low risk for high- grade dysplasia or cervical cancer.
Colposcopy negative AND any combination of normal or low-grade cytology on 3 consecutive visits. Pap screening every year by a primary care provider.	HPV test is positive AND normal or low-grade cytology. Pap screening every year by a primary care provider. These patients are at slightly elevated risk for
These patients are at slightly elevated risk for high-grade dysplasia or cervical cancer and should be screened annually .	high-grade dysplasia or cervical cancer and should be screened annually .

- Current pathways, discharge letters and other resources for colposcopists are available on the OH (CCO) website: <u>Toolkit</u> for Ontario Colposcopists - Cancer Care Ontario
- Future state pathways will be risk-based, incorporating HPV and cytology testing



Case study 2: Posttreatment management

Dr. Rachel Kupets &

Dr. Nadia Ismiil

- A 38-year-old patient is referred for colposcopy
 - Biopsy result: HSIL
- Loop electrosurgical excision procedure (LEEP) is performed
 - Result: HSIL with extensive involvement of endocervical glands,
 negative margins



Grossing and Description LEEP



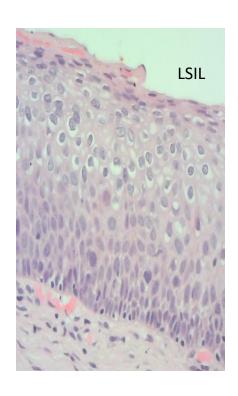


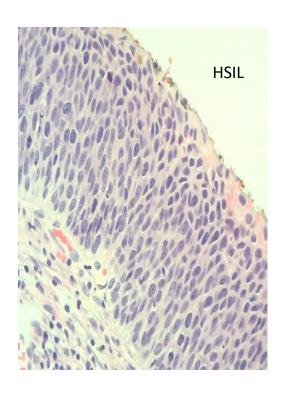
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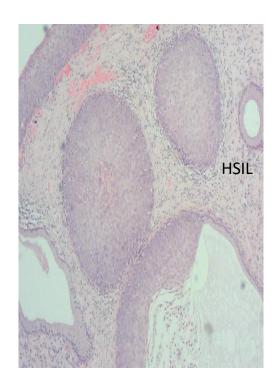


- 1. Identify, orient and measure
- 2. Ink margins 1) endocervix, 2) deep, 3) ectocervix
- 3. Serially section radially and submit

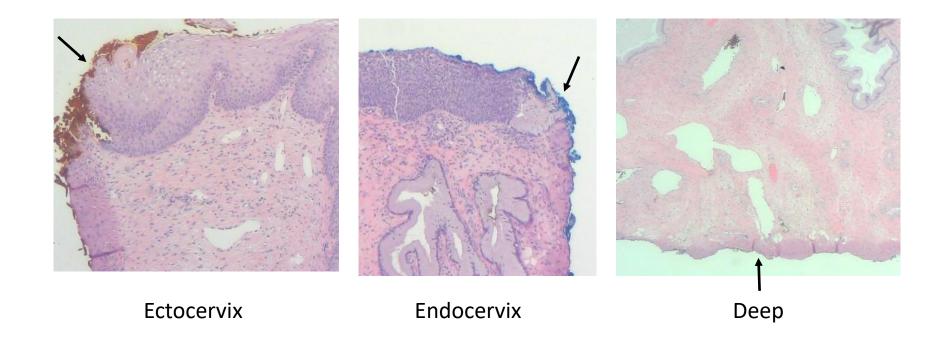
Cervical dysplasia



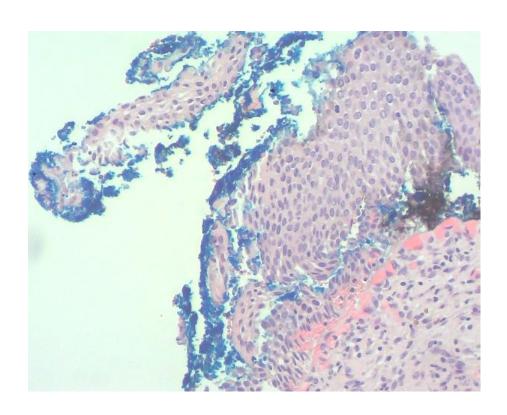




LEEP margin evaluation



Positive margin



If your facility does not have access to HPV testing, how many post-treatment visits are required, assuming colposcopies do not detect high-grade lesions (i.e., HSIL) and all cytology results ≤ LSIL?

