Rouge Valley Health System and The Scarborough Hospital Facilitated Integration Process

Due Diligence Workbook: Oncology (DRAFT)

A Facilitated Process of the Central East LHIN

Authors:	Oncology Working Group	**Version Number:**	6
Status:	Draft	**Version Date:**	October 1, 2013

Table of Contents

1. Current State Assessment & Leading Practice Review

1.1. Overview of Services/Programs

Location of Service / Program *Where are the services/ programs delivered? At both hospitals? At specific sites?*	The Scarborough Hospital (TSH) – General & Birchmount	Rouge Valley Health System (RVHS)

	• Screening:
	  ○ Colonoscopy (both sites)
	  ○ OBSP (Ontario Breast Screening Program) (General site)
	
	• Diagnostics and Staging:
	  ○ Interventional radiology
	  ○ Bone marrow biopsy
	  ○ Digital mammography
	  ○ Ultrasound biopsy (both sites)
	  ○ Stereotactic biopsies (general site)
	  ○ RN navigator for breast DAU (general site)
	  ○ Endobrochial ultrasound (EBUS) and endoscopic ultrasound (EUS)
	  ○ Vascular access – port insertions by vascular surgery/PICC line insertion by IV team
	  ○ Reserved DI time for oncology patients
	
	• Treatment:
	  ○ Surgery
	  ○ Systemic Treatment
	  ▪ Medical Oncology consultation, treatment, and follow up (at both sites – chemotherapy suite at General campus only)
	  ▪ Two day model (day one – blood work and assessment; day two – treatment)
	  ▪ Certified Registered Nurses
	  ▪ Specialty trained chemo pharmacists
	  ▪ Multidisciplinary team (social work, registered dietician, spiritual care)
	  ▪ Oncology Patient Information System (OPIS) for computerized physician order entry (CPOE)
	  ▪ Primary nurse model
	  ▪ Full adherence to regional chemotherapy administration guidelines
	  ▪ Phaseal ® - closed system device for safe handling and administration of cytotoxic agents
	  ○ Weekly Radiation Assessment Clinics for breast and Gastrointestinal cancers with radiation oncologists from Sunnybrook
	  ○ Weekly Palliative clinic – pain, symptom management, and advance care planning
	  ○ In patient unit to cohort oncology patients where appropriate
	  ○ In patient palliative care unit
	• Multidisciplinary case conferences (MCC)
	  ○ Radiation oncology from Sunnybrook
		• Screening:
		  ○ Colonoscopy
		  ○ OBSP (Ontario Breast Screening Program)
		
		• Diagnostics and Staging:
		  ○ Interventional Radiology
		  ○ Bone Marrow biopsy
		  ○ Digital Mammography biopsy
		  ○ MRI guided biopsy (RVAP)
		  ○ Stereotactic biopsies
		  ○ Ultrasound biopsies
		  ○ Dedicated system navigator for Breast
		  ○ Priority coding in scheduling for oncology patients
		  ○ Tomosynthesis
		  ○ Vascular access / PICC insertion
		
		• Treatment:
		  ○ Surgery
		  ○ Systemic Treatment
		  ▪ Chemo suite is a one-stop-shop; consult, treatment, and follow up visit in one location
		  ▪ Two day care model:
		  ○ Day One: Blood work & Assessment
		  ○ Day Two: Treatment
		  ○ Palliative consultation Inpatient
		  ○ Certified Oncology Registered Nurses
		  ○ Oncology Nurse Practitioner
		  ▪ Specially trained chemo pharmacist
		  ▪ Dedicated treatment rooms for 1:1 assessment with oncologist / nurse
		  ▪ Multidisciplinary team (social worker, chaplaincy, bio-ethicist, dietician)
		  ▪ Oncology Patient Information System (OPIS) for computerized physician order entry (CPOE)
		  ▪ Full adherence to regional chemotherapy administration guidelines
		  ▪ Phaseal ® - closed system device for safe handling and administration of cytotoxic agents
		  ○ Weekly Pain & Symptom Management Clinic
		  ○ Weekly Thoracic Assessment Clinic
		  ○ Radiation Assessment Clinic
		  ▪ Genitourinary Cancers (RVC)
		  ▪ Radiation Oncologist Assessment (RVAP)
		  ○ Monthly multidisciplinary rounds
		  ▪ Case conference
		  ▪ Education session
		• Multidisciplinary case conferences (MCC)
		  ○ With Sunnybrook for RVC and with DRCC for RVAP

Volume of Activity

What is the current volume of activity? (e.g. service levels, patient volume) Are there important trends? (e.g. growth, decline)

2012/13 Volumes:

	TSH (General & Birchmount campus)	RVHS (Centenary & Ajax Pickering sites)
OBSP	5383 screens; 437 OBSP assessments	6,246 screens; 265 OBSP assessments
Positive Fecal Occult Blood Test (FOBT) – Colon Cancer Check	1015 procedures	1,766 procedures
Qualifying Cancer Surgery* (see below for details)	1085 cases	1,231 cases
Systemic Therapy* (see below for details)	C1S (new cases): 968 Chemo suite/other procedures: 10,981 Pre/post visits: 13,633 Total oncology clinic visits: 24,615	C1S (new cases): 450 Chemo suite treatment: 7,615 Pre/post visits: 6,843 Total oncology clinic visits: 14, 458
Outpatient Palliative Clinic	New patients: 154 Follow-up patients: 279	

Cancer Volume by Site and Cancer Intervention

# of Procedures	Hospital / Site				
	ROUGE VALLEY HEALTH SYST		SCARBOROUGH HOSPITAL (T		Grand Total
Cancer Intervention	Ajax	Centenary	Grace	General	
Breast	156	297	127	323	903
Breast (with Reconstruction)		5	5	13	23
CNS (Central Nervous System)	1			1	2
Colorectal - Colon	52	103	30	70	255
Colorectal - Rectum	23	50	28	43	144
Digestive System - Stomach	9	17	5	8	39
Endocrine	1	285	56	74	416
Genitourinary (excluding Prostate)	19	21	19	45	104
Gynaecological	22	34	24	37	117
HNK - High	3	3	7	7	20
HNK - Low (excl. Thyroid)	7	34	7	36	84
HPB	1	1		1	3
Non-site Specific	4	5		2	11
Ophthalmic	2			17	19
Prostate	27	18	22	51	118
Sarcoma - Bone	6	13	2	8	29
Sarcoma - Soft Tissue		12	3	10	25
Thoracic - Lung				1	1
Grand Total	**333**	**898**	**335**	**747**	**2,313**

Note:
1. Source: intelliHealth.
2. Criteria: Based on 2012-13 CSA Index Procedure Methodology_July182013.xls, provided by CCO.
volume.

- Cancer Surgery market share highlights include:
  - 52% of Scarborough residents have cancer surgery outside of Scarborough at both regional and other local community hospitals. More specifically,
    - 37% of breast surgery,
    - 75% of gynecological surgery,
    - 30% of colorectal surgery,
    - 52% of prostate surgery, and
    - 60% of genitourinary surgery
  - Of the total 2,313 cancer surgeries at TSH and RVSH, non-Scarborough residents account for slightly more than half of these surgeries (1,208 cases).

