CANADIAN PARTNERSHIP AGAINST CANCER | PARTENARIAT CANADIEN CONTRE LE CANCER

Lung Cancer Screening

Progress or Problems?

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JOINING FORCES – ACCELERATING PROGRESS

uicc global cancer control WORLD CANCER CONGRESS

Hosted by Cancer Council Australia

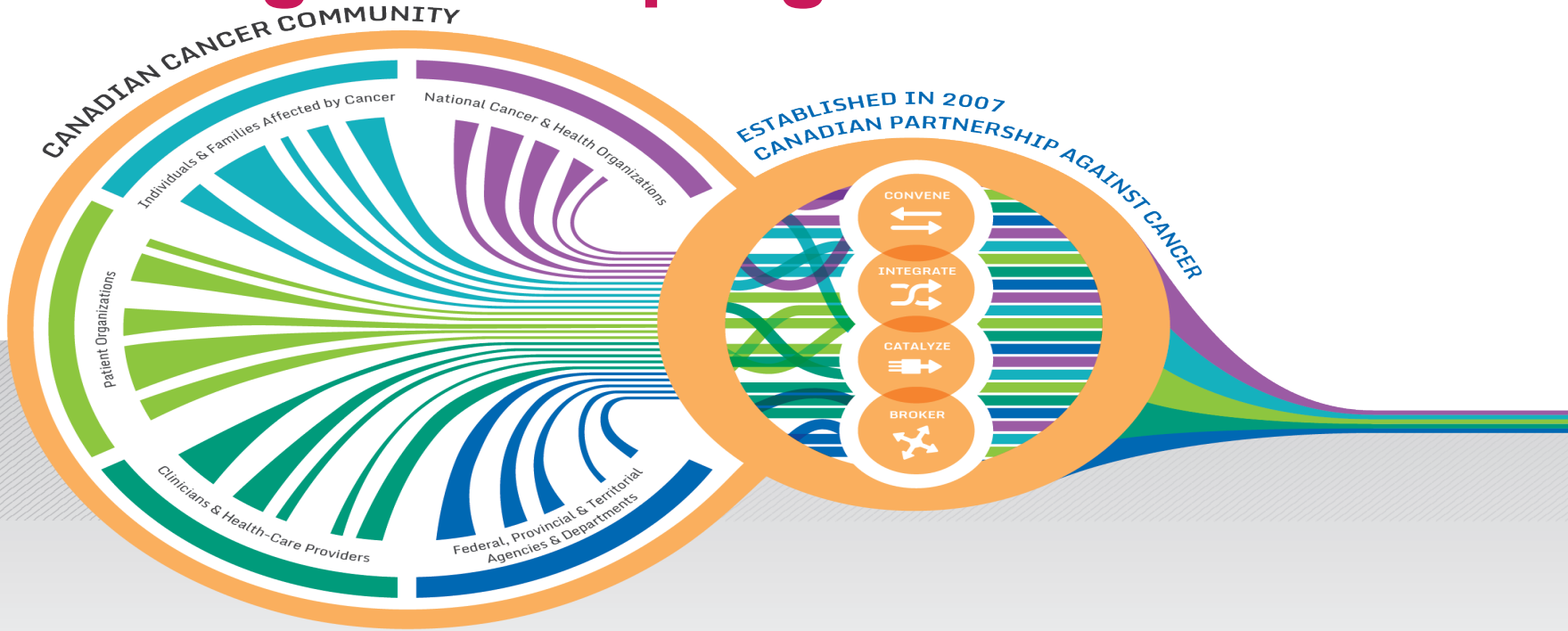
www.worldcancercongress.org

A word about Canada's cancer system…

-In most provinces, there is some kind of provincial focus on cancer care, through an agency or a government department

-Registries have long history – perhaps due to early affinity to cover disastrous illness

Canada's cancer strategy is enabling shared progress.