- A. 1
- B. 2
- **C**. 3
- D. 4

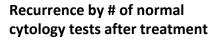
If HPV testing is available: only 2 post-treatment visits are required, assuming histo/cyto results ≤ LSIL at both and an HPV test at visit #2 is negative

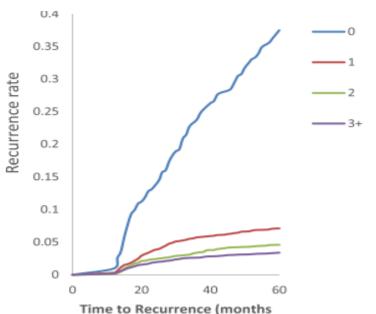
If your facility does not have access to HPV testing and all 3 post-treatment colposcopies do not detect a high-grade lesion (i.e., HSIL) and cytology results ≤ LSIL, what is the appropriate screening interval when discharging to primary care?

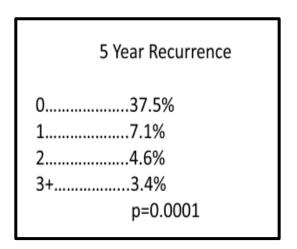
- A. Every 6 months
- B. Annual screening
- C. Routine screening every 3 years

If HPV testing is available: same recommendation applies (assuming histo/cyto results ≤LSIL at both post-treatment visits and negative HPV test at visit #2)

ON data on recurrence by # of normal cytology tests after treatment for CIN3/AIS







KEY TAKEWAYS

- A normal cytology result after treatment reduces the risk of recurrence
- The more normal cytology results a person has, the lower their risk of recurrence
- There is still a risk of recurrence after 3+ normal cytology results, but risk is low enough to safely return to routine screening every 3 years

Cervical screening and colposcopy quality reporting

Dr. Rachel Kupets

Recap: 2021 quality reporting activities

- Reports sent by email on September 21, 2021
- Quality report overview and Q&A teleconference (October 21, 2021) facilitated by Provincial Clinical Lead and Lead Scientist
- Regional Cervical Screening and Colposcopy Leads available to answer questions, discuss reports and provide quality improvement guidance
- Evaluation of 2021 reports indicate most recipients:
 - Read all or part of the report.
 - Understood the standards and indicators
 - Believe the report accurately represents their facility's performance



2022 quality reports: what to expect

- Facility, regional and provincial quality reports will continue to be released annually
 - Target release: September 2022
- No significant updates to the report design, standards, indicators or reporting processes

Is there additional support the Ontario Cervical Screening Program or Regional Cervical Screening and Colposcopy Leads can provide to help you interpret the reports and identify quality improvement opportunities?



Current activities: facility onboarding*

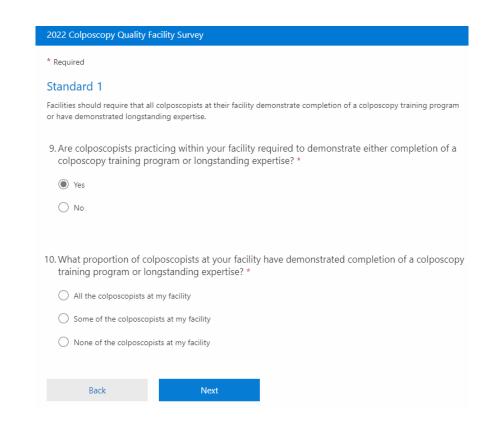
- Continuing to onboard non-hospital colposcopy facilities
- OCSP thresholds for considering an individual or group practice to be a separate facility are:
 - ≥ 50 colposcopy or treatment volumes that occur in a non-hospital setting; or
 - ≥ 30% of colposcopy or treatment volumes that occur in a nonhospital setting

	Total number of eligible facilities	Number of onboarded facilities	Percentage of onboarded facilities that will receive quality reports
Hospitals	57	57	100%
Non-hospitals	83	53	64%



Current activities: facility survey

- 2022 colposcopy quality facility survey is live!
 - Focused on adherence to nine quality standards
 - Survey link emailed to Facility
 Quality Leads on April 20, 2022
 - Reminder! Improvements to the implementation of standards will be reflected in your 2022 reports
 - Deadline: June 10, 2022





How can you get involved?