Chemotherapy Visits by Disease Site:

Note: Chemotherapy visits exclude procedures and pre/post visits

2012/13 Chemo Volume by Disease Site- All Cases

Disease Site	RVHS	TSH	RVHS & TSH
Oral		6	6
GI	794	1187	1981
Lungs/Thoracic	144	509	653
Bone	4		4
Soft Tissues	12	5	17
Breast	563	1675	2238
Female	53	122	175
Male	74	284	358
Urinary	3	58	61
Nerves	44	0	44
Skin		11	11
Unspecified\Ill Defined	67	26	93
Lymphoid	672	1334	2006
Insitu	48	0	48
Benign	41	167	208
Grand Total	2519	5384	7903

Note:

1. Data source: intellihealth, extracted on Sept 5th, 2013.

2. Only cases with diagnosis code Z51.1 at any occurrence in functional centre 713407000 & 713407010 are selected. i.e., pre-chemo and post-chemo visits are not included.

3. Sites are identified based on the cancer codes captured along with Chemo Diagnosis. The ICD10 code for disease sites can be found in tab - Disease site.

Furthermore, TSH and RVHS account for only 35% of all chemotherapy visits for Scarborough residents. Breast and GI disease sites are the largest number of chemotherapy visits Scarborough residents are receiving outside of Scarborough. * (details in the appendices)

Overall Trends:

- TSH: Incremental growth anticipated as we are now capturing and reporting malignant hematological activity (pulled from Clinical Day Unit to oncology clinic)
- TSH/RVHS: Investment in the Breast Diagnostic Assessment Unit (DAU) to navigate patients from screening to diagnosis with goal to increase market share (increasing cancer surgery/systemic volumes)
- TSH: Thoracic and gynaecological surgical oncology – without on-site access, there has been a dramatic decline in lung/thoracic and gynecological oncology patients

Mode of Delivery *How are the services/programs delivered? (e.g. inpatient, ambulatory)*	Out-patient • Screening and diagnostics • Interventional radiology • Surgery – Out & In-patient • Medical Oncology assessment – Out & In-patient • Palliative consultation – In-patient • Vascular access (General) • Systemic therapy – unless required in critical care. Non-critical care admitted patients are brought down to the ambulatory clinic for treatment as appropriate (General) • Radiation Oncology assessment (General) • Weekly Palliative clinic (General)	Out-patient • Screening and diagnostics • Interventional radiology • Vascular access Out & In-patient • Surgery Out & In-patient • Medical Oncology assessment Out & In-patient • Systemic therapy • Radiation Oncology assessment • Weekly pain clinic

Innovations Planned and/or Underway *What changes are planned or in-progress to improve the service/ program?(e.g. new model of care, investment in new technology)*	• Re-design rapid assessment breast DAU model – initiated with breast, with plans to roll out to other disease sites • Well established MCCs with strategy to further expand to support demand and volume • Regional Systemic Therapy Program (RSTP) – project to improve safety in delivery of oral chemotherapy • Implementation of a "Fever Card" for patients on chemotherapy to carry and order set to be initiated in Emergency Department for febrile neutropenia • Implementation of ISAAC (Integrated symptom Assessment And Collection)	• Planning prospective trials with the use of Rehab/physical therapy getting cancer treatment to see how well we can reduce side effects of cancer treatment • Seeking synergy with strong cardiology program, leveraging its facilities • Plan to implement electronic documentation for nursing and allied health (going paperless) • Early Rehabilitation After Surgery (ERAS) partially implemented • Regional Systemic Therapy Program (RSTP) – project to improve safety in delivery of oral chemotherapy Improved order sets • Breast diagnostic assessment (navigator)
Key Metrics *Identify and describe the key metrics that capture the quality and performance of the services/programs.*	1) Wait-times o Colonoscopy (% completed within benchmark) o Consult with Oncologist (systemic) o Pathology turn around for post surgical colorectal cancer (synoptic reporting o Treatment 2) Patient Satisfaction Survey 3) Medication Reconciliation on Admission and Discharge 4) Fiscal accountability & reimbursement rate for New Drug Funding Program 5) Tracking compliance with safety measures in handling and administering chemo-therapy agents. Compliance in: o Personal Protective Equipment o Right patient Independent double check	
Other Information *Provide additional service/program information (if required)*		

1.2. Patient Profile

Patient Value Statement *Identify the purpose of the service/program area and the value-added benefit that it offers from the perspective of the patient.*	• Quick & efficient access to services (expedited) • Clear & comprehensive communication • Respect • Personal touch • Confidence in receiving quality care • Easy & seamless navigation through the hospital • Care closer to home I have full trust and confidence in my health care team that I will receive the highest quality care close to home and in a timely manner.
Patient Characteristics *Describe the key patient characteristics; consider factors such as demographics, geography, complexity, etc.*	• Highest multicultural population density (41 % of LHIN population in Scarborough) • Low socio-economic status (23.2% in Scarborough) • Multiple co-morbidities • Communication barrier; high population of English as a second language • Low number with private insurance; unable to access additional health services • Less educated about diseases • Aging population

Population Need *Describe the key factors driving population need; consider factors such as social determinants of health, incidence/ prevalence rates, demand (e.g. wait lists, people travelling outside CE LHIN for service/program), etc.*	• Access to care in a language the patient understands • Cost of transportation • Ready access to diagnostics and specialized service (i.e. gynaecological oncology, thoracic surgery) • Patient access to clinical trials • Local Radiotherapy • Medical ambulatory growth is also expected to be substantial with more than 33% expected growth over 10 years in Cardiac, Oncology, and Renal visits

1.3. SWOT Analysis

	RVHS	TSH
Strengths		
1. Combined trends and data illustrate strong surgical volumes and outcomes	X	X
2. Exceeding wait time targets for cancer surgery & systemic therapy	X	X
3. Excellent case per cost for systemic therapy		X
4. Adherence to Cancer Care Ontario (CCO) guidelines	X	X
5. Active participation in the development of regional policy, guidelines, and standards	X	X
6. Fully accredited with exemplary standing for 2012 – 2015 meeting all safety standards as outlined in Cancer Care standards	X	X
7. Strong partnerships with tertiary institutions for referral and consultation of highly complex cancer cases	X	X
8. Computerized Physician Order Entry (CPOE) systems in Oncology suites	X	X
9. Electronic documentation for nurses and allied health		X
10. Rapid Assessment Clinic for Breast (DAU)	X	X
11. Thoracic Assessment Clinic	X	
12. Oncology prioritized as core service in hospital strategic plan	X	X
13. Excellent turnaround time for Pathology by highly skilled Pathologists	X	X
14. Highly skilled specialized surgeons	X	X
15. Largest thyroid cancer volumes Central East LHIN	X	
16. Excellent and highly accessible interventional radiologists/diagnostics	X	X
17. Large community volume for systemic volumes	X	X
18. Cancer and Palliative advisory committee including patients and community agencies	X	
19. Oncology Steering Committee	X	X
20. ISAAC (Integrated symptom Assessment And Collection)	X	
21. Recent publication on day-before blood work	X	
22. Mobile Workstations	X	X
23. Survive and thrive program (SW/NP)	X	
24. Potassium Titanyl Phosphate laser (KTP) used for prostate	X	X
25. Voice recognition software for real-time patient reporting	X	
26. Staff speak multiple languages (ex. Tamil, Mandarin, Cantonese, & Tagalong), facilitating multicultural population	X	X
27. Very good access to external translation services	X	X
28. Cohort Oncology in-patient leads to increase support across the continuum of care		X
29. Staff on in-patient units have Oncology Certification and expertise	X	X
30. Palliative Clinic in Oncology Clinic provides continuum of care for Oncology patients		X
31. IV team comes to floor / clinic to insert PICCs		X
32. Direct link of medical Oncologists from regional cancer program that helps to support process / quality initiatives		X

