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Integrated Patient Focus Trajectory of Care for Lung Cancer Patients

Lung Disease Site Group

INTRODUCTION

Across the Rossy Cancer Network (RCN), approximately 1000 new patients (Table 1) are diagnosed with lung cancer (LC) each year. The majority of these patients (~700, 65%) are diagnosed and treated at the MUHC. The rest are shared about equally between CIUSS-CODIM (~200, 20%) and CIUSS-ODIM (~150, 14%). Areas of expertise offered across the RCN in LC care include, but are not limited to: CT-based screening, advanced diagnostics including molecular diagnostics, thoracic surgery, radiation oncology with stereotactic ablative technologies (SBRT), clinical trials for novel systemic therapeutics, palliative procedures, and supportive care. However, patients are not uniquely treated at one center. They must travel across the network (see Figure 1) to receive specialized care.

Harmonizing and expediting the diagnosis and staging pathway for patients referred to the RCN partner hospitals by diverse healthcare providers, remains an important challenge. A recent quality review at the RCN demonstrates that the median time from suspicious CT imaging to surgical treatment of a curable LC is approximately 100 days. This echoes data from a recent province-wide review by the Institut Universitaire de Cardiologie et de Pneumologie du Québec. Given that the average doubling time for a confirmed untreated LC is 3 months, the need to improve on these numbers is obvious. Importantly, the diagnosis and staging work-up of LC has become increasingly complex with the arrival of several new technologies over the last 20 years and this has led to one of the most convoluted pathways from suspected cancer diagnosis to treatment of all malignancies.

While a perceived weakness of our program is de-centralization, with proper coordination this will become its greatest strength thanks to the large number of expert clinicians in LC care who are engaged to deliver seamless and world-class patient-centered care.



Table 1: Unique patients newly diagnosed with

| | lung cancer (2017) | | | | |
|-----------|-----------------------------|-----|------|------|--|
| | Provenance (by postal code) | JGH | MUHC | SMHC | |
| Gill S | - | 5 | 14 | 5 | |
| | 06-Montréal | 155 | 415 | 52 | |
| | 07-Outaouais | | 89 | | |
| | 08-Abitibi-Témiscamingue | | 4 | | |
| | 10-Nord-du-Québec | | 1 | | |
| | 16-Montérégie | 16 | 173 | 2 | |
| | 17-Nunavik | | 7 | | |
| Sill S | 18-Terres-Cries-de-la-Baie- | | | | |
| | James | | 4 | | |
| | 01-Bas-Saint-Laurent | | | | |
| | 04-Mauricie et Centre-du-Qc | | | | |
| | 05-Estrie | 40 | 3 | | |
| | 13-Laval | 16 | 15 | | |
| | 14-Lanaudière | 3 | 6 | 1 | |
| | 15-Laurentides | 4 | 16 | 1 | |
| | Ontario Total | 199 | 748 | 60 | |
| | | | | | |
| | Source: Cancer Registry | | | | |

Population: 1.9 million

Bas-Saint-Laurent | Mauricie et Centre-du-Quebec | Estrie | Outaouais | Abitibi-Témiscamingue | Nord-du-Quebec Laval Lanaudiere Laurentides Montérégie Nunavik Terre-Cries-de-la-Baie-James