- Connect with your Facility Quality Lead to understand your facility's report!
 - Engaging in conversations now about quality reporting and improvement will help prepare you for the release of physician-level reports
- Attend regional events hosted by your Regional Cervical Screening and Colposcopy Lead

Are there any approaches or resources your facility has found helpful with your report review and quality improvement activities?



Next steps

- Email us at <u>cancerscreening@ontariohealth.ca</u> if you are:
 - A Facility Quality Lead and have not received a link to the survey
 - Unclear whether your facility has been onboarded and will be receiving a quality report this year
- Advance communication in August
 - Communicate report release date
 - Update contacts/report recipients, if required
- Report release in September
- Planning for physician-level reporting



Dr. Dustin Costescu

Question:

Are there recommendations for vaginal vault testing?

Answer:

- Currently out of scope for the OCSP
- We understand that this is of interest and concern to clinicians
- The OCSP will be providing guidance on vaginal vault testing in primary care in our future state HPV testing recommendations



Question:

What is the recommended approach to colposcopy in pregnancy?

Answer:

- Pregnant people with any high-grade lesions should be seen by a colposcopist who is experienced with colposcopy and management of lower genital tract abnormalities during pregnancy
- Aim is to exclude invasive disease
- If possible, defer biopsy or treatment until the pregnancy has concluded
- Pregnant people with apparent low-grade lesions should have repeat assessment with colposcopy and cytology testing at 12 weeks postpartum
- For additional details see <u>OH (CCO) Clinical Guidance: Recommended Best Practices for Delivery of Colposcopy Services in Ontario (Section 2.3)</u>



Question:

 What is the false negative rate associated with HPV testing in cervical screening?

Key definitions:

- False negative: a negative HPV test result when a lesion is present
- Sensitivity: the effectiveness of a test to correctly identify people with a disease
- **Specificity**: the effectiveness of a test to correctly identify people without a disease
- **Negative predictive value (NPV):** the probability that people with a negative screening test truly don't have the disease



Answer:

- High sensitivity is the most important element of a screening test
 - Specificity needs to be high enough to minimize falsely identifying participants with insignificant abnormalities
- Overall, HPV testing with reflex cytology offers greater sensitivity while reducing unnecessary colposcopy referrals¹
- NPV of HPV testing for detecting HSIL or worse is very high (over 99% over 10 years²), therefore the protective value of a negative HPV test is very reassuring

Question:

 What is the recommended approach to discharging unattached patients from colposcopy?

Answer:

- Access to primary care is an important issue that has been exacerbated by the pandemic
- However, this is a system-level challenge
- Ongoing colposcopy should not be performed on discharged patients
- If no primary care provider is available, consider seeing the patient in a gynecology practice (yours or an amenable colleague)
- You may also refer the patient to <u>Health Care Connect</u>



Concluding remarks

Dr. Dustin Costescu

Accreditation

Royal College of Physicians and Surgeons of Canada – Section 1:

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, approved by Continuing Professional Development, Faculty of Medicine, University of Toronto. You may claim up to a maximum of 1.5 hours (credits are automatically calculated).

In order to obtain your certificate of participation, you must fill out our survey that will be emailed to you following this meeting.



What's next?

- Please ensure you fill out the post-webinar survey survey link will be emailed to CoP webinar attendees
- Next CoP webinar: Fall 2022 (dates TBD)
- Share your feedback and questions with us at <u>ColposcopyCoP@ontariohealth.ca</u>

