Integrated Patient Focus
Trajectory of Care for
Lung Cancer Patients
Dr. J. Agulnik & Dr. J. Spicer
Objectives

• **Call to action** for lung cancer care quality improvement

• RCN Lung Disease Site **group vision for an integrated trajectory of care**

• Elicit **stakeholder engagement** on the proposed strategy

• Provide a **strategic plan of action** to address these priorities
Background

Lung cancer (LC) accounts for more fatalities than any other cancer

~1000 new cases per year

Patients travel across RCN sites and beyond to receive specialized care

The median time from suspicious CT imaging to surgical treatment of a curable LC is ~100 days

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. A phased approach to expediting the flight path of LC patients across their entire trajectory of care must be adopted.
Background - Patient trajectory across the RCN

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

Grey boxes represent referring centers

**Montreal General**
- Thoracic surgery
- CT/PET/MRI
- Bronchoscopy
- Mol Path
- Surgery
- SBRT

**JGH**
- Molecular pathology
- CT/PET/MRI
- Bronchoscopy
- Pathology, Lung CDTC
- Systemic Treatment
- Radiotherapy
- Palliative Care
- Clinical Trials
- SBRT

**SMHC**
- CT/PET/MRI
- Bronchoscopy, Pathology, CDTC
- Systemic Treatment
- Palliative Care, Clinical Trials

**Lakeshore**
- CT/MRI, Biopsy, Bronchoscopy
- Pathology, Systemic Treatment

**Bas-Saint-Laurent**
- Surgery
- CT
- Bronchoscopy
- Palliative Care

**Mauricie et Centre-du-Quebec**
- Surgery
- Path, Chemotherapy, RT, Trials

**Estrie**
- Surgery
- Surgery

**Outaouais**
- Surgery
- Surgery

**Abitibi-Témiscamingue**
- Surgery

**Nord-du-Quebec**
- Surgery

**Laval**
- Surgery

**Lanaudiere**
- Surgery

**Laurentides**
- Surgery

**Montérégie Nunavik**
- Surgery

**Terre-Cries-de-la-Baie-James**
- Surgery

**Surgery**
- PET, RT, Trials

**Mol Path**
- Surgery, Trials

**Trials, SBRT**
- Surgery, Trials, SBRT

**Thoracic surgery**
- CT/PET/MRI
- Bronchoscopy
- Mol Path
- Surgery
- SBRT

**Clinical Trials**
- SBRT

**SBRT**
- SBRT

**For personal use only**
- For personal use only
Background – RCN lung cancer incidence

McGill RUIS, Population: 1.9 million

Table 1: Unique patients newly diagnosed with lung cancer (2017)

<table>
<thead>
<tr>
<th>Provenance (by postal code)</th>
<th>JGH</th>
<th>MUHC</th>
<th>SMHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-Montréal</td>
<td>155</td>
<td>415</td>
<td>52</td>
</tr>
<tr>
<td>07-Outaouais</td>
<td>89</td>
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<tr>
<td>08-Abitibi-Témiscamingue</td>
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<tr>
<td>10-Nord-du-Québec</td>
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<tr>
<td>16-Montérégie</td>
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<td>173</td>
<td>2</td>
</tr>
<tr>
<td>17-Nunavik</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-Terres-Cries-de-la-Baie-James</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01-Bas-Saint-Laurent</td>
<td></td>
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<tr>
<td>04-Mauricie et Centre-du-Qc</td>
<td></td>
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<tr>
<td>05-Estrie</td>
<td>3</td>
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<tr>
<td>13-Laval</td>
<td>16</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>14-Lanaudière</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>15-Laurentides</td>
<td>4</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Ontario</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>199</td>
<td>748</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Cancer registry
### Our patient-centered values

<table>
<thead>
<tr>
<th><strong>EFFICIENCY</strong></th>
<th>We reduce harmful delays. We focus on what’s necessary and sufficient. Problems are identified and solutions are offered rapidly. We decrease redundancy and increase efficiency.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLLABORATION</strong></td>
<td>We work together across disciplines and institutions to achieve a common goal. We communicate often and share resources. Our multi-site teams are linked by modern informatics to effect seamless clinical collaboration and utilize all available data for fully personalized care</td>
</tr>
<tr>
<td><strong>EVIDENCE-INFORMED CARE</strong></td>
<td>We integrate a scientific approach to our clinical expertise, patient-centered values, and deliver standardized care according to RCN specific guidelines. Our clinical team is fully integrated to a province wide Lung Cancer Research Network.</td>
</tr>
<tr>
<td><strong>INNOVATION</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>
**Strengths**
- Diverse clinical expertise within RCN
- Physician communication
- Engagement of stakeholders
- Bottom-up approach to strategic planning
- Clinical research and trials