Weaknesses		
1. Aging infrastructure and inadequate space (poorly designed)	X	X
2. Lack of an integrated Oncology program (status/profile)	X	X
3. Lack of funding to supporting department to support growth and demand of Oncological services (ex. Lab)	X	X
4. Lack of broader scope to subspecialty care	X	X
5. Coordinating and accessing radiology services in a timely manner		X
6. Lack of Cancer Surgery Agreement to support enhanced funding allocation	X	X
7. Changing funding model (HBAM, QBP)	X	X

	RVHS	TSH
8. Limitation for Scarborough residents to access regional radiation services as the location is not easily accessible for Scarborough population	X	X
9. Size and boundaries of Central East LHIN	X	X
Threats		
1. New Health Funding Model	X	X
2. CCO funding model	X	X
3. Media portrayal of Scarborough community as it pertains to health care	X	X
4. Surrounding Regional Cancer Centers and Specialized Clinics	X	X
5. Merging of Oncology programs may lead to changes in baseline volumes as outlined by CCO, potentially impacting funding	X	X
Opportunities		
1. Improve cancer care profile within community	X	X
2. Optimize market share and repatriate Scarborough residents seeking cancer care outside of Scarborough	X	X
3. Establish formal Cancer Service Agreement with CCO	X	X
4. Pool and align of resources and sub-specialities cross hospitals to enhance and compliment services	X	X
5. Improve communications system (technological upgrades)	X	X
6. Develop a new facility in Scarborough (Hospital and surgical centre)	X	X
7. Accessible and readily available sub-specialty service (gynaecological surgery)	X	X
8. Opportunity to increase volumes as large portions of population is currently under-screened / never screened	X	X
9. Access to TSH palliative care unit to support care across the continuum	X	X
10. Impact of future centre of excellence in women's health to influence gynaecological surgery	X	X
11. Create disease site clinics with increased critical mass	X	X

1.4. Environmental Scan

Political *Factors that include provincial strategies and/or programs, LHIN priorities/directions and other government trends*	• Funding policies (increased regulations and reporting) • LHIN boundaries • Provincial and Regional directives – mandating (how and where to deliver care) • Little autonomy • Immigration laws and funding • Need for strong and influential political voice and support in Scarborough • Limited political outreach • Opening of IHF (specialty clinic) LHIN-funded
Economical *Factors that include fiscal realities, funding models and other economic trends*	• New funding model (QBP) – will drive how we deliver care • Changes in IFH/refugee resulting in unfunded care • Rely on transfer payments for funding from CCO to regional center • Old city, old municipal infrastructure, old hospitals/operating rooms • Drug funding rules
Social *Factors that include demographics, socio-cultural trends, social determinants of health and other social/community trends*	• Large multicultural population • Low socio-economic status – higher co-morbidities, more complex situations • Lack of private insurance • Lack of understanding about what is available may lead to delay in accessing services • Strong efforts to be culturally sensitive in delivering care • High under-screened / never screened population
Technological *Factors that include information management and information technology trends, globalization, innovations in patient care and other technical trends*	• Difficult to access to obtain positron emission tomography scans (PET) • Pathology – genetics • Surgery (robotics), targeted agents • Information sharing of patient records • Information technology: record systems • Patient using technology (e.g. Internet/smart phones to navigate system • Patient/MD communication
Legal *Factors that include relevant legislation and other legal trends*	• Patient privacy • Ethics and treatment • End-of-life issues • Private health care • Legislated balanced budget • Excellent Care for All Act • Private business e.g. pharmacies and labs • Full Disclosure
Environmental *Factors that include attitudes towards "green" or ecological products/resources, corporate social responsibility trends and other environmental trends*	• Ensuring patient and staff safety through education; proper disposal etc • New facility for Scarborough

1.5. Leading Practices

The Leading Practice Summary provided by KPMG is included for reference in the Appendix of the Workbook. The Summary is a high-level review of leading practice themes and is intended to be a conversation-starter for the purpose of assisting in the due diligence process in order to determine what benefits a merger of the two hospital corporations will provide to the Scarborough community. The Leading Practice Summary is only one source to obtain ideas and insights related to leading practices. The Working Group is also encouraged to draw on their own knowledge, experiences and sources to complete the following section.

Additional Leading Practices for Consideration *Identify any additional leading practices based on the Working Groups knowledge, experience and sources.*	• Cancer Care Ontario Strategic Plan 2011-2015 • Central East Regional Cancer Program Initiative and Projects 2013-2014 • One-Stop Diagnostic Assessment Unit – seamless and easily navigated services for patients across the cancer continuum of care (i.e., from screening → diagnosis → treatment and follow-up) • Safe handling and prescribing of oral chemotherapy agents
Leading Practices Already Implemented *Based on the Leading Practice Summary and the additional leading practices listed above, identify those that are already in place at RVHS and/or TSH.*	• Cancer Care Ontario – Program in Evidenced Based Care – guidelines for systemic treatment • Computerized Prescriber Order Entry (CPOE) for Systemic Treatment – Fully implemented in both hospitals • Participation on the Regional Systemic Therapy Program committee; developed and implemented regional chemotherapy administration guidelines and regimen-based anti-emetic guidelines • Both hospitals are OBSP accredited
Benefits of a Potential Merger *Identify the leading practices that could be adopted and/or enhanced through a potential merger of the two hospitals?*	•

2. Opportunity Assessment

2.1. Overview of Opportunities

Reference	Opportunity
1	To strive for a Center of Excellence in Cancer care that is recognized within the community and that enhances funding and resource allocation. A priority on profiling and branding this program will serve as a milestone in this opportunity.
2	Develop a Patient Navigation System to support patients across the continuum of care from screening to treatment. (Screening → Diagnosis → Treatment → Survivorship and Supportive Care)
3	Standardize and consolidate patient education and psychosocial support services for patients throughout the cancer journey.
4	Leverage the health human resource expertise across the cancer continuum of care to support professional development and sharing of knowledge to compliment service delivery. The alignment of sub-speciality resources across the organizations will broaden the scope and delivery of services.
5	Build and enhance access to sub-specialty programs that the Scarborough community needs. This may include the services that Scarborough residents that are seeking outside of Scarborough (including gynaecology, genitourinary, breast and thoracic surgery).
6	Develop a Rapid Response Oncology Clinic to support the non-emergency oncology patients as they undergo treatment, as defined in the Leading Practices (Appendix) – with the goal of reducing emergency room visits and providing ready access to an oncology nurse specialist and/or medical oncologist.

2.2. Opportunity Assessment

Opportunity 1: To strive for a Center of Excellence in Cancer Care that is recognized within the community and that enhances funding and resource allocation. A priority on profiling and branding this program will serve as a milestone in this opportunity.

