



Réseau-1 Québec

Série de webinaires 2020-2021

***Clinical practice during the pandemic:
Implications for future research***

Roland Grad, MD, CM, MSc, FCFP

novembre 2020

Réseau-1 Québec

Yves Couturier, *Directeur scientifique*

Mélanie Ann Smithman, *Fonction renforcement des capacités*

info@reseau1quebec.ca | reseau1quebec.ca



@reseau1quebec



Réseau-1 Québec



Roland Grad, MD, CM, MSc, FCFP, est chercheur clinicien en médecine de famille et professeur agrégé de médecine de famille à McGill. Sa recherche est centrée sur la façon dont les médecins, les infirmières et les pharmaciens utilisent l'information clinique pour améliorer les soins et la santé de leurs patients.

Objectifs de la présentation : Comprendre comment les soins cliniques en médecine familiale ont changé pendant la pandémie et les répercussions de ce changement sur la recherche future



Réseau-1 Québec

Questions ou commentaires ?

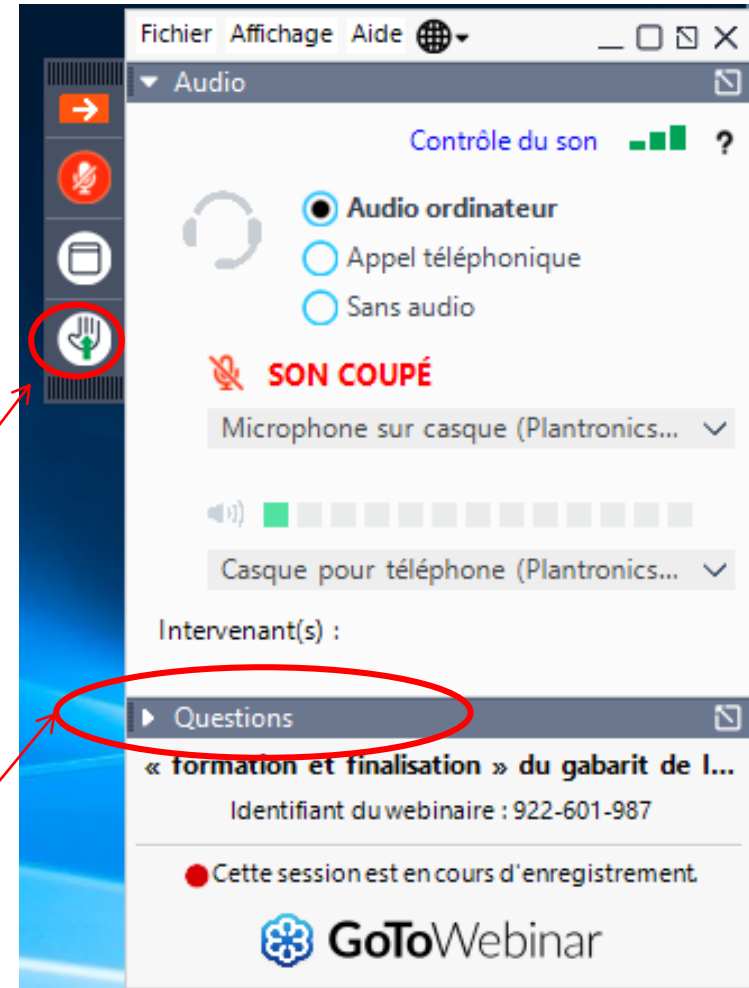
Posez vos questions de deux façons:

1. Lever la main :

Nous ouvrirons votre micro et vous inviterons à poser votre question oralement durant la période de questions.

2. Par écrit :

Tout au long de la présentation, vous pouvez écrire une question dans la boîte (cliquer sur Questions pour l'ouvrir). Nous répondrons à votre question durant la période de questions.