Lung Cancer and Screening

Evidence:

November 2010: National Lung Screening Trial initial results

“Anticipatory science” exercise with expert panel

July 2011: International Association for the Study of Lung Cancer, CT Screening Task Force and Workshop

CONVENE & BROKER KNOWLEDGE

The Partnership hosted two national forums in Nov. 2011 and Feb. 2012

- CONVENE: Brought together interested provincial and national governments, cancer agencies and affiliated organizations to identify priorities for lung cancer screening in Canada; and

- BROKER KNOWLEDGE: Determine how to best serve the population at risk of lung cancer.

Pan-Canadian Lung Cancer Screening Network

October 2012: The Pan-Canadian Lung Cancer Screening Network is launched

- To support initiatives that inform, leverage expertise, and make evidence-based recommendations that support policy and health practices in lung cancer screening.
- First priority initiative: Develop consensus statements regarding screening recommendations.

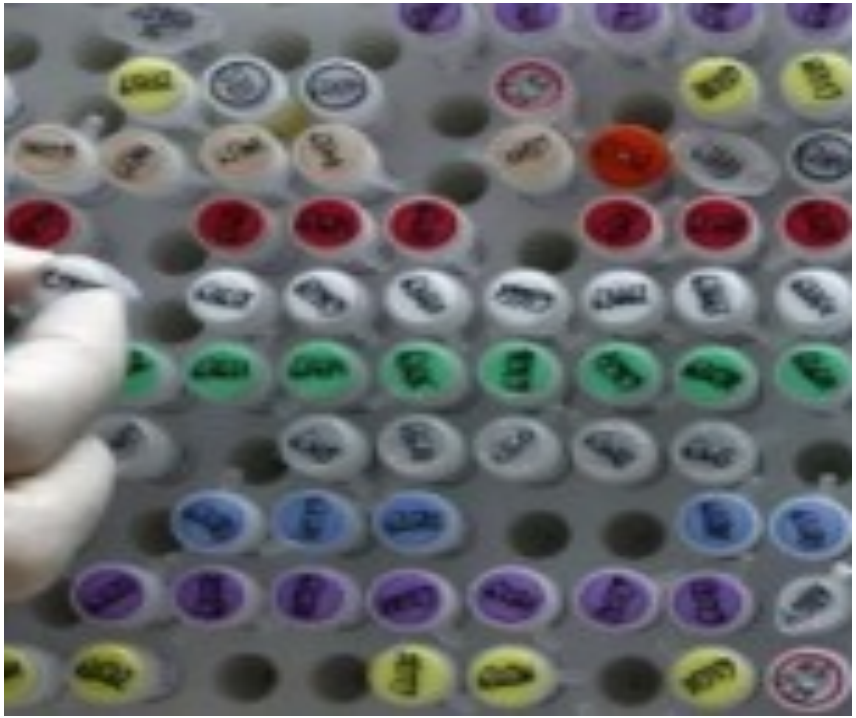
Context for planning in a national network framework

Lung cancer is the leading cause of cancer death in Canada

For the first time, there may be a screening test that will make SOME difference

How do we implement it so that we take into consideration the realities of current cancer control dilemmas, but still do the best we can to make the highest impact on cancer mortality in Canada?

Sustainability of the cancer system a new challenge



You see, idealism detached from action is just a dream. But idealism allied with pragmatism, with rolling up your sleeves and making the world bend a bit, is very exciting. It's very real. It's very strong.

(Bono)

This is not for amateurs

All other screening in Canada has tried to get organized after being out in general practice

