

**A Quality Initiative of the  
Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)**

**The Organization of Colposcopy Services in Ontario:  
Recommended Framework**

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EBS 15-12 Version 2 is comprised of 3 sections. You can access the summary and full report here:

<https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/2096>

- Section 1: Guideline Recommendations
- Section 2: Guideline Methods Overview and Evidence Review
- Section 3: Internal and External Review

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#### **PUBLICATIONS RELATED TO THIS REPORT**

A recommended framework has been published in the peer-reviewed journal *Current Oncology* (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4530814/>):

- Murphy J, Varela NP, Elit L, Lytwyn A, Yudin M, Shier M, et al. The organization of colposcopy services in Ontario: recommended framework. *Curr Oncol*. 2015 Aug; 22(4):287-96.

The original version of this report, which was released in 2008, has been published as a systematic review in the peer-reviewed *Journal of Lower Genital Tract Disease* (<http://www.ncbi.nlm.nih.gov/pubmed/20040831>):

- Fung-Kee-Fung M, Howlett RI, Oliver TK, Murphy J, Elit L, Strychowsky J, et al. The optimum organization for the delivery of colposcopy service in Ontario: a systematic review. *J Low Genit Tract Dis*. 2010 Jan;14(1):11-21.

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## **Evidence-Based Series #15-12 Version 2**

### **Evidence-Based Series #15-12 Version 2: Section 1**

# **The Organization of Colposcopy Services in Ontario: Recommended Framework**

## **Guideline Recommendations**

*J. Murphy, N. Varela, L. Elit, A. Lytwyn, V. Wu, M. Yudin, M. Shier, S. El-Khatib, and  
the Cervical Cancer Screening Clinical Advisory Committee*

**Report Date: January 20, 2015**

### **GUIDELINE OBJECTIVES**

To provide a framework by which colposcopy services in Ontario can be delivered with consistent quality, in the following areas:

1. Colposcopy training, qualification, and maintenance of competence:
  - Accessibility to training programs
  - Quality of training programs
  - Requirements to qualify as a colposcopist
  - Maintenance of competence
2. Practice setting requirements:
  - Group practice: hospital-based clinics and outpatient clinics located outside of hospitals
  - Individual office-based practice
3. Operational practices:
  - Referral criteria
  - Wait times
  - Strategies to reduce drop-out rates
4. Quality indicators and outcomes:
  - Quality assurance
  - Performance indicators

### **INTRODUCTION**

The objective of this document is to help ensure the provision of high-quality colposcopy procedures in the province of Ontario, including those conducted as diagnostic procedures in follow-up to an abnormal cervical screening test. In Ontario, no prior efforts

other than the good will of care providers, administrators, and other involved parties have been made to organize these services. The current document will provide guidance both for the time being and for the future on a variety of initiatives including the organization of colposcopy and integration with the Ontario Cervical Screening Program, the use of synoptic/electronic data capture, and the introduction of human papillomavirus (HPV) testing for triage to manage women with low grade abnormalities, for test of cure to assess the risk of residual/recurrent cervical intraepithelial neoplasia (CIN) disease in treated women, and/or for primary HPV cervical cancer screening. The potential uses of each initiative will be examined as they are implemented. Each such initiative would contribute to the incremental organization of colposcopy, ultimately achieving a fully organized and managed system integrated with the cervical screening program. Each of these individual initiatives will be based on informed evidence and expert opinion and is intended to improve the seamless, consistent, and timely access to high-quality colposcopy care that is necessary as an adjunct to screening in order to achieve the optimum reduction in cervical cancer incidence and mortality rates.

This document provides recommendations on training and maintenance of competence for colposcopists in the practice setting where colposcopic evaluation and treatments are conducted, as well as recommendations on operational issues and quality indicators for colposcopy. Clinical practice recommendations on how to perform colposcopy or recommendations for improving the skill level of an individual colposcopist are beyond the scope of this document. Similarly, detailed clinical management pathways and colposcopy best practices are addressed in the *Clinical Guidance: Recommended Best Practices for Delivery of Colposcopy Services in Ontario* (Colposcopy Clinical Guidance) document. This document can be found at <https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/43336>. This Evidence-Based Series (EBS) provides an update to the 2008 Cancer Care Ontario (CCO) document EBS #15-12: “The Optimum Organization for the Delivery of Colposcopy Service in Ontario” (1).