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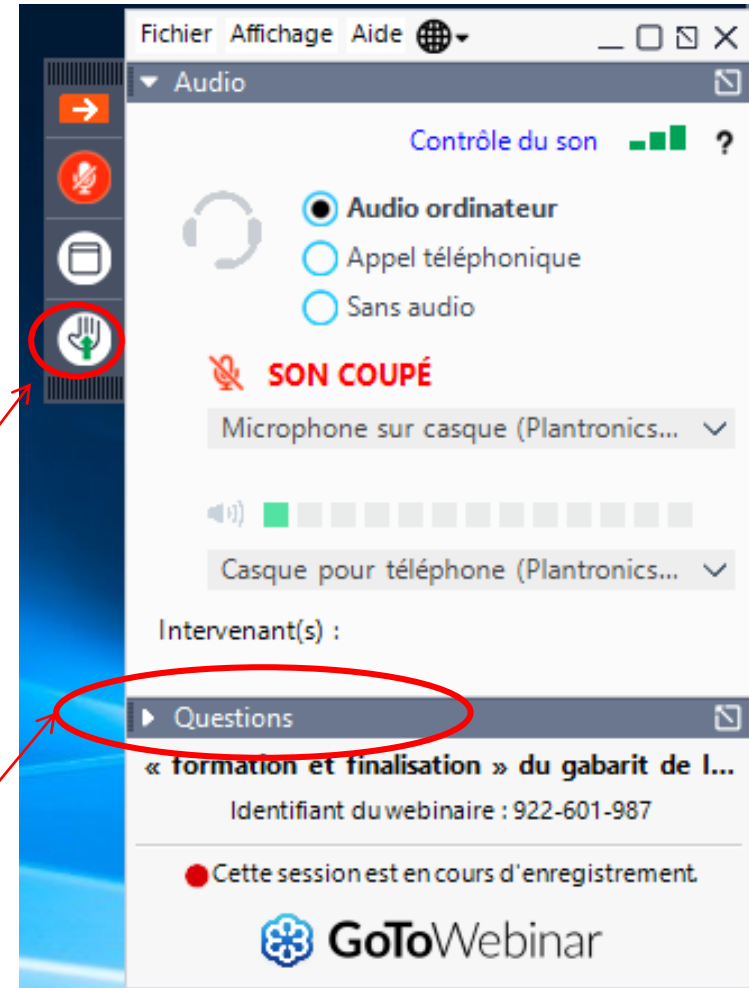
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*La pratique clinique
durant la pandémie :
conséquences pour la
recherche future*

@RolandGrad



Déclaration relative aux conflits d'intérêts

Médecin de famille en exercice

Directeur du programme de clinicien érudit à McGill

Membre du Groupe d'étude canadien sur les soins de santé préventifs

- Les membres sont bénévoles. Je reçois un salaire de l'Université McGill, et on me rembourse uniquement mes frais de déplacement et d'hébergement.

Consultant pour *Naître et grandir*, de la Fondation Chagnon

Subventions ou soutien à la recherche : Joule Inc., une société de l'Association médicale canadienne, appuie mon travail portant sur le [programme de formation médicale continue POEMs](#)