Overview:

Description	• The opportunity to be the leader in Cancer Services for Scarborough includes: ▪ Developing a unified corporate brand ▪ Setting strategic goals and priorities that align with regional and provincial initiatives ▪ creating opportunities to meet/exceed surgical volume targets to advocate for enhanced funding (i.e. Cancer Surgery Agreement) ▪ cultivating and developing new partnerships in the community from screening and referrals from primary care providers to gain and retain the care to Scarborough patients throughout the cancer continuum ▪ repatriating cancer patients who live in Scarborough who are seeking care outside of the Central East LHIN
Anticipated Alignment to Guiding Principles *Shade the relevant guiding principle(s)*	• Collaboration • Accessibility • Sustainability • Excellence

Potential Benefits and Risks:

Potential Benefits *Identify the most significant potential benefits. Where relevant, consider the following perspectives when identifying benefits: Patient, Community, Organization, Clinicians & Staff.*	
Patient	• Greater awareness of Cancer Care services and treatments that are available • Increased confidence that they are receiving the highest quality care that is consistent with/or equal to care received in the regional cancer centres for services provided
Community	• People living in Scarborough can access the full band of services and receive treatment close to home • Community engagement through targeted cancer prevention and screening programs (e.g. smoking cessation; breast, prostate, colorectal and cervical screening) • Designed to meet needs of the diverse, multicultural community
Organization	• Increased collaboration and integration between the two organizations • Striving for the same goals, meeting the needs of the community • Meeting volume and targets (CSA) • Combined physician and staff resources with an expertise in cancer care • More fundraising opportunities
Clinicians & Staff	• Staff engagement through collaboration • Increased capacity to recruit expertise and talent • Higher retention rates

Potential Risks *Identify the key risks that must be considered (e.g. high impact and high probability). For each risk identified, provide a proposed risk mitigation strategy.*	
Risk	**Mitigation Strategy**
• Upfront costs needed to initiate a branding and marketing strategy for the oncology program specifically	• Seek partnership for funding and strategy development with regional partners • Request to Central East LHIN / Ministry of Health and Long-Term Care (MOHLTC) for funding assistance • Initiate fundraising campaign with hospital

• Losing site-specific identity	• Community engagement (e.g. Town Halls, positive media coverage and press releases) • Support from the local politicians to gain community confidence • Develop a shared vision for the program that has shared ownership
• Focus on repatriating Scarborough residents for cancer care may risk diverting attention to retain existing non Scarborough resident cancer cases	• Branding strategy must focus on both new growth and retention of existing cancer volumes.
• Lack of robust marketing and branding strategy to ensure a consistent and compelling approach	• Proper planning, implementation and change-management strategies with ongoing engagement and communication with key stakeholders (e.g. physicians, staff, volunteers, community etc.)

Benefit Realization:

Estimated Timeline *Shade the estimated timeline (choose only one)*	• Short-term (up to 1 year) • Medium-term (1-2 years) • Long-term (3-5 years) (potentially longer)

Key Metrics to Measure Benefits	• Community engagement (community scan) • Volume / target • Staff and patient satisfaction

Feasibility Assessment:

Key Metrics to Estimate High-Level Financial Impact	• Increased volumes of cancer surgeries and chemotherapy visits from higher market share

Required Investments – Operating and Capital (if applicable) *Identify the key financial investments (e.g. one-time costs) required to realize the benefits.*	• The Working Group stated that striving for a Center of Excellence in Cancer Care at RVHS/TSH will require additional operating and capital investments. Quantifying the investments is not possible at this early stage of the planning exercise. Capital investments would include adding new space or retrofitting existing space to accommodate increased surgical and chemotherapy volumes. Part of the next steps in the costing exercise should include assessing the ability of RVHS/TSH to accommodate increased volumes with existing capital. CCO's functional planning standards for space requirements for chemotherapy visits will establish the required space against which to compared existing chemotherapy space. Operating investments will include roughly $1.8M for increased surgical and chemotherapy volumes, and additional human resources to improve the coordination and delivery of cancer services. New positions required may include patient navigators and clinical leads.

Analysis	• *Increasing market share of cancer surgeries*. The Working Group identified draft targets for increases in market share of cancer surgeries. They estimated that capturing 50% of the cancer surgeries that Scarborough patients receive at Toronto East General or North York General and 25% of surgeries that Scarborough residents receive at Sunnybrook. TEGH and NYG are the two closest community hospitals to Scarborough and Sunnybrook is the closest regional cancer center. The Working Group assumed that no CNS, HNK-High, HPB, Thoracic, or Sarcoma surgeries would be repatriated from TEGH, NYG, or Sunnybrook. Achieving the targets would have added 192 more cancer surgeries at RVHS/TSH. We estimated the cost implications by counting the number of additional surgeries by type of cancer (e.g. breast, endocrine, etc.) that would be captured from

	TEGH, NYG, and Sunnybrook. We multiplied the number of cancer surgeries by the average weighted case per surgery, and then multiplied the result by the RVHS/TSH blended average direct cost per weighted case. Details of the calculation are included in the Technical Details section below. • *Increasing market share of chemotherapy visits.* The Working Group estimated that chemotherapy visits could increase by 1,658. Using reported MIS data from RVHS and TSH, we calculated the blended average cost per chemotherapy visit. To estimate the incremental cost of the additional chemotherapy visits we multiplied the 1,658 visits by the blended average cost per visit. Details of the calculations are shown in the Technical Details section below.

Anticipated Financial Impact *Indicate the order or magnitude financial impact (stated in the $100,000).* *Is this opportunity a financial investment or savings?*	• **Operating Costs.** Increasing the cancer surgery volumes by 192 would increase RVHS/TSH total direct operating costs by **$1.2M.** An additional 1,658 chemotherapy visits would cost **$1M. Total increase in operating costs associated with increasing market share roughly $2.2M.** • **Revenue implications** - **Cancer Care Ontario**. As a combined entity, RVHS/TSH might qualify for additional CCO funding by meeting the minimum volume threshold required to qualify for the Cancer Surgery Agreement. It was possible to estimate the potential for increased CCO revenues at this time. • **Revenue Implications - MOHLTC HBAM**. Increasing market share would increase RVHS/TSH's share of provincial HBAM funding, but the increase is not likely to be substantial. The 192 new surgeries would increase RVHS/TSH total weighted cases by roughly 0.4 percent (296/70k). • **Revenue Implications - MOHLTC QBP.** Cancer surgeries are not yet part of the Ministry's QBP funding scheme, but are being considered for inclusion in the future. Chemotherapy is part of the QBP funding stream but the Ministry has not yet set a price for chemotherapy. Revenue implications for Chemotherapy will depend on the price set by the Ministry. • **Revenue implications - Non-Ministry.** The implications for non-Ministry revenue are not known at this time, but are not likely to be substantial. More cancer surgeries would increase non-Ministry revenue from payments for days of preferred accommodation.

Technical Details

Increasing Market Share of Cancer Surgeries

We began by calculating the RVHS/TSH blended average direct cost per weighted case. As shown in the table below, the result is $4,171. We use this later to multiply the estimated increase in weighted cases for new cancer surgeries.

RVHS/TSH Direct Cost per Weighted Case

	RVHS	*TSH*	*Combined*
Total Expenses	$173,824,015	$212,750,669	$386,574,684
Percent Direct Expenses	74%	77%	
Direct Expenses	$128,629,771	$163,818,015	$292,447,786
Total Weighted Cases	29,917	40,204	70,121
Actual Unit Cost	$5,810	$5,292	$5,513
Direct Unit Cost	$4,300	$4,075	**$4,171**

Using the estimates provided by the Working Group that RVHS/TSH could capture 50 percent of cancer surgeries received by Scarborough residents at Toronto East General Hospital and North York General Hospital, and 25 percent of the surgeries received at Sunnybrook Health Sciences Centre. The table below shows the estimated increase in each surgery, assuming that RVHS/TSH can capture the same percentage of each type of surgery. Also shown in the table is the provincial average weighted case per surgery and the expected increase in direct costs at RVHS/TSH. We assumed that RVHS and TSH would share all new surgeries equally.