Given the availability of current, high-quality, and relevant documents identified after a systematic review of guidelines, the sources of evidence to inform these recommendations are based on the endorsement or adaptation of existing recommendations from relevant guidelines published since 2008. A review of the primary literature was not undertaken. Further details related to the methodology for developing the evidentiary base can be found in Section 2. The quality assurance and performance metrics (see below) can be used to provide feedback to individuals to improve performance on quality indicators when necessary and to monitor performance at the system level to improve the overall quality of colposcopy in Ontario.

## **TARGET POPULATION**

These recommendations apply to all healthcare providers and administrators involved with the provision of colposcopy examination in Ontario.

## **INTENDED USERS**

These recommendations are intended for clinicians and institutions performing colposcopy in Ontario, and to policy makers and program planners involved in the delivery of colposcopy services.

## **GUIDELINE DEVELOPMENT PROCESS**

Through a systematic search, several guidelines were identified that addressed the objectives outlined above. Recommendations from the earlier 2008 CCO colposcopy guideline were reviewed along with recommendations from five other guidelines published since that

time (identified below). These guidelines were appraised for quality using the Appraisal of Guidelines for Research and Evaluation (AGREE) II Tool (<http://www.agreetrust.org/>) (Table 1, Section 2). Modifications and additions to the original 2008 CCO recommendations are noted. Details of the methods can be found in Section 2.

## FORMATION OF GUIDELINE WORKING GROUP

CCO Prevention and Cancer Control (CCO-PCC) asked the Program in Evidence-Based Care (PEBC) to develop a guideline on the organization for colposcopy services in Ontario. In consultation with CCO-PCC, a Working Group was identified. This Working Group consisted of two gynecologic oncologists, three gynecologists, one pathologist, one registered nurse, and one methodologist (Appendix 1).

## FORMAT OF THE RECOMMENDATIONS

Recommendations from the 2008 version of this guideline were first assessed for their relevance to the current practice environment. These recommendations were endorsed where appropriate. The new modified or revised recommendations are labelled as defined below:

- *NEW Consensus*: this recommendation is a new consensus recommendation developed by this guideline Working Group
- *RANZCOG*: this recommendation is adapted from the 2011 guideline (2) developed by the Royal Australian and New Zealand College of Obstetricians and Gynecologists (RANZCOG) in conjunction with the Australian Society for Colposcopy and Cervical Pathology (ASCCP) working party
- *NHSCSP*: this recommendation is adapted from the 2010 or the 2011 guideline (3) developed by the National Health Service Cervical Screening Programme (NHSCSP) in the United Kingdom
- *ECCSN*: this recommendation is adapted from the 2008 guideline (4) developed by the European Cervical Cancer Screening Network (ECCSN)

At the end of each major section of the recommendations a justification is provided.

## RECOMMENDATIONS AND JUSTIFICATION

### Qualification, Training, and Maintenance of Competence

#### 1. *Accessibility to Training Programs*

Besides practicing obstetricians and gynecologists, the following practitioners should be eligible for colposcopic training programs:

- Residents and fellows in obstetrics and gynecology programs
- Other colposcopy service providers (e.g., family physicians, nurse practitioners) who meet the knowledge requirements as described below

To qualify for colposcopy training programs, health practitioners should demonstrate current knowledge of:

- HPV, including its biology, epidemiology, and natural history
- The natural history of lower genital tract dysplasia and cancer
- New and emerging therapies that impact clinical practice

- Cancer screening, including primary and secondary prevention
- Colposcopic clinicopathological correlations and standard terminology
- Indications for referral to colposcopy, as per the Ontario Cervical Screening Guideline (5) (*NEW Consensus*)
- Existing guidelines for referral (intake), treatment, re-referral, follow-up, and discharge as per the Colposcopy Clinical Guidance document. This document can be found at <https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/43336>.
- The Society of Canadian Colposcopists (SCC) 2012 publication (6) (*NEW Consensus*)
- Quality assurance principles and components

## **2. Training Programs and Qualification Requirements**

All colposcopists should complete a colposcopy training program. Colposcopy training programs should be conducted by supervised, suitably trained personnel who are part of a well-established colposcopy program and whose competence and teaching abilities are recognized. Systems to provide certification of training programs and to ensure competence are evolving in other jurisdictions than Ontario, so no formal criteria for such programs can be recommended. However, ideally, colposcopy training programs should:

- Include attendance at a formally recognized course or program
- Be a minimum of three months in length, or equivalent, which ideally should be completed within a year
- Involve both theoretical and practical components, where practical training is under the direct supervision of a competent colposcopist preceptor and includes the four core components of diagnoses, therapeutic modalities, documentation, and maintenance of competence
- The training program should involve a minimum of 100 new cases, approximately 30% of whom should be patients with histologically documented low- or high-grade squamous intraepithelial lesions (LSIL or HSIL), endocervical adenocarcinoma in situ, or cancer including vulva, vagina, and vaginal squamous neoplasia. Of the 100 new cases, the preceptor should be present throughout the colposcopy examination for approximately 75 cases, and for the other 25 cases the trainer should be available if help is needed
- Include components of surgical pathology and cytopathology to allow understanding of laboratory investigation of lower genital track neoplasia, including assessment of morphology, immunohistochemistry and molecular testing (*NEW Consensus*)
- Involve a review of case logs
- Involve a formal evaluation confirming the successful completion of training
- To achieve better patient outcomes, all clinicians providing colposcopy services are expected to incorporate the Royal College of Physicians and Surgeons of Canada CanMeds competencies (Medical Expert, Communicator, Manager, Health Advocate, Scholar, and Professional) into their practice (*NEW Consensus*)

The training and qualification requirements to perform laser, cryotherapy, or loop electrosurgical excision procedures as part of treatment for cervical abnormalities should involve:

- The successful completion of a formal, procedure-specific course or program, e.g., laser certification (as noted above)
- A minimum of 10 procedures should be completed in a year in a given treatment modality under direct supervision before performing them independently

- The review of pathology and its correlation with clinical findings by a colposcopist preceptor
- A formal evaluation by a colposcopist preceptor that the trainee has demonstrated competence in each respective modality

To qualify as a colposcopist preceptor, practitioners should:

- Maintain a minimum of 100 new colposcopy cases per year with exposure to the spectrum of disease
- Work within an interdisciplinary team environment in an established clinic or practice, usually a hospital-based unit
- Be associated with a formal colposcopy program

### **3. Accreditation/Certification**

Although a formal accreditation process for colposcopists is not implemented at present in Ontario, it is considered a standard of care in many other jurisdictions. Therefore, it is recommended that such a process be developed in Ontario, based on the process used by the NHSCSP (3) (*NEW Consensus*).

### **4. Maintenance of Competence**

To maintain competence, colposcopists should:

- Manage a sufficient number of patients with abnormal cervical cytology to develop, maintain, and improve their skills in this area of practice. Ideally, a clinical volume of approximately 100 colposcopies per year should be performed. Although the optimal proportion of new patients is not known, 25% is generally considered to be an absolute minimum
- Regularly attend and/or provide accredited continuing medical education (CME) events related to lower genital tract preinvasive diseases, at least once every two years
- Participate regularly in clinical audits as a component of continuing education
- Practice in compliance with the Colposcopy Clinical Guidance document. This document can be found at <https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/43336>.

### **Justification**

The members of the Working Group endorse the accessibility to training programs, the training and qualification requirements, and the program scope recommendations contained in the 2008 CCO guideline (1).

The recommendations for maintenance of competence represent the consensus of the Working Group members based on guidance provided by the NHCSP in the United Kingdom (3), the RANZCOG in conjunction with the ASCCP Working Party (2), and the 2008 CCO guideline (1). Two additional recommendations related to CME from the 2008 CCO guideline (1) were endorsed. While the evidence base underpinning the volume-related practice recommendations is sparse and of poor quality, there is a convergence of opinion across different guideline developers internationally and among the members of this panel.

### **Practice Setting Requirements**

The recommendations for practice setting requirements reflect current practice in Ontario where colposcopy services are delivered either in hospitals, outpatient clinics (located outside of hospitals), or individual office practices. The recommendations are presented separately for group and individual practices, not because of different recommendations in quality but in recognition of differences in resources, roles, and

responsibilities (1). It is desirable that all colposcopy services whether in hospitals, outpatient clinics, or individual office practices achieve the same standard of patient care. Although the settings vary, each setting should have adequate personnel, appropriate facilities, and documentation and patient-management strategies in place. Each organized program or individual provider should provide the continuum of care for diagnosis through treatment and follow-up to discharge.