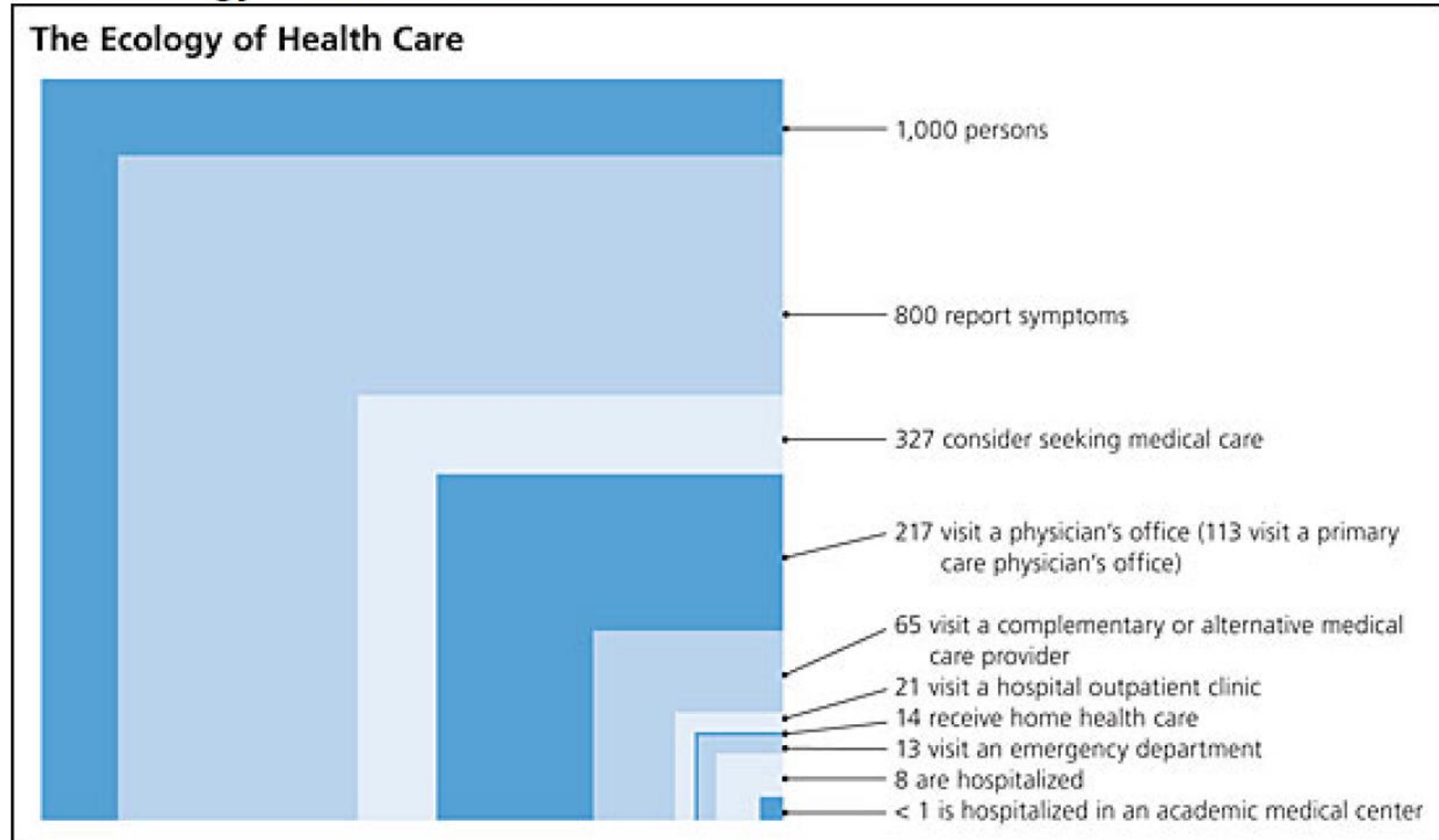
Objectifs spécifiques

Comprendre la façon dont les soins cliniques en médecine de famille ont changé durant la pandémie, et les conséquences de ces changements pour la recherche future.

Contexte



The Ecology of Health Care



Original EBM Research



CrossMark

How good is the evidence to support primary care practice?

Mark H Ebell,¹ Randi Sokol,² Aaron Lee,¹ Christopher Simons,³
Jessica Early²

Soins de
faible
valeur

Examens
annuels

Tests « de
routine »

Que savons-nous sur les
soins de faible valeur?

JAMA Internal Medicine | [Original Investigation](#) | **LESS IS MORE**

Association of Low-Value Testing With Subsequent Health Care Use and Clinical Outcomes Among Low-risk Primary Care Outpatients Undergoing an Annual Health Examination

Zachary Bouck, MPH; Andrew J. Calzavara, MSc; Noah M. Ivers, MD, PhD; Eve A. Kerr, MD, MPH; Cherry Chu, MSc; Jacob Ferguson, BMSc; Danielle Martin, MD, MPP; Joshua Tepper, MD; Peter C. Austin, PhD; Peter Cram, MD, MBA; Wendy Levinson, MD; R. Sacha Bhatia, MD, MBA



Codes de la CIM-10

- Z71.1 Sujet inquiet de son état de santé (sans diagnostic)
- U07.1 COVID-19, virus identifié
- U07.2 COVID-19, virus non identifié
 - COVID-19 diagnostiquée sur les plans clinique et épidémiologique
 - COVID-19 probable
 - COVID-19 suspectée

A history of notable pandemics

1334-1350 ○ "Black Death"

30 to 50 million deaths

- Bubonic plague
- Originated in China, and spread to Europe along trade routes.

