

Lung cancer patient pathways in primary care: from first presentation to referral

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Disclosure statement

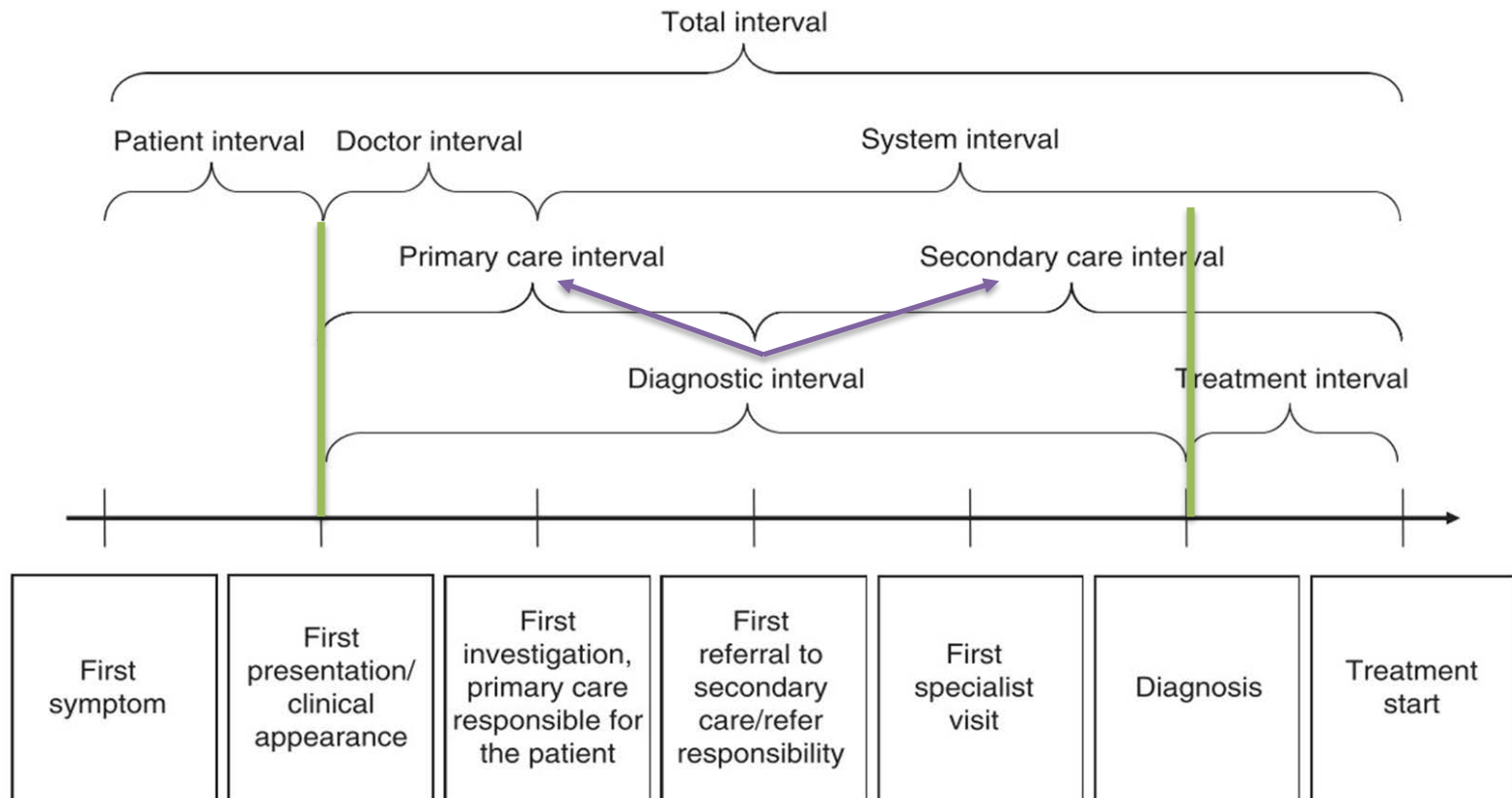
➤ I have no conflict of interest to declare

Motivation behind the work

- Lung cancer is the leading cause of cancer deaths in Canada (26%)
- Late stage at diagnosis is a major culprit (71% at stages III&IV)
- How do we reduce time to diagnosis?



Primary vs secondary care



Source: Olesen F, Hansen RP, Vedsted P. Delay in diagnosis: the experience in Denmark. *Br J Cancer* 2009; 101 (suppl 2): S5-8.

What the literature showed

- Longer time intervals in primary care compared to secondary care

First author	Year	Country	Median delay in primary care (days)	Median delay in secondary care (days)
Koyi et al.	2002	Sweden	33	9
Barrett et al.	2008	United Kingdom	51	29
Bjerager et al.	2006	Denmark	33	—

- No Canadian studies on lung cancer diagnostic pathways in primary care



Research objective

- Identify and characterize groups of lung cancer patients with similar diagnostic pathways based on health-care service utilization patterns in the primary care interval
 - Utilization activities
 - 1) # family physician visits
 - 2) # walk-in clinic visits
 - 3) # emergency department visits
 - 4) # hospitalizations
 - 5) # of CXR
 - 6) # of CT
 - 7) # of visits to non-respirologists (misdirected referral)

Methods

- Consecutive case sampling from a lung cancer center in Montréal, Québec (n=50)
- Chart review + structured patient interview
- Latent class analysis (LCA)
 - Model-based approach to clustering that partitions a heterogeneous population (lung cancer patients) into homogeneous subgroups (diagnostic pathway groups) based on associations among observed variables (health-care service utilization patterns)

Key results

- Two distinct diagnostic pathway groups
 - Family physician (FP) centric group
 - ◆ High probability of seeing their family physician, low probability of going to a walk-in clinic, and zero probability of hospitalization
 - ◆ Although FP centric, still had a moderate probability of visiting the emergency department
 - Emergency department (ED) centric' group
 - ◆ Certain probability of visiting the emergency department, a moderate probability of going to a walk-in clinic, and a low probability of hospitalization

Interpretation

- Patients with suspected lung cancer follow a pathway that is dominated by visits to their family physician, or a pathway that is dominated by visits to the emergency department.
- In the family physician dominant pathway, there is still a moderate use of the emergency department indicating poor integration of primary and specialist care.

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