### **1. Group Practices: Hospital-Based and Outpatient Clinics Located Outside of Hospitals**

Group practices should have:

#### **A. Personnel**

- Colposcopists who meet the training requirements described in the previous section on qualification, training, and the maintenance of competence should see a sufficient case load to ensure and maintain the skills needed for the colposcopy program (see “Maintenance of Competence” above)
- Physician colposcopists, including a lead clinical colposcopist with a specialist team specific to the colposcopy unit. The physician colposcopists and the lead clinic colposcopists should maintain responsibility for quality assurance and management of protocols
- An experienced clinical colposcopist should be available to cover leave or other absences (*RANZCOG*)
- A pathologist or cytopathologist lead with specific competence in preinvasive lower genital tract disease who is responsible for collaborating in quality assurance processes
- A nurse lead responsible for clinic organization, patient education, and the coordination of collaborative services
- Nurses should have the appropriate training and knowledge:
  - All colposcopy nurses should complete training and/or coursework specific to colposcopy and best colposcopic practice
  - Nursing staff should be able to explain, and educate the patient about, the purpose of colposcopy, biopsy, treatment options, follow-up, fertility, risk factors, and possible side effects
  - There should be an educational component in every new patient history where the education provided by the nurse can be documented. Nurses have an opportunity to educate women at every visit (*NEW Consensus*)
  - Defining adequate nursing complement to meet the standard of care is determined by patient volumes, logistics, patient characteristics and other factors specific to each practice setting (*NEW Consensus*)
- Positive and active relationships with personnel from cytology and pathology services.
- An established liaison with a gynecological oncology unit or a gynecological oncologist(s) (*RANZCOG*)
- Adequate support personnel, clerical staff, and information technology staff

#### **B. Facilities**

The necessary physical resources and collaborative services deemed necessary to provide colposcopy should include:

- Compliance with infection control best practices, including access to instrument sterilizing facilities in accordance with provincial guidelines (*NEW Consensus*)
- A suitable information system for the collection of data



- Adequate safety guidelines for laser or diathermy equipment if in use, with all staff trained in their operation. Clearly written and easily accessible emergency guidelines should also be available (*NHSCSP*)
- Mechanisms to record wait times for patient consultations and treatments
- Adequate facilities and protected time for the training of staff (in the larger colposcopy units)
- Where required to comply with provincial standards for healthcare facilities, accessible resuscitation equipment and staff with appropriate training should be available (*RANZCOG*)
- Mechanisms to ensure the patient flow process provides privacy and dignity during the colposcopy visit (*NEW Consensus*)

#### C. *Documentation and Patient Management*

The following should be available or provided to the patients:

- Evidence-based provincial educational materials (written, online, or otherwise) and patient resources related to cervical screening that are standardized throughout the province. The educational materials should address risk factors, therapeutic and diagnostic procedures, aftercare following treatment, and appropriate follow-up strategies (*NEW Consensus*)
- A record-keeping process (ideally computerized) for the documentation of quality outcomes to allow audits and quality improvement initiatives, and to facilitate consistent reporting
- A relationship with all referral sources, including primary care and regional public health cervical screening services
- Referral for treatment is the responsibility of the colposcopists making the original diagnosis, and should occur in a seamless and timely manner (*NEW Consensus*)
- Written management protocols consistent with provincial and national guidelines
- Regular documented meetings to discuss case management protocols and quality issues
- If training is provided within the facility, maintenance of documented evaluations, course materials, and a roster of identified preceptors
- Documentation of all CME events should be maintained, including rounds and lectures for the clinic team, referring clinicians, and clinics
- A clinic-based systematic recall mechanism for patients (*NEW Consensus*)
- Regional access for the provision of care, including
  - Access for the physically challenged, and
  - Culturally appropriate information with translation into the primary language of the client
- Appropriate and sensitive enquires regarding sexual history may be made, but only under the auspices of an ethically approved study or if the patient presents with a specific indication (*NHSCSP*)

## 2. *Individual Office-Based Practices*

Individual office-based practices should:

- Have a formal, clearly defined relationship with a regional or hospital-based colposcopy program
- Participate in quality assurance and quality control activities, CME events, and educational meetings of the regional or hospital-based colposcopy programs
- See a sufficient number of patients each year. Ideally, 25 new patients for a total of at least 100 colposcopies each year should be the absolute minimum number seen