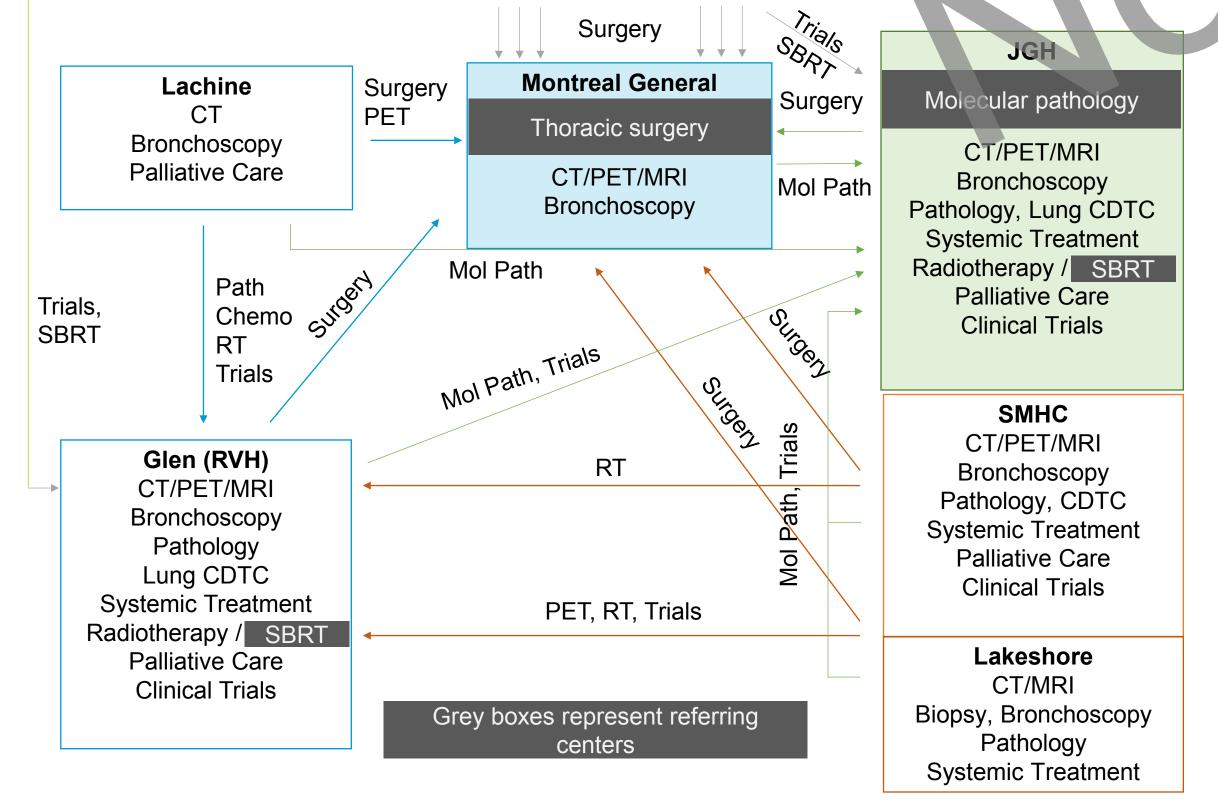


Figure 1: Patient trajectory across the RCN

Strengths

- Diverse clinical expertise within RCN
- Physician communication (e.g. joint CDTC, texting between physicians)
- Engagement of stakeholders
- Bottom-up approach to strategic planning Clinical trials (clinical research)

Opportunities

- Greater patient satisfaction
- DGC mandate and reorganization of care (ex.
- RCN support
- International recognition of center of excellence Emerging treatment

Weaknesses

- Lack of access to patient information throughout RCN (no common database or EHR)
- Complicated patient trajectories
- Significant delays in imaging and curative treatment (~100 days)
- Low participation in clinical trials (Stage 4) Resistance to change of practice

Threats

- Increasing burden of LC
- Limited funding and resources
- Imposed reorganization of care by the MSSS
- Competing priorities of healthcare professionals

Figure 2: SWOT analysis of lung cancer care within RCN

OUR OBJECTIVES

- 1. Provide a call to action for lung cancer quality improvement by detailing the current issues
- 2. Demonstrate the RCN Lung Disease Site (DS) group vision for a patient focused and integrated trajectory
- Elicit stakeholder engagement on the proposed strategy
- 4. Set priorities for action and provide a strategic plan to address these priorities

PATIENT CENTERED VALUES

We reduce harmful delays. We focus on what's necessary and sufficient Problems are identified and solutions are offered rapidly. We decrease **EFFICIENCY** redundancy and increase efficiency We work together across disciplines and institutions to achieve a common goal. We communicate often and share resources. Our multi-COLLABORATION site teams are linked by modern informatics to effect seamless clinical collaboration and utilize all available data for fully personalized care We integrate a scientific approach to our clinical expertise, patientcentered values, and deliver standardized care according to RCN EVIDENCE-INFORMED CARE

specific guidelines. Our clinical team is fully integrated to a province wide Lung Cancer Research Network. We participate in clinical trials to bring state of the art medicine to our

patients. Our teams are built to facilitate and expedite patient access to trials best suited to the individual patient needs. We are innovators and international thought leaders in lung cancer care.