1860s-1903 ○ The modern plague

About 10 million deaths

- Bubonic plague
- Started in China and then spread to Hong Kong by 1894.

Image: Bubonic plague victims-mass grave in Martigues, France

1889-1890 ○ Russian flu

About 1 million deaths

- Influenza A
- The pandemic was first recorded in Russia, and then spread through Europe, Asia and reached USA.

1918-1919 ○ Spanish flu

50 to 100 million deaths

- Influenza A (H1N1)
- Estimated to have infected over 500 million people world wide.

1956-1958 ○ Asian flu

About 2 million deaths

- Influenza A (H2N2)
- Originated in China and spread to Singapore, Hong Kong and USA.

1968-1969 ○ Hong Kong flu

About 1 million deaths

- Influenza A (H3N2)
- Started in Hong Kong and then spread through Asia, Australia, Europe and the USA.

1976 ○ Ebola outbreak

280 deaths

- The first recorded outbreak of the Ebola virus
- Contained within Zaire (now DRC).

Image: Spanish Flu victims burial 1918

1981 (ongoing) ○ HIV/AIDS

About 32 million deaths

- Human immunodeficiency virus (HIV), develops into acquired immunodeficiency syndrome (AIDS)

Thought to have originated in west Africa in the early



Widening coronavirus crisis threatens to shutter doctors' offices nationwide



CORONAVIRUS >

Here is what can now reopen in L.A. County, and here is what is still closed

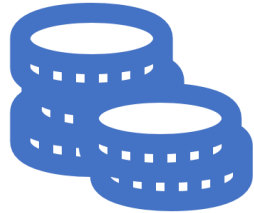
In many counties, hair salons, barbershops can reopen now, in Stage 3 of Newsom's plan

Perturbation de la pratique médicale

Conséquences pour la recherche



Aspect biomédical



Aspect économique



Aspect biopsychosocial

Conséquences sur le plan économique

¹ Deakin Health Economics, Deakin University, 221 Burwood Highway, Burwood, VIC 3125, Australia

² Menzies Institute for Medical Research, University of Tasmania

Correspondence to:
martin.hensher@deakin.edu.au

Cite this as: *BMJ* 2020;371:m3687
<http://dx.doi.org/10.1136/bmj.m3687>

Published: 8 October 2020

Covid-19, unemployment, and health: time for deeper solutions?

As covid-19 drives unemployment rates around the world to levels unseen in generations, once radical economic policy proposals are rapidly gaining a hearing. **Martin Hensher** examines how job guarantee or universal basic income schemes might support better health and better economics

Martin Hensher *associate professor of health systems financing and organisation*^{1,2}

Covid-19 has been a dramatic global health and economic shock. As SARS-CoV-2 spread across nations, economic activity plummeted, first as individuals changed their behaviour and then as

others have prevented many workers from becoming technically unemployed. In the United Kingdom, the headline rate of unemployment for April-June 2020 was

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Conséquences sur le plan
biopsychosocial



Épuisement professionnel

Conséquences sur le plan biomédical



Pandemic threatens primary care for long term conditions

Change is required to ensure effective care during and after covid-19

Louis S Levene,¹ Samuel Seidu,¹ Trish Greenhalgh,² Kamlesh Khunti¹

¹ Diabetes Research Centre, University of Leicester, Leicester, UK

² Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK

Comparing April to August 2020 with the same period in 2019, the total number of general practice appointments in England fell by 20.8%, from 120.66 million to 95.52 million.⁴ Although these statistics should be treated cautiously, they suggest that substantially fewer planned care appointments took place in 2020. The resulting backlog, combined with