- Maintain record-keeping processes for documentation of quality outcomes and to permit audits and quality improvement initiatives (to facilitate consistent reporting)
- Comply with infection-control best practices, including access to instrument sterilizing facilities in accordance with provincial guidelines (*NEW Consensus*)
- Have the necessary physical resources for and access to collaborative services deemed necessary for providing colposcopy, which may include:
  - A proper examination room in accordance with provincial guidelines
  - Access to resuscitation equipment if treatment is being provided
  - A suitable information system for the collection of data

## Justification

The members of the Working Group endorse the practice setting requirements (group practice and individual office-based practice) recommendations contained in the 2008 CCO guideline (1), except for the recommendations listed below, which are based on guidance provided by the RANZCOG and ASCCP working party (2), the NHSCSP (3), or consensus of the Working Group:

Under the personnel domain, the members of the Working Group endorse the clinical lead colposcopist standards contained in the RANZCOG and ASCCP document published in 2011 (2), except that the colposcopist designation used by the RANZCOG and ASCCP Working Party was modified from “*experienced colposcopist*” to “*clinical lead colposcopist*”. Regarding nursing staff, at least two nurses for each clinic are recommended. However, the Working Group members recognized that for low-volume units in some geographic regions in Ontario it may be difficult to achieve this recommendation. It was concluded by consensus that, for low-volume units, one nurse may suffice.

Under the facilities domain, the members of the Working Group endorse the recommendation related to resuscitation equipment, contained in the RANZCOG and ASCCP document (2). The recommendation for the clinical facilities and patient flow process providing privacy and dignity is the consensus of the Working Group.

The recommendations under the documentation and patient management domain are based on guidance provided by the NHSCSP in the United Kingdom (3), and the 2008 CCO guideline (1).

While the individual study evidence underpinning these recommendations is sparse and of poor quality, there is international consensus about the key best practices to support these optimal practical settings requirements.

## OPERATIONAL PRACTICES

### 1. Referral Criteria

Women should be referred for colposcopy according to the Ontario Cervical Screening Program Clinical Guideline (<https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/2156>).

## Justification

The recommendations for referral criteria are based on guidance provided by CCO’s 2011 Cervical Screening Guidelines (5).

### 2. Wait Times

Patients with abnormal cytology should be seen for colposcopy within a reasonable time, given the risk of high-grade changes and the psychological stress associated with an abnormal cytology result. Although there is limited biological information to fully inform wait

times recommendation, we recommend that under the following conditions women should ideally be seen in a colposcopy clinic within the following time of referral:

- Women with atypical squamous cells cannot exclude HSIL (ASC-H) or atypical glandular cells (AGC) should be seen in a colposcopy clinic within six weeks of referral
- Women with HSIL should be seen in a colposcopy clinic within four weeks of referral
- Women with a Pap test suggestive of carcinoma should be seen in a colposcopy clinic within two weeks of referral
- All other women with abnormal results should be seen in a colposcopy clinic within 12 weeks of referral

### **Justification**

The members of the Working Group endorsed the wait times recommendations from the 2012 clinical practice guidelines developed by the SCC (6). These recommendations are opinions of respected authorities, based on clinical expertise, descriptive studies, or reports of expert committees.

### **3. Strategies to Reduce Drop-Out Rates**

System-wide mechanisms and follow-up procedures are needed to maximize attendance and improve patient outcomes:

- Women should be advised that they should notify the clinic of any change of their address and other contact details (*RANZCOG*)
- Ideally, the drop-out rate should be less than 15%
- Protocols to minimize the nonattendance of patients should be established
- Standardized, culturally appropriate information should be made available (*NHSCSP*)
- Women should be able to have a friend or relative present if they wish (*NHSCSP*)
- Audits should include analysis of the records of defaulters to identify avoidable causes of default at first consultation (*NHSCSP*)
- Effective information and communication are crucial to reducing anxiety. They include providing women with an understanding of the procedure, and of how and when information will be communicated to them and the referring practitioner (*NHSCSP*)
- Optimal practice requires that the referring clinician's details should be recorded for each new patient (*RANZCOG*)
- A documented system needs to be in place to notify or recall patients who default at first consultation, treatment or follow-up (*RANZCOG*)

### **Justification**

The recommendations for reducing drop-out rates are based on guidance provided by the 2008 CCO guideline (1), the RANZCOC-ASCCP (2), and NHSCSP (3).

## **QUALITY INDICATORS AND OUTCOMES**

There are multiple aspects of assuring high-quality care:

**Quality management** involves quality planning, quality control, quality assurance, and quality improvement to improve system performance and outcomes.