Estimated Increased Cancer Surgeries and Costs at RVHS/TSH

Cancer Intervention	*Procedures for Scarborough Residents*	*Potential Increased Surgical Volume at RVHS/TSH*	*Potential Increase in Weighted Cases*	*Cost Increase at RVHS / TSH Average Direct CPWC ($4,171)*
Breast	166	74	76	$317,273
Breast (with Reconstruction)	4	1	1	$5,396
CNS (Central Nervous System)	34	0	0	$0
Colorectal - Colon	40	16	48	$200,190
Colorectal - Rectum	14	7	20	$81,327
Digestive System - Stomach	7	3	9	$37,536
Endocrine	34	15	13	$55,360
Genitourinary (excluding Prostate)	37	15	20	$84,664
Gynaecological	103	37	56	$231,469
HNK - High	9	0	0	$0
HNK - Low (excl. Thyroid)	17	6	29	$120,114
HPB	36	0	0	$0
Non-site Specific	2	1	1	$4,588
Ophthalmic	3	1	2	$8,863
Prostate	41	18	21	$88,834
Sarcoma - Bone	2	0	0	$0
Sarcoma - Soft Tissue	3	0	0	$0
Thoracic - Esophagus	1	0	0	$0
Thoracic - Lung	33	0	0	$0
Total	586	192	296	$1,235,612

The table above combines the expected increases in surgical volumes from Toronto East General, North York General, and Sunnybrook.

Increasing Market Share of Chemotherapy Visits

We estimated the RVHS/TSH average cost per chemotherapy visit at $565. We combined visits and expenses for the Day/Night Oncology Clinic to measure the average cost of all oncology visits.

Oncology Day / Night Clinic			
	RVHS	*TSH*	*Combined*
Clinic Expenses	$4,066,404	$7,184,632	$11,251,036
Visits	8879	11028	$19,907
Cost per visit	458	$651	$565

We estimated the increased cost of new chemotherapy visits by multiplying the expected increased visits by the average cost per visit.

	RVHS / TSH
New Chemotherapy Visits	1,658
Cost per visit	$565
Total Cost	**$937,068**

Opportunity 2: Develop a Patient Navigation System to support patients across the continuum of care from screening to treatment. (Screening → Diagnosis → Treatment → Survivorship and Supportive Care)

Overview:

Description	• Access to Rapid Diagnostics (ex. breast, gastrointestinal (GI), lung, haematological malignancies, genitourinary (GU), thyroid)
	  • Establish clear, standardized care pathways through a single integrated system
	  • Timely access to shared diagnostics
	• Coordinate access to care for our patients through the continuum of care
	  • Time of screening or abnormal finding → referral → staging / treatment → supportive care

Anticipated Alignment to Guiding Principles *Shade the relevant guiding principle(s)*	• Collaboration • Accessibility • Sustainability • Excellence

Potential Benefits and Risks:

Potential Benefits *Identify the most significant potential benefits. Where relevant, consider the following perspectives when identifying benefits: Patient, Community, Organization, Clinicians & Staff.*	
Patient	• Decreased patient anxieties as they will experience expeditious screening and diagnostic testing • Navigator role to guide and educate patients through the system, ensuring all tests are followed up in a timely manner and information is shared with the appropriate physician or clinician • Increased patient satisfaction
Community	• Access to care / services that is seamless and closer to home • Appropriate use of resources • Increased awareness of cancer prevention, screening, and health promotion, • Targeting the under-screened / never screened populations in Scarborough • Establish Diagnostic Assessment Units (DAUs) and ensure ready access for family physician referrals
Organization	• Ability to strategically plan for service delivery • Increases referrals / volumes of Scarborough patients, while meeting targets and demands • Reinvestment in equipment and infrastructure, ensuring new and innovative equipment is available • Aligned with the regional cancer center and CCO guidelines
Clinicians & Staff	• Centralized and pooling of human resources to meet community needs • Efficiencies through centralization and elimination of redundancies • Increased job satisfaction through positive patient outcomes and feedback

Potential Risks *Identify the key risks that must be considered (e.g. high impact and high probability). For each risk identified, provide a proposed risk mitigation strategy.*	
Risk	**Mitigation Strategy**
• Meeting the demands and volumes (e.g. equipment failure, staff burnout etc.)	• Reinvestment in equipment infrastructure and technology • Centralization of human resources • Controlled gradual / incremental increase in volume levels
• Patient will seek care outside of Scarborough	• Community engagement • Networking with primary care physicians to promote and

	market available diagnostic services in Scarborough
• Challenges in patients accessing the Navigator	• Create centralized referral and booking process • Establish triage process and prioritization criteria
• Navigator "model" is currently only available for breast disease site	• Expand model to other disease sites (e.g. colorectal and prostate)

Benefit Realization:

Estimated Timeline *Shade the estimated timeline (choose only one)*	• Short-term (up to 1 year) • Medium-term (1-2 years) • Long-term (3-5 years)

Key Metrics to Measure Benefits	• Wait times • Volumes • Patient satisfaction • Resource utilization

Opportunity 3: Standardize and consolidate patient education and psychosocial support services for patients throughout the cancer journey

Overview:

Description	• Establishing group education and psychosocial support sessions shared across organizations offered throughout the cancer journey • Achieving efficiencies through centralization of patient education sessions where appropriate • Ensuring that supports are available and accessible for patients that will lead to an improved patient experience
Anticipated Alignment to Guiding Principles *Shade the relevant guiding principle(s)*	• Collaboration • Accessibility • Sustainability • Excellence

Potential Benefits and Risks:

Potential Benefits *Identify the most significant potential benefits. Where relevant, consider the following perspectives when identifying benefits: Patient, Community, Organization, Clinicians & Staff.*	
Patient	• Patient education is structured and specific to the individual's actual clinical need. • Patient education materials/resources are available to meet the needs of a diverse population, reflecting language, literacy, culture and ethnicity, gender, sexual orientation, age/stage of life and physical or intellectual abilities ** • Seamless transition through the patient journey: the team communicates to the patient, family/caregivers, the plan of care and provides appropriate resources and information
Community	• The team collaborates with organization and community resources (e.g. the Regional Cancer Center and Community Care Access Center (CCAC)) to meet the educational and informational needs of the patient
Organization	• Standardized educational materials in multiple languages and formats (e.g. pamphlets, computer software etc.) are developed and/or approved by Professional Practice / Patient Education Committee • Work with Public Health and Municipalities to promote a healthy lifestyle and cancer prevention strategies e.g., smoking cessation

Clinicians & Staff	• Professional development and competency related to the education of people affected by cancer • Collaborative patient-centered practice

Potential Risks *Identify the key risks that must be considered (e.g. high impact and high probability). For each risk identified, provide a proposed risk mitigation strategy.*	
Risk	**Mitigation Strategy**
• Patients choice not to learn/participate in learning process	• Assess patients' prior knowledge level of understanding and preferences for information • Outline learning objectives • Engaging adult education experts • Ensure that education is provided in a safe, competent and ethical manner for patients **
• Language Barrier	• Use of professional interpreters or same language Health Care Providers
• Lack of one on one, or individual education sessions	• Education sessions can be modified to meet the unique needs of patients and families when required

Benefit Realization:

Estimated Timeline *Shade the estimated timeline (choose only one)*	• Short-term (up to 1 year) • Medium-term (1-2 years) • Long-term (3-5 years)

Key Metrics to Measure Benefits	• Patient satisfaction • Measurable Learning Outcomes

** Cancer Care Nova Scotia. *Education Standards for Adults Affected by Cancer.* Province of Nova Scotia (2011)

Opportunity 4: Leverage the health human resource expertise across the cancer continuum of care to support professional development and sharing of knowledge to compliment service delivery. The alignment of sub-speciality resources across the organizations will broaden the scope and delivery of services

Overview:

Description	• Significant pool of shared talent, expertise, skill and knowledge between pathology, radiology, surgery, medical oncology and palliative care that could support academic affiliations and the opportunity to partner with teaching programs. • Continuing to build upon existing and local expertise to work cooperatively in managing the care for complex cases that may otherwise require transfer to another centre. •
Anticipated Alignment to Guiding Principles *Shade the relevant guiding principle(s)*	• Collaboration • Accessibility • Sustainability • Excellence

Potential Benefits and Risks:

Potential Benefits *Identify the most significant potential benefits. Where relevant, consider the following perspectives when identifying benefits: Patient, Community, Organization, Clinicians & Staff.*	
Patient	• Receive up-to-date treatment following best practice guidelines while meeting or exceeding CCO timelines and targets • Access to innovative services
Community	• Onsite access to local experts for consultation and/or transfer of care • Ability to provide care for complex cases through the continuum including inpatient admission and outpatient care.
Organization	• Recruitment and retention of expert staff • With the attraction of the additional case volumes, this may translate into opportunities to enter service agreements and benefit from new funding models. • Physician leadership to guide best practice and ensure ongoing adherence to standard of care
Clinicians & Staff	• Increased staff / physician satisfaction • Professional development • Maintaining certification • Opportunity to participate in cancer clinical trials (enhancement of research department) • Knowledge sharing among staff / physicians

Potential Risks *Identify the key risks that must be considered (e.g. high impact and high probability). For each risk identified, provide a proposed risk mitigation strategy.*	
Risk	**Mitigation Strategy**
• Will volume be less than provider capacity	• Strategic planning, recruitment and marketing • Strategy to build volumes across the cancer continuum through process and profiling initiatives • Targeting repatriation as a primary focus to build volumes
• Team collaboration may be strained through initial integration of policies, practices and culture	• Establish clear and shared vision • Administration and physician leadership • Team buy-in and engagement process
• Capital plan for service delivery does not align with clinical and service delivery needs	• Developing a functional plan as one organization and identifying reallocation of space or newly developed space as a capital plan to a accommodate growth in the community • Site-specific sub-groups/care
• Inability to meet new cancer care volumes and targets may lead to a financial deficit	• Identify clear processes how to achieve funded volumes • Repatriate patients leaving Scarborough to seek treatment outside of Central East LHIN

Benefit Realization:

Estimated Timeline *Shade the estimated timeline (choose only one)*	• Short-term (up to 1 year) • Medium-term (1-2 years) • Long-term (3-5 years)

Key Metrics to Measure Benefits	• Volume (CSA, C1S cases) • Scope and number of services offered • Clinicians / staff / patient satisfaction • Financial opportunities – service agreements • Recruitment / retention

Opportunity 5: Build and enhance access to sub-specialty programs that the Scarborough community needs. This may include the services that residents are seeking outside of Scarborough (including gynaecology, genitourinary and thoracic surgery).

Overview:

Description	Current data shows that access to sub-specialized programs is not adequately servicing patients in Scarborough as only 7% of thoracic cancer surgeries and 25 % of gynecological oncology surgeries remained in the region • Build and develop access to services that are identified gaps in cancer care service delivery in Scarborough where residents are seeking care outside of their community. • Coordinate and leverage partnerships to complement existing expertise to broaden the scope of service that can be provided in the community hospital setting. • Sub-speciality programs can be enhanced throughout the continuum of care from screening to treatment and after-care • Currently the majority of Scarborough residents requiring gynecological, genitourinary, and thoracic surgery are seeking care outside of Scarborough and often outside of the Central East LHIN.
Anticipated Alignment to Guiding Principles *Shade the relevant guiding principle(s)*	• Collaboration • Accessibility • Sustainability • Excellence

Potential Benefits and Risks:

Potential Benefits *Identify the most significant potential benefits. Where relevant, consider the following perspectives when identifying benefits: Patient, Community, Organization, Clinicians & Staff.*	
Patient	• High quality care close to home • Surgery performed by gynecology oncology surgeon, with support from local gynecologist and general surgeon for follow up • Improved wait times for surgery
Community	• Access to highly specialized surgeons • In the case of gynaecology, a strong link can be established with the cervical screening program • In the case of thoracic or lung disease, a strong link can be established with the smoking cessation programs
Organization	• Creation of formal partnership with regional program and CCO to ensure volumes are achieved and best practice standards and guidelines are followed
Clinicians & Staff	• Professional development • Disease site specific multi-disciplinary rounds

Potential Risks *Identify the key risks that must be considered (e.g. high impact and high probability). For each risk identified, provide a proposed risk mitigation strategy.*	
Risk	**Mitigation Strategy**
• No current formal agreement in place for gynaecological cancers	• Clear and formalized memorandum of agreement (MOU) needs to be established, including funding agreements, and operating room time
• There may be lack of interest among key stakeholders to fully assess and explore potential opportunity	• Conduct environment scan, stakeholder engagement including CCO and Central East Regional Cancer Program (RCP)
• Current thoracic surgery agreement is not adequately meeting the needs for patients in	• Explore strategies to make current arrangement viable; consider establishing secondary site of level one care

western part of the Central East LHIN	• Need to repatriate volumes; over 40% of patients presently have their surgery done in a local community hospital outside of the Central East LHIN
• LHIN boundary lines	• Ensure communication is clear and all parties are appropriately engaged and informed

Benefit Realization:

Estimated Timeline *Shade the estimated timeline (choose only one)*	• Short-term (up to 1 year) • Medium-term (1-2 years) • Long-term (3-5 years)

Key Metrics to Measure Benefits	• Volume and market share – for surgery and systemic cases • Clinical outcomes – infection rate, surgical complications • Financial opportunities – service agreements • Patient satisfaction

Opportunity 6: Develop a Rapid Response Oncology Clinic to support the non-emergency oncology patients as they undergo treatment, as defined in the Leading Practices (Appendix) – with the goal of reducing emergency room visits and providing ready access to an oncology nurse specialist and/or medical oncologist.