**Weaknesses**
- Lack of access to patient information across RCN
- Complicated patient trajectories
- Significant delays in imaging and curative treatment
- Low participation in clinical trials
- Resistance to change of practice

**Opportunities**
- Greater patient satisfaction
- DGC mandate and reorganization of care
- RCN support
- International recognition of center of excellence
- Emerging treatments

**Threats**
- Increasing lung cancer burden
- Limited funding and resources
- Imposed reorganization of care
- Competing priorities of healthcare professionals
Focus Areas

Screening & Prevention
- Referring Community
- Diagnosis
  - Multidisciplinary case conference team
  - CONCORD (MUHC)
  - Pulmonology (JGH)
  - Medical-Oncology (SMHC)
- Therapeutic Intent
  - Curative
    - Prolongation Of Life
    - Supportive/EOL
  - Survivorship & Surveillance

Integrated Informatics and Administrative Support
Proposed Leadership Structure

RCN Executive Committee for Thoracic Oncology

- **ABDULKARIM** (Radiation-Oncology)
- **AGULNIK / SPICER** (Pulmonary, Surgery)
- **COOK / TARDIF** (Nursing)
- **LANGLEBEN** (Medical-Oncology)
- **SPATZ** (Pathology)

### Screening, Prevention, Survivorship, Surveillance
- **Lead**: Alan Spatz
- **Co-Leads**: Nicole Ezer, Carmela Pepe, Anne Gonzalez

### Diagnosis
- **Co-Leads**: Vicco Cohen, Adrian Langleben

### Treatment
- **Co-Leads**: Carmela Pepe, Anne Gonzalez, Alan Spatz

### Integrated Informatics
- **Lead**: Alan Spatz

### Patient Committee

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.
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

Survivorship & Surveillance

- Ensure a standardized approach to surveillance and management of recurrent disease

Nicole Ezer (Lead)
Lucie Lajeunesse
Jana Taylor
Jonathan Cools-Lartigue
Bojan Kovacina
Andrew Hirsch
Nathalie Saad
Sean Gilman
Joseph Erban
Hitesh Bhanabhai
Bernard Lapointe
Diagnosis

- Create funnels of care across RCN sites to expedite the flight path of LC
- Harmonize the approach to diagnosis and staging through multidisciplinary case conference teams
- Increase efficiency of resource utilization across all platforms
- Provide multi-disciplinary input to treatment selection once necessary and sufficient data is acquired.
- Establish RCN-wide best practices for diagnosis and staging
Treatment

- Improve the delivery of care across the treatment trajectory
  - Ensure first treatment is delivered within 30 days of treatment decision by multidisciplinary case conference team (exceptions include patients requiring medical optimization prior to commencement of cancer therapy)
  - Ensure that palliation and supportive care are considered as a treatment destination
  - 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
Clinical Trials

The American Society of Clinical Oncology states that exemplary clinical trials sites should accrue at least 10% of treated patients onto treatment-based clinical trials.

Number of currently open lung cancer trials across the RCN (excludes basket trials)

<table>
<thead>
<tr>
<th>Year</th>
<th>JGH</th>
<th>MUHC</th>
<th>SMHC</th>
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<tbody>
<tr>
<td>2016</td>
<td></td>
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<tr>
<td>2017</td>
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Source: Managers of each of the research groups

Ratio of LC patients enrolled in clinical trials to number of incident cases (2016, 2017)

Integrated informatics

• Provide a transparent view of the patients’ trajectory and flow using an integrated informatics platform

Patient Committee

• Partnership between lung cancer patients and healthcare experts

Alan Spatz (Lead)
Sabine Cohen
Scott Owen
Pierre Fiset
Yvan Carbonneau
Thomas Jagoe
Number of Lung Cancer Publications within the RCN

Source: Pubmed, World Conference on Lung Cancer (2016-2018 for available data)
Thank you!