**Quality assurance** is an administrative or procedural activity in a quality system to ensure that the goals of the service are achieved. It is systematically measured and associated with an effective feedback loop.

**Quality improvement** is a systematic, continuous approach to making changes that lead to better patient outcomes, stronger system performance and enhanced professional development. It involves all stakeholders, including healthcare professionals, patients, families, planners, researchers, and educators.

**Performance indicators** are metrics that allow evaluation of how well (or poorly) a system's goals are being met. These metrics are compared with an appropriate benchmark that reflects the system's desired performance. Performance indicators, which are carefully chosen to reflect strategic goals, allow a measure of progress toward these goals.

### **1. Quality Care**

- An organized provincial colposcopy information and quality control system should be established to monitor the quality of colposcopy services. This system should include paired evaluations of colposcopy diagnoses, managerial evaluations, and the development of quality control indicators
- Colposcopy clinics (large and small) should undergo annual reviews for quality assurance
- Clinical audits should occur at the regional and provincial levels with appropriate feedback to clinicians
- All colposcopists should participate in regular quality and auditing activities that may include:
  - Colposcopists should ensure good practice, compliance with protocols and adequate data collection, and should monitor whether quality standards are attained and maintained
  - Lead clinical colposcopists should develop written protocols for local use that work toward achieving quality
  - Regular meetings of colposcopists, pathologists, and allied health professionals should occur to allow for the discussion of cytological and histological slides and colposcopic pictures, and to correlate (review discordance and concordance) cytology, histology, and colposcopy opinions
  - Correlations between cervical cytology and colposcopic diagnosis should be reviewed
  - Clinics should undergo annual reviews for quality assurance purposes with an opportunity for referring providers and patients to provide feedback on the colposcopy services
  - Clinical audits should take place at the provincial level to ensure consistent results
  - Data should ideally be captured on standardized electronic information collection systems to ensure quality and to facilitate quality improvement initiatives
  - Colposcopic findings should be recorded in the patient's record (*ECCSN*)
  - Reports on colposcopy procedures should be completed in specially designed reporting formats (preferably consistent across the province), and include information on findings, treatment, and recommendations for follow-up
  - Colposcopy reports should be followed to ensure compliance. If the patient's family physician is not the source of referral for colposcopy, the colposcopy report should be sent to the family physician (unless expressly prohibited by the

- patient) as well as to the referring colposcopy service provider. If the colposcopist records a referral to other services in the report (e.g., gynecology, oncology), then the colposcopist should follow up to ensure the referral takes place
  - Colposcopists should audit their work to confirm that their colposcopic assessment and colposcopically directed treatment is aligned with internationally agreed standards (*ECCSN*)
- Colposcopists should regularly participate in quality assurance activities including (*RANZCOG*):
  - Meeting defined clinical indicators
  - Conducting tissue audits (e.g., excisional biopsies, microinvasive cancer, glandular neoplasms, and other pathology of interest. Audits of excisional treatments should occur with particular emphasis on specimen quality and clinical outcome)
  - Reviewing patient satisfaction surveys (e.g., a survey form suitable for collecting data in consulting rooms or clinics. Data from 100 consecutive patients could be collected as part of an individual, group or institutional practice improvement activity)
  - Reviewing service audits (e.g., wait times for women with high- and low-grade abnormalities, distances travelled, quality of documentation, the proportion of women treated under general anesthesia, and the proportion of women found to have neoplasia)
- In practice, quality assurance baseline data should be collected (*RANZCOG*)

### **Justification**

The recommendations for quality improvement are based on guidance provided by the 2008 CCO guideline (1), the RANZCOG in conjunction with the ASCCP Working Party (2), and the ECCSN (4). The members of the Working Group recognize that quality assurance activities such as clinical indicators, tissue audits, patient satisfaction surveys, and service audits are helpful to understand the distribution of disease in the population.

## **2. Performance Indicators**

Individual clinics should implement clinic-specific performance indicators that could include (*RANZCOG*):

- Colposcopy-biopsy concordance
- Complication after treatment
- Readmission for complications after treatment
- Residual disease after treatment
- Retreatment rate

### **Justification**

The members of the Working Group endorsed the guidance provided by the ECCSN regarding key performance indicators for monitoring the cervical screening process (4), and adapted the guidance from the RANZCOG and the ASCCP Working Party regarding performance standards that should be used to monitor quality assurance in colposcopy (2).

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