Overview:

Description	• The Rapid Response Oncology clinic will provide easy and timely access to care for active oncology patients with cancer related problems. Patients receiving cancer care treatment or follow up visits will be seen in the clinic for non emergency issues to avoid presenting to the Emergency Departments at RVHS or TSH.
Anticipated Alignment to Guiding Principles *Shade the relevant guiding principle(s)*	• Collaboration • Accessibility • Sustainability • Excellence

Potential Benefits and Risks:

Potential Benefits *Identify the most significant potential benefits. Where relevant, consider the following perspectives when identifying benefits: Patient, Community, Organization, Clinicians & Staff.*	
Patient	• Patient will receive rapid and seamless responses for any non-emergent cancer related issues • Improve continuity of care for cancer patients in Scarborough • Reducing the number of readmissions rate for oncology patients • Patients are seen and assessed by nurses and oncologists who they are familiar and comfortable with • Patients are discharged or admitted to hospitals
Community	• Reduce the number of oncology patients presenting to Emergency Departments, as they tend to be sicker and more prone to infections • The right patient will be getting the right treatment in the right place
Organization	• Improve relationships with Emergency Departments. • Emergency Department avoidance • Reduce readmission rates for oncology patients • Relieve pressure on other Ambulatory Care clinics in the hospitals
Clinicians & Staff	• Improved staff satisfaction – treating the right patients

	• Collaborative patient-centered practice

Potential Risks *Identify the key risks that must be considered (e.g. high impact and high probability). For each risk identified, provide a proposed risk mitigation strategy.*	
Risk	**Mitigation Strategy**
• High volume of patients could overburden the oncology clinic	• Strict referral guidelines • Close monitoring and re-evaluation of patient visits
• Increasing utilization of the oncology clinic for procedures that can be done in the community	• Strict referral guidelines • Close monitoring and re-evaluation of patient visits

Benefit Realization:

Estimated Timeline *Shade the estimated timeline (choose only one)*	• Short-term (up to 1 year) • Medium-term (1-2 years) • Long-term (3-5 years)

Key Metrics to Measure Benefits	• Rapid Response Oncology visits • Patient & staff satisfaction • Emergency Department Avoidance Days

2.3. Stakeholder Engagement Information

*This section should summarize the input considered from stakeholder engagement activities. Content in this section should be drawn from the Working Group's **Stakeholder Engagement Summary.** (Refer to the Guiding Framework for expectations).*

Note: This section will be completed before final submission of the Workbook. Working Groups are to use the Stakeholder Engagement Summary as a tool to document and consider stakeholder input/feedback collected during the due diligence process.

3. Recommended Integration Opportunities

3.1. Alignment to Guiding Principles

For each of the recommended opportunities, complete the table on the following page. Specifically, for each of the recommended integration opportunities, Working Groups must clearly articulate a rationale that describes the degree to which the integration opportunity supports each of the Guiding Principles. In building this rationale, the Working Groups will use the most relevant measures/indicators based on the service/program.

Recommendation 1: To strive for a Center of Excellence in Cancer care that is recognized within the community and that enhances funding and resource allocation. A priority on profiling and branding this program will serve as a milestone in this opportunity.

Description:

- The opportunity to be the leader in Cancer Services for Scarborough includes:
  - Developing a unified corporate brand
  - Setting strategic goals and priorities that align with regional and provincial initiatives
  - Creating opportunities to meet/exceed surgical volume targets to advocate for enhanced funding (i.e. Cancer Surgery Agreement)
  - Cultivating and developing new partnerships in the community from screening and referrals from primary care providers to gain and retain the care to Scarborough patients throughout the cancer continuum
    - Repatriating cancer patients who live in Scarborough who are seeking care outside of the Central East LHIN

Alignment to Guiding Principles:

	COLLABORATION *We believe that collaboration will lead us to better solutions.*	**ACCESSIBILITY** *We believe in providing accessible patient care to our community.*	**SUSTAINABILITY** *We believe that we must find new solutions to sustain our health care system.*	**EXCELLENCE** *We believe that we must never waver from our responsibilities to provide quality patient care and to be accountable to our stakeholders.*
Rationale	• More access to an expert pool of physicians in the collaboration and coordination of cancer care services for patients in Scarborough. • Hospitals will not be competing for the same volume of patients which will lead to improved quality, safety and efficiency.	• Timely access and seamless transition of care for patients at various points of their journey (screening, diagnosis, treatment, recovery & survivorship). • Care closer to home that is coordinated and integrated that ensures optimum access and links patients to formal and informal services.	• Strategically plan to grow cancer base volumes and repatriate patients back to Scarborough Increasing cancer volumes will enable us to meet the CSA. • Develop a unified and recognizable corporate brand with an effective marketing strategy that will lead to an increased market share	• Will be better positioned to attract and retain talented and dedicated staff • Establish efficient referral patterns from Primary Care Physicians • Improve use of best and leading practices will lead more innovative and high quality patient care • Improved provider/ staff satisfaction • Increase confidence that patients are receiving highest quality of care • Attracting patients and providers to refer (magnet hospital)
Measures / Indicators	• Patient satisfaction • Staff satisfaction	• Wait times at all phases (1, 2, & 3)	• Balanced budget • Incremental funding for additional volumes C1S & CSA • Increased volumes • Increased market share & repatriation • Improved efficiency (cost-per-case)	• Name recognition • Meeting or exceeding quality indicators (e.g. CCO) • Staff turnover rate (staff retention) • Patient and provider satisfaction

Recommendation 2: Develop a Patient Navigation System to support patients across the continuum of care from screening to treatment. (Screening → Diagnosis → Treatment → Survivorship and Supportive Care.

Standardize and consolidate patient education and psychosocial support services for patients throughout the cancer journey.

Description:

- Access to Rapid Diagnostics (ex. breast, gastrointestinal (GI), lung, haematological malignancies, genitourinary (GU), thyroid)
  - Establish clear, standardized care pathways through a single integrated system
  - Timely access to shared diagnostics
- Coordinate access to care for our patients through the continuum of care
  - Time of screening or abnormal finding → referral → staging / treatment → supportive care
  - Establishing group education and psychosocial support sessions shared across organizations offered throughout the cancer journey
- Achieving efficiencies through centralization of patient education sessions where appropriate
- Ensuring that supports are available and accessible for patients that will lead to an improved patient experience

Alignment to Guiding Principles:

	COLLABORATION *We believe that collaboration will lead us to better solutions.*	**ACCESSIBILITY** *We believe in providing accessible patient care to our community.*	**SUSTAINABILITY** *We believe that we must find new solutions to sustain our health care system.*	**EXCELLENCE** *We believe that we must never waver from our responsibilities to provide quality patient care and to be accountable to our stakeholders.*
Rationale	• Standardized pathways to be consistent across the program, and incorporate best practice standards that are in place throughout the region and the province • Develop efficiencies throughout the patient journey ensuring timely and seamless continuum of care • Improve and ensure an efficient centralized intake process is established and followed • Collaborate with broader community of primary providers	• Timely accessed to shared diagnostics • Targeting under-screened/never screened population in Scarborough	• Main access point into cancer care system • Streamlining resource to ensure optimal utilization	• Best practice guidelines • High customer satisfaction • More efficient and better use of limited resources (no redundancies)
Measures / Indicators	• Percentage of utilization of pathways • Patient satisfaction • Complication rate, lost cases	• Turnaround time, time to treat, time for biopsy etc. • Wait time	• Market share • Cost per case	• Cost per case • Patient satisfaction • Provider satisfaction (including referring physician) • Measurable learning outcomes

Recommendation: 3 Leverage the health human resource expertise across the cancer continuum of care to support professional development and sharing of knowledge to compliment service delivery. The alignment of sub-speciality resources across the organizations will broaden the scope and delivery of services.

Build and enhance access to sub-specialty programs that the Scarborough community needs. This may include the services that Scarborough residents are seeking outside of Scarborough (including gynaecology, genitourinary, breast and thoracic surgery).