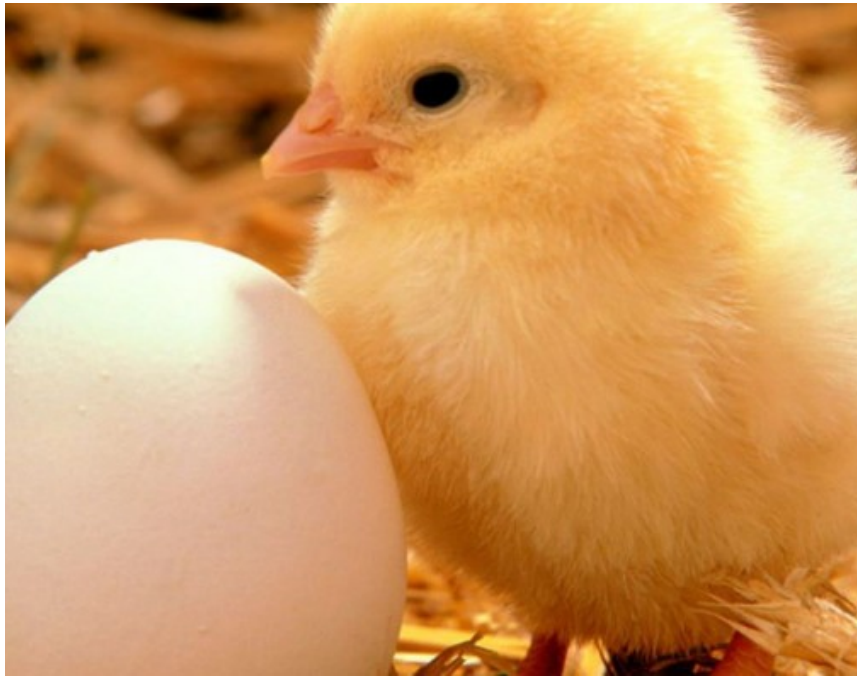
For cervical screening, caused delayed uptake (and unncecessary deaths)

For breast screening, perpetuated debates over benefit and targets

For CRC, resulted in more scoping and less screening

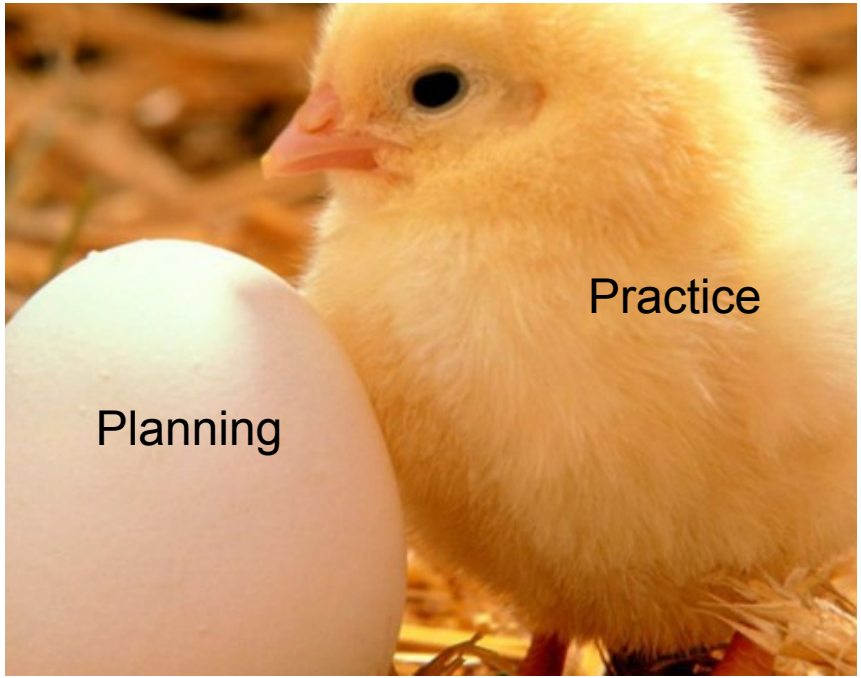
Lung screening…..

Planning dilemmas



What came first?

Planning dilemmas



Public health view is often linear

Reality

The practice chicken lays its own eggs, and incubates them faster

Areas for network consideration

1. Target population definition for intake
2. Role of tobacco cessation
3. Reaching the hard-to-reach
4. Defining “positive” findings
5. Technical quality issues
6. Eligibility for Continued Screening

Learning from experience

Eligibility: Intake

Risk model (Tammemagi, PCELCDP) gives risk of <2% vs >2% risk

- Gives an evidence-based and rational approach to defining eligibility
- Potentially much more palatable tool to define eligibility, as those not eligible get the good news of lower risk
- Could allay the controversy of eligibility based on the length of a past “unhealthy” behaviour

Do we need monitoring of use of this model vs age/pack year approaches?