PROPOSED STRUCTURE

INNOVATON

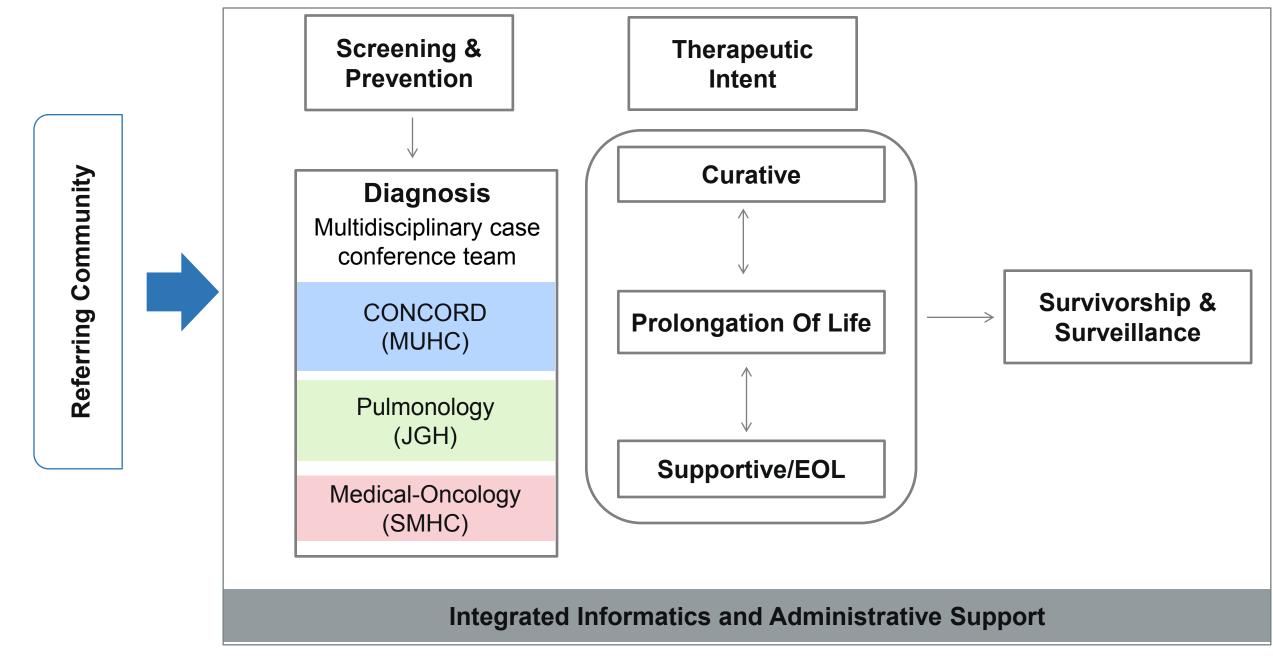


Figure 3: Focus areas within lung cancer patient trajectory

OUR VISION

Diagnosis

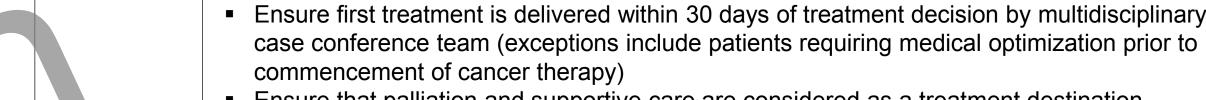
informatics

Table 2: Providing lung cancer patients with an integrated trajectory of care and dynamic alignment of providers

| | Focus Area | Organizational Goals | | |
|----|------------------------|---|--|--|
| Qr | Screening & prevention | Develop RCN approach to screening and prevention Perform community outreach to publicize screening program and prevention teams Develop public awareness campaign for smoking cessation, radon exposure, asbestos exposure and reality that 1/6 lung cancers occur in non-smokers | | |
| | | Create funnels of care across RCN sites to expedite the flight path of LC, harmonize the | | |

approach to diagnosis and staging, increase efficiency with regards to resource utilization and provide multi-disciplinary input to treatment selection once necessary and sufficient data is acquired. Required steps:

- Standardize multidisciplinary case conference teams across the RCN as unique access points for the coordination of new LC referrals
- Implement rapid access corridors of service (1 week) to specialty services at all sites to ensure priority access (nuclear med, interventional radiology, endoscopy) Improve pathology, cytology and molecular platform turnaround time for new LC cases to 1
- week or less with pushed resulting to multidisciplinary case conference team Establish RCN-wide best practices for diagnostic and staging work-up
- Improve the delivery of care across the treatment trajectory

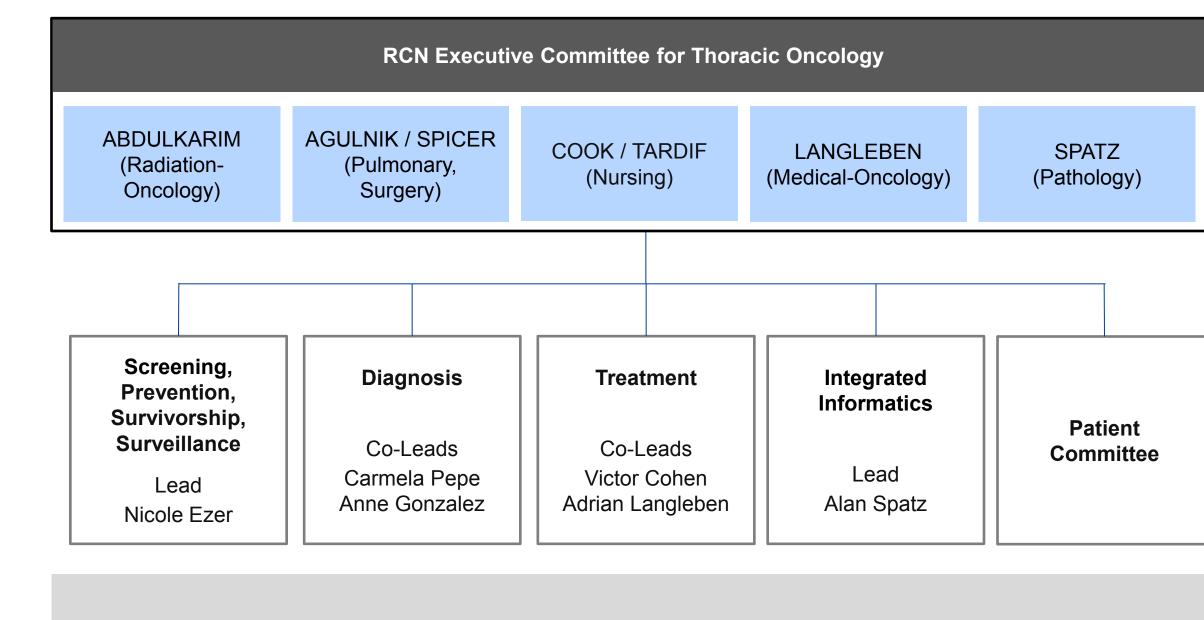


- Ensure that palliation and supportive care are considered as a treatment destination Treatment
 - Fulfill MESI/FACS grant targets to double clinical trial enrollment over next 4 years Ensure all patients are offered biobank enrollment to enable cutting edge research
 - Proactively manage symptoms and side effects to reduce ER use
- Improve IPO support across all phases and types of treatment

 Implement patient-reported outcomes (PROs) reporting for all LC patients under treatment Survivorship

Ensure a standardized approach to surveillance and management of recurrent disease & surveillance Provide a transparent view of the patients' trajectory and flow using an integrated informatics Integrated

EXECUTIVE COMMITTEE & SUB-COMMITTEES



Membership includes: Cancer Prevention Center, CLSCs, Family Medicine, Information Technology, Medical-Oncology, Nuclear Medicine, Molecular Pathology, Nursing, Palliative Care, Pathology, Patients, Pharmacy, Radiation-Oncology, Radiology, Pulmonary, and Thoracic Surgery.

NEXT STEPS

The RCN aims to make an impact on patient care in oncology by implementing change at the trajectory level, with the patient in partnership and at the center of care.

This strategic plan has been created in-conjunction with multi-disciplinary colleagues and stakeholders across the partner hospitals of the RCN. Upon identifying actionable improvement efforts, the plan will be presented to the RCN governance on which sits the Director Generals of the MUHC, CIUSS-ODIM, and CIUSS-CODIM.

At this meeting, we will seek RCN governance approval and support on the priorities for action and implementation of the plan.

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