

Appendix 1 (as supplied by the authors): Objectives Evaluated For Inclusion in Round 3	
Objective	Agreement for Inclusion (%)
BASIC SCIENCE OF ONCOLOGY	
Describe regulation of the cell cycle and relate this to the development of cancer.	52%
Describe the role of proto-oncogenes, tumor suppressor genes and DNA repair genes in pathogenesis of cancer.	45%
Demonstrate an understanding of the progression from dysplastic changes to in-situ and invasive cancers.	55%
Demonstrate an understanding of the histopathologic, immunohistochemical, and molecular characteristics of cancers as they relate to the hallmarks of cancer and how that affect diagnosis, treatment and prognosis.	52%
PUBLIC HEALTH	
Demonstrate an understanding of provincial cancer registries and understand their purpose.	68%
Define lead-time and length-time bias in relation to cancer screening.	61%
Demonstrate an understanding of basic statistics in relation to public health, including: morbidity (incidence and prevalence rates), mortality, relative risk, survival, distributions, measures of central tendency and sampling.	35%
Demonstrate an ability to critically appraise cancer screening studies.	6%
*Demonstrate an understanding of case-control and cohort studies with respect to how they are used to study the impact of risk factors on the development of cancer.	77%
DIAGNOSIS	
Demonstrate an understanding of appropriate staging investigations for common cancers (e.g. prostate, breast, lung, colorectal cancers).	42%
*Identify appropriate diagnostic and treatment referral algorithms for patients with various common cancers.	90%
TREATMENT	
Understand the basic principles of radiobiology.	23%

Appendix to: Tam VC, Ingledew PA, Berry S, et al. Developing Canadian oncology education goals and objectives for medical students: a national modified Delphi study. CMAJ Open 2016.

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*Demonstrate an understanding of the general principles of how radiation is used to treat cancer and different types of radiation (e.g. external beam, brachytherapy, stereotactic radiation).	84%
Identify factors that are general contraindications to radiotherapy (e.g. physical limitations, lupus, scleroderma, non-compliance, pregnancy)	32%
List characteristic toxicities of commonly used chemotherapy (e.g. cardiotoxicity from anthracyclines, neuropathy from platinum agents).	45%
*Demonstrate an understanding of novel targeted agents which are now used to treat cancer and how they differ from traditional cytotoxic chemotherapy.	90%
Demonstrate a basic understanding of important endpoints in cancer treatment trials, including: response rate, stable disease, disease-free survival, progression-free survival, overall survival and quality of life.	35%
Demonstrate an ability to critically appraise cancer treatment studies.	13%
Describe how to manage recurrences of common Cancers.	10%
*Demonstrate an understanding of the role of the palliative care physician/team and family physician in the care of cancer patients.	100%
PROGNOSIS	
*Demonstrate an understanding that some metastatic cancers are curable.	97%
Demonstrate an understanding of the approximate median survival of patients with common incurable cancers (e.g. metastatic breast cancer, non-small cell lung cancer, small cell lung cancer, metastatic colon cancer, metastatic prostate cancer, etc).	23%
KNOWLEDGE OF COMMON CANCERS	
*Demonstrate an understanding of the epidemiology, risk factors, prevention, screening, presentation, diagnosis, staging, basics of treatment, prognosis and followup/survivorship care for the most common cancers including: Prostate cancer, Lung cancer, Breast cancer, Colorectal cancer and Non-melanoma skin cancer	87%
Demonstrate an understanding of the epidemiology, risk factors, prevention, screening, presentation, diagnosis and prognosis for the following cancers including: Lymphoma, Bladder cancer, Melanoma, Head/neck cancer (oral and larynx), Thyroid cancer, Leukemia, Kidney cancer, Uterine cancer, Pancreatic cancer, Gastric cancer, Brain cancer, Ovarian cancer, Multiple myeloma, Liver (hepatocellular) cancer, Esophageal cancer, Cervical cancer, Testicular cancer	68%

KNOWLEDGE OF SPECIFIC CANCERS	
<i>Lung Cancer</i>	
List criteria that make a patient eligible for low-dose CT screening for lung cancer.	16%
Understand that lung cancer is in the differential diagnosis of an anterior mediastinal mass.	26%
Demonstrate an understanding of the histologic classification of lung cancers and how this determines treatment and affects prognosis.	13%
<i>Colorectal Cancer</i>	
Demonstrate an approach to a patient with iron deficiency anemia with special emphasis on colon cancer as a possible diagnosis.	32%
Demonstrate an understanding of how to manage a patient with large bowel obstruction secondary to an obstructing colon cancer.	19%
Demonstrate an understanding of the fact that localized colorectal cancer and some cases of metastatic disease are curable.	23%
<i>Lymphoma</i>	
Understand the difference between Non-Hodgkin's (e.g. diffuse large B-cell) and Hodgkin's lymphoma.	26%
<i>Melanoma & Non-Melanoma Skin Cancers</i>	
Demonstrate an understanding of the importance of diagnosing melanoma at an early stage since surgical management may be curative and adjuvant treatments may be required for more advanced disease.	35%
<i>Leukemia</i>	
Understand that the differences between AML, ALL, CML and CLL.	32%
<i>Kidney Cancer</i>	
Demonstrate an understanding of the fact that kidney cancer can cause a number of paraneoplastic syndromes.	19%
<i>Uterine (Endometrial) Cancer</i>	
Demonstrate knowledge of how to perform an endometrial biopsy, the most appropriate ambulatory diagnostic test for endometrial cancer (even if they are unable to independently perform the procedure).	16%
<i>Ovarian Cancer</i>	
Demonstrate an understanding of the significance/limitation of CA 125 - in the context of ovarian cancer screening; diagnosis; prognosis; response to treatment; and relapse.	19%
Demonstrate an ability to independently and correctly perform a focused	13%

physical examination that includes: a) bimanual and pelvic/rectal examination (under supervision) that attempts to evaluate size, location/origin, mobility and evidence of local disease spread of mass; and b) directed examination that evaluates likely findings of extrapelvic spread of disease.	
<i>Esophageal Cancer</i>	
Understand that esophageal cancer is in the differential diagnosis of a posterior mediastinal mass.	19%
<i>Cervical Cancer</i>	
Describe current guidelines regarding HPV vaccination.	45%
<i>Testicular Cancer</i>	
Understand the difference between seminomas and non-seminomas.	16%
<i>Pediatric Cancer</i>	
Have some basic knowledge regarding the presentation, diagnosis and treatment of osteosarcoma and Ewing's sarcoma.	10%
PSYCHOSOCIAL ISSUES	
Understand how to appropriately assess and manage psychological difficulties in patients and family members.	29%
Understand how to differentiate and manage, grief, atypical grief, anxiety, depression, and adjustment disorder.	16%
Describe the management of psychosocial resources in an effective and ethical fashion, including appropriate consultation requests.	6%
Describe the relevant legislation e.g. Mental Health Act, in the palliative care setting.	0%
Understand the barriers to access of psychosocial care among patients and family members and how physicians can help overcome these barriers.	13%
Understand the importance to give voice patient concerns at the level of the health care team, the institution and in health policy.	3%
Describe preventive aspects of some psychosocial syndromes such as depression and anxiety.	10%
COMMUNICATION	
Demonstrate an ability to discuss treatment options with a patient distinguishing between proven therapies, experimental therapies and alternative/complimentary therapies.	23%
*Objectives included in the final goals and objectives (i.e. ≥75% agreement for inclusion)	