Learning from experience

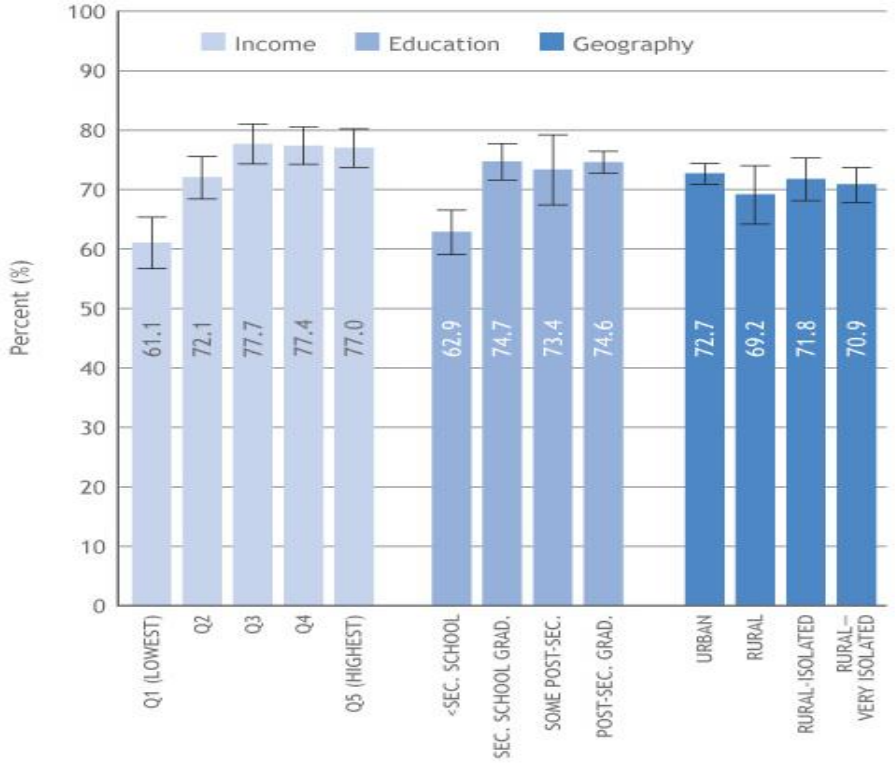
Intake: Smoking Cessation

Current smokers should be offered access to smoking cessation:

- What type?
- What degree (a handout, a program, individualized treatment and follow-up?)
- Funding of NRT (nicotine replacement tx)
- Do we follow success rates of different strategies?

Should we be prepared for questions on continued screening eligibility for those who do not quit??

Percentage of women (50–69) reporting a screening mammogram in the past 2 years BY INCOME QUINTILE, EDUCATION AND GEOGRAPHY, CANADA—CCHS 2008



Note: 95% confidence intervals are indicated on figure.
Data Source: Statistics Canada, Canadian Community Health Survey

Learning from experience

Reaching underserved

Recognition that the prevalence of screening eligibility will likely be concentrated in rural/remote/isolated communities, and inner cities/ SES disadvantaged areas of cities

Breast screening has been very effective in reaching rural/remote women despite the fact that participants need to actually go to the technology

- Mobile programs have been key

However, still variation in uptake by income and education despite years of initiatives

Learning from experience

Definition of “positive” findings

Size/diameter/volume estimates are continuous variables, and therefore the decision on what is positive can be “titrated” by adjusting the positivity call limit

- This is similar to the use of FIT (fecal immunochemical tests) for colorectal screening, and there is some experience on the impact of implementation of different decision rules

Would require follow-up to look at the impact on the “negatives” in follow-up

Learning from Experience

Technical Quality Issues

Experience in MB has shown that there is wide variation in radiation exposure from different CT's across the province

In breast screening, early steps were development of an accreditation program for image quality through the Canadian Association of Radiologists

Should this be explored for spiral CT?

Learning from experience

Eligibility: Continued Screening

Currently RCT evidence exists for efficacy

However, there are no data that would drive decisions re continued screening (to what age?), interval between screens…….