Description:

- Currently the majority of Scarborough residents requiring gynecological, genitourinary, and thoracic surgery are seeking care outside of Scarborough and often outside of the Central East LHIN.
- Significant pool of shared talent, expertise, skill and knowledge between pathology, radiology, surgery, medical oncology and palliative care that could support academic affiliations and the opportunity to partner with teaching programs.
- Continuing to build upon existing and local expertise to work cooperatively in managing the care for complex cases that may otherwise require transfer to another center.
- Current data shows that access to sub-specialized programs is not adequately servicing patients in Scarborough as only 7% of thoracic cancer surgeries and 25 % of gynecological oncology surgeries remained in the region
  - Build and develop access to services that are identified gaps in cancer care service delivery in Scarborough where residents are seeking care outside of their community
  - Coordinate and leverage partnerships to complement existing expertise to broaden the scope of service that can be provided in the community hospital setting
  - Sub-speciality programs can be enhanced throughout the continuum of care from screening to treatment and after-care

Alignment to Guiding Principles:

	COLLABORATION *We believe that collaboration will lead us to better solutions.*	**ACCESSIBILITY** *We believe in providing accessible patient care to our community.*	**SUSTAINABILITY** *We believe that we must find new solutions to sustain our health care system.*	**EXCELLENCE** *We believe that we must never waver from our responsibilities to provide quality patient care and to be accountable to our stakeholders.*
Rationale	• Capable to treat more complicated cancer cases • Opportunity to sub-specialize resulting from increased talent pool • Opportunities to collaborate and develop stronger relationships with educational institutions • Provide opportunity for professional development within organization • Improved knowledge sharing between physicians	• Increased volume of patients seeking their treatment within the Central East LHIN • Care closer to home for patients, who require more complex care (ex. gynecological, genitourinary) • Access to sub-specialties enable patients to be repatriated in a timely manner	• Ability to maintain and increase market share • Attracting additional new cases leads to increased funding opportunities (C1S & CSA)	• Provider satisfaction • Patient satisfaction • Attract more sub-specialities • Staff retention • Collaboration and partnership with academic institution → improves innovation and advances staff/physician skills and expertise • Participation in drug trials and research
Measures / Indicators	• Scope of services provided • Number of student placements across organization	• Wait-times • Number of clinical trials and patients enrolled in clinical trials • Participation in research	• Meeting service agreements (CSA etc.) • Volume and market share	• Patient satisfaction • Recruitment and retention • Number of clinical trials and patients enrolled in clinical trials

4. Workbook Sign-Off

Identify the individuals that were involved in the completion of the Workbook.

Organization - Program	Team Member:
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature

Organization - Program	Team Member:
	Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date
	Signature Print Name Date

Appendix: Leading Practice Summary (KPMG)

The purpose of this section is to highlight and identify high-level leading practices themes for the purpose of assisting in the due diligence review. The themes that have been identified in this document are from several sources and are meant to provide Working Group members with a broad view of the themes related to leading practices for **Oncology**. These sources include KPMG's own experience, global thought leadership and external sources (where identified).

The below tables summarizes leading practices themes for Oncology.

Leading Practice Themes	
Integrative Oncology Programs[1]	• The discipline of integrative oncology has emerged in response to cancer patients' increasing tendency to use complementary approaches, such as naturopathic medicine, acupuncture and meditation to manage their cancer experience. It is an evidence-based approach that combines the best of both conventional and complementary medicine in a shift towards whole person care. There are numerous examples of integrative oncology practice in the literature. • Documented integrative oncology programs share a common vision to provide whole-person, patient-centered and integrative care, but each program is unique in terms of components of care, organizational structure, and patient flow. Programs seem to develop in direct relation to their local environment and the people leading the process. There is a lack of information regarding facilitators and barriers to the development and sustainability of such programs.
Chemotherapy, phlebotomy & symptom management at home[2,3]	• With ever-increasing demands on resources, home healthcare is becoming an important and cost effective alternative (e.g.: In-home chemotherapy – supported by dedicated nurses, pharmacists, care-coordinators and after-house on-call coverage) • As a result, precious space is freed up in the hospital for sicker patients and those on clinical trials, potentially reducing wait lists. Currently, a pharmacist is completing medication reconciliation for all patients enrolled in the program and certified oncology nurses have the expanded role of providing care in the patient's home setting. The latter creates a hybrid of specialized oncology nurses with home care skills.

London Cancer Alliance (LCA) - Pathway groups[4]	• Each pathway group is made up of clinical representatives from the partner trusts and key stakeholders from across the LCA, and is led by a pathway group chair.
	• The pathway groups share a set of common core objectives, outcomes and targets:
	  • Review evidence and current performance of pathways within the LCA with regards to outcomes, model of care recommendations and best practice.
	  • Undertake baseline audits of the performance of each organization against delivery of the relevant model of care recommendations.
	  • Agree and establish current best practice and develop exemplar best practice pathways.
	  • Undertake a baseline assessment against the exemplar pathway confirming the extent to which practice in each organization is in line with this best practice.
	  • Ensure appropriate levels of engagement with patients, primary care and other key stakeholders.
	  • Be compliant with peer review requirements.
	• The following pathways have been established and are operational.

[1] Ottawa Integrative Cancer Centre: poster presentation at the 1st Annual Canadian Cancer Research Conference; Toronto, 2011

[2] Bupa Home Healthcare - http://www.bupa.co.uk/home-healthcare

[3] http://www.cancerview.ca/idc/groups/public/documents/webcontent/hhr_repo_ca_tx.pdf

[4] London Cancer Alliance - http://www.londoncanceralliance.nhs.uk/information-for-healthcare-professionals/pathway-groups/

Leading Practice Themes	
	• Breast • Colorectal • Oesophago-gastric • Hepato-pancreatic-biliary • Lung • Survivorship • Acute oncology • Palliative care & end of life care

Acute Oncology Model[5]	• Acute Oncology Model of Care delivery aims to reduce length of stay for emergency admissions and avert unnecessary acute admissions.
	• Attributes include: Acute oncologist available to see new in-patient referrals daily and a Rapid Access Clinic for new patients presenting acutely with suspected malignancy.
	• Benefits
	  • Shorter LOS for emergency admissions with new cancers
	  • Admission avoidance for some acute patients with suspected cancer
	  • Fewer unnecessary tests ordered

CHESS – Comprehensive Health Enhancement Support System[6]	• The Comprehensive Health Enhancement Support System (CHESS), developed by the University of Wisconsin, provides information and interactive coaching tools, and enables patients and carers to communicate with their clinical team, as well as with other patients and their own social support networks. CHESS has been used by people with cancer and heart disease (including heart patients in the United Kingdom), and is being adapted and trialled to support other groups such as older people and people with alcohol dependence.
Rapid Response Oncology Clinic[7]	• The goals of the Rapid Response Oncology Clinic are to: provide rapid access to care for active oncology patients with cancer related problems; improve continuity of care for patients; reduce the number of oncology patients presenting to emergency departments; relieve pressure on follow up clinics at the Regional Cancer Centers; reduce readmission rates for oncology patients; and improve relationships with emergency departments. As a result of the model, the readmission rate for oncology patients has been reduced. In addition, the relationship between the Oncology and Emergency Departments has improved. Registered nurses, with increased scopes of practice assess oncology emergencies and triage patients in the clinic and a hospitalist (a family physician) works collaboratively with medical and radiation oncologists.

[5] NHS: http://www.improvement.nhs.uk/cancer/inpatients/wp_case_studies_2010/wp3_whittington.pdf
[6] Center for Health Enhancement Systems Studies, 2012." ; King's Fund, 2012
[7] http://www.cancerview.ca/idc/groups/public/documents/webcontent/hhr_repo_rapid_response.pdf