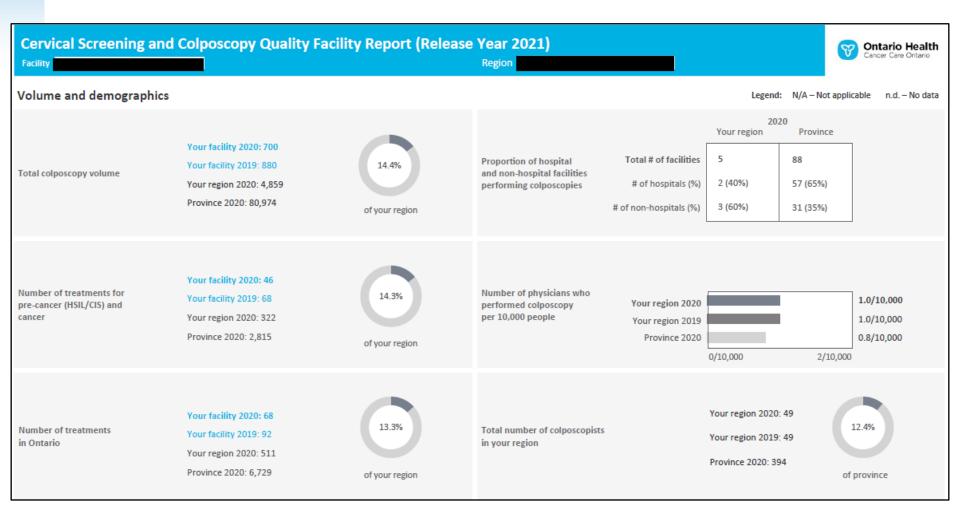






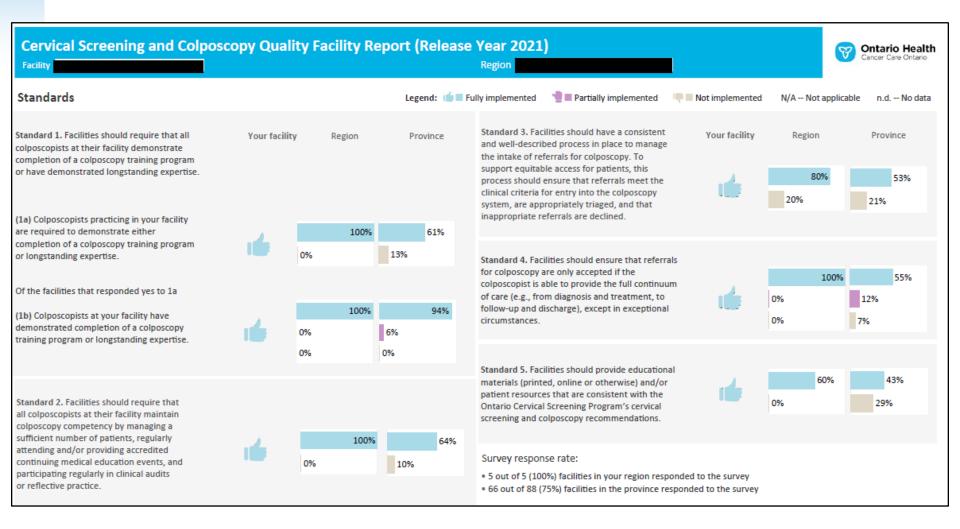
Appendix: Cervical screening and colposcopy quality reporting

Facility report: volume and demographics





Facility report: standards



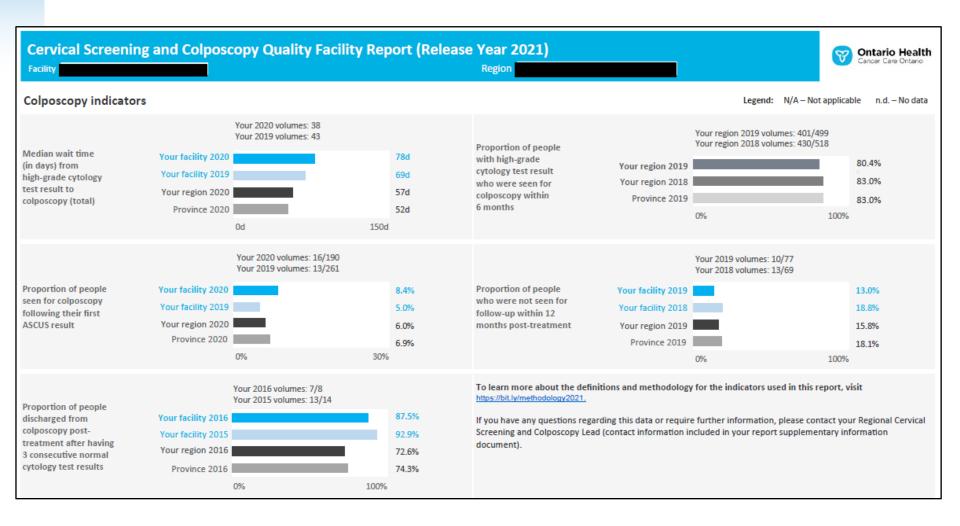


Facility report: standards con't





Facility report: colposcopy indicators





Facility report: cervical screening indicators