Modeling will help to point to promising directions, but ongoing in-practice experience (with follow-up databases) will be needed to validate these

The risk/benefit

Unnecessary tests

Unnecessary diagnostics

Unnecessary treatment

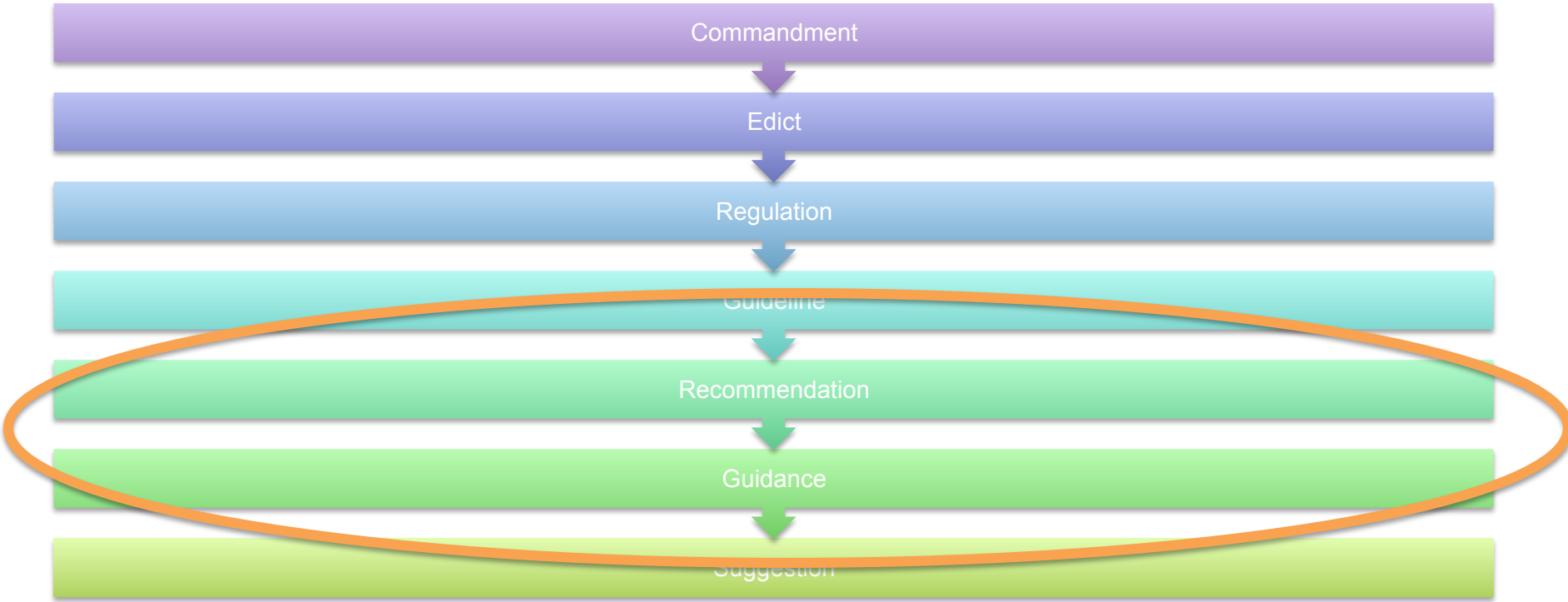
All on well people who would never have developed the disease in question

Reduced mortality

Reduced incidence

Reduced treatment needs

Types of Meeting Outcomes



Quality Determinants

Refers to core elements that can be collected to evaluate quality within programs

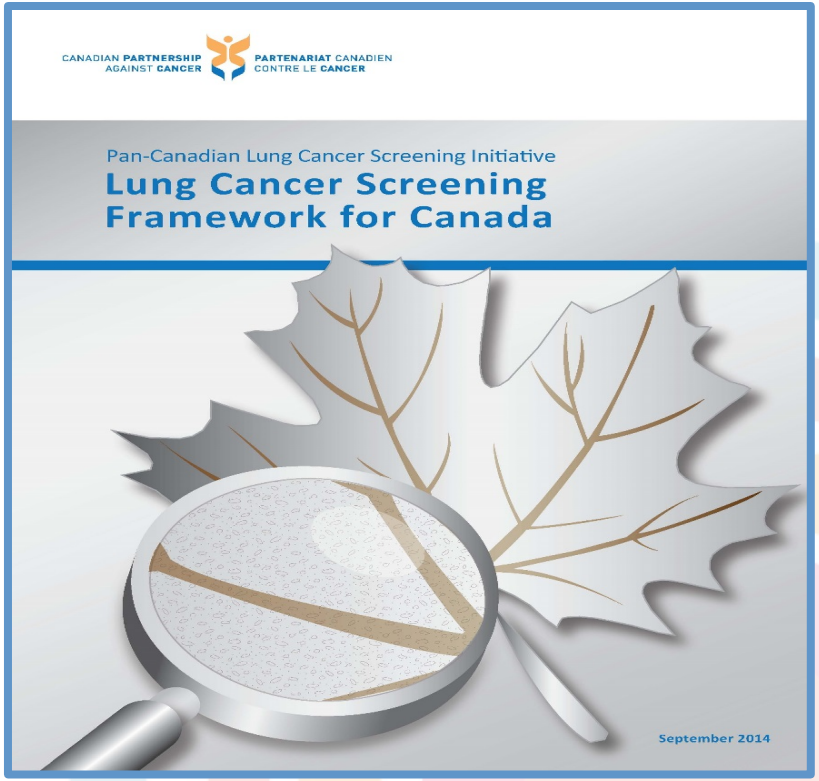
The Network members are developing these core elements, as this will allow them to assess results, and perhaps learn from this “natural experiment”

Lung Cancer Screening Framework for Canada

November 2014

To help guide jurisdictions in deliberations and discussions about lung cancer screening

Cancerview.ca



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Questions that could be addressed by network as we work forward…

Should we pilot to gain more info before we implement screening in the face of info gaps? What is the possibility for policy/research partnerships to move this ahead?

Is this something that would benefit from a programmatic approach?

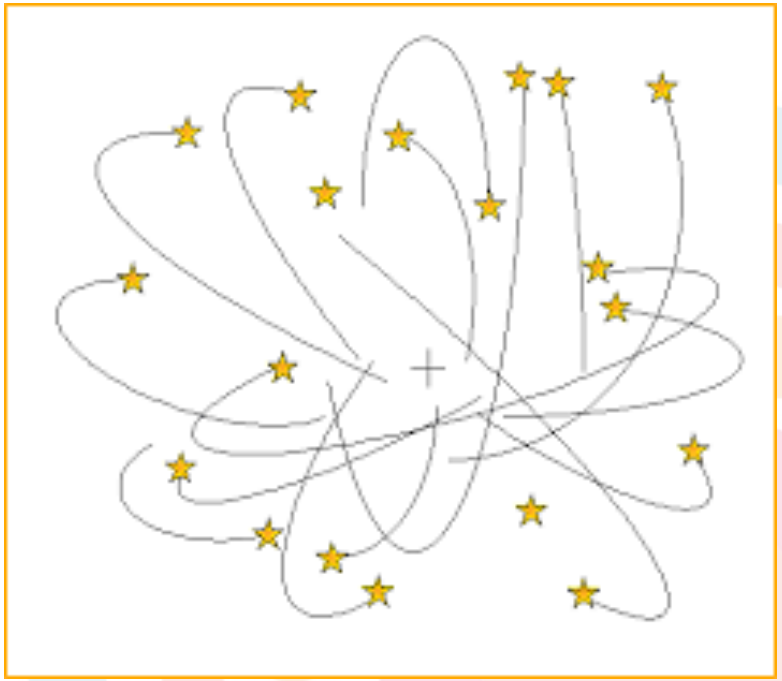
What can we learn from one another that would help us and, most importantly, the Canadians at greatest risk for lung cancer?

We do not have the perfect information

But past experience teaches us that allowing the practice to incubate naturally will not result in the best outcomes

For the future

Potential for harms and benefits exists: so action must be a considered action



Lung Cancer Screening Framework for Canada

Thank you!

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