What are the changes in use of healthcare during the pandemic? A systematic review

81 studies included

20 nations across Americas, Europe, AsiaPacific

Reported on more than

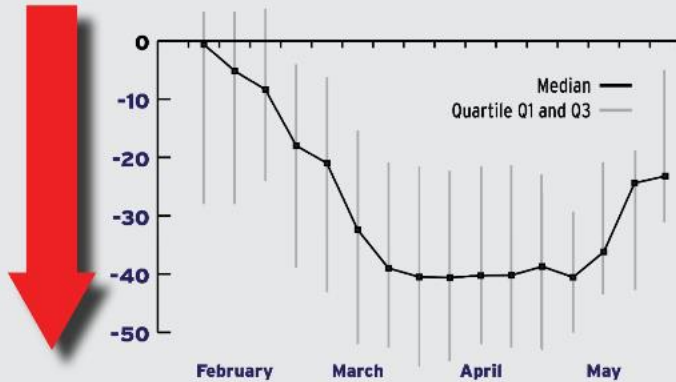
6.9M

healthcare services in the pandemic

11M

in comparator pre-pandemic period

37% Overall median reduction in healthcare services during pandemic compared to pre-pandemic



Reductions in use tended to be greater among those with milder illness



Visits

42%



Tests

31%



Admissions

28%



Treatment

30%

Implications

Health systems need to prioritise unmet need
Crisis offers opportunity to wind back unnecessary care

R Moynihan, S Sanders, ZA Michaleff, AM Scott, J Clark, EJ To, M Jones, E Kitchener, M Fox, M Johansson, E Lang, A Duggan, IA Scott, L Albarqouni. 2020. Pandemic impacts on healthcare utilisation: a systematic review. medRxiv 2020.10.26.20219352



INSTITUTE FOR Evidence-Based Healthcare



Changements
concernant le recours
aux soins de santé
durant la pandémie :
revue systématique

Effets de la réduction du nombre de visites en cabinet?

Interruption du dépistage



Cancer : quelques cas de cancer agressif non détecté vont progresser; beaucoup moins de surdiagnostic du cancer de la prostate

Moins d'ordonnances

Moins de suivi



Antibiotiques : plus d'ordonnances pour les personnes présentant des symptômes respiratoires; moins d'ordonnances pour les autres types de symptômes

Warning of an increased risk of vertebral fracture after stopping denosumab

Christopher Symonds MD, Gregory Kline MD

■ Cite as: *CMAJ* 2018 April 23;190:E485-6. doi: 10.1503/cmaj.180115

KEY POINTS

- Denosumab, a well-tolerated, injectable inhibitor of osteoclast-mediated bone resorption, has been shown in randomized controlled trials to reduce significantly the risk of vertebral and nonvertebral fractures in postmenopausal women with osteoporosis.
- Recent evidence shows that patients previously treated with denosumab who discontinue the drug have an increased risk for rebound vertebral fractures, which are often multiple and may occur as soon as eight months after the last injection of the drug.

La COVID-19 à Montréal



Objectives

1. describe the natural history of COVID-19 in patients followed in family practice
2. to describe cases with enough detail to allow others to make comparisons



Table 3: Emergency Department Visits and Hospitalization

	Total (89)	Male (39)	Female (50)
Cases with ED visit % (n)	27.0% (24)	33.3% (13)	22.0% (11)
Cases with ED visit who were PCR tested % (n)	22.5% (20)	25.6% (10)	20.0% (10)
PCR + % (n)	80% (16)	100% (10)	60% (6)
PCR - % (n)	15% (3)	0% (0)	30% (3)
PCR result missing % (n)	5% (1)	0% (0)	10% (1)
Cases with ED visit who were not PCR tested % (n)	4.5% (4)	7.7% (3)	2% (1)
Symptom onset -> ED visit (days)			
25th %ile	3.5	-	-
Median	8	-	-
75th %ile	26.5	-	-
Hospitalized cases % (n)	11.2% (10)	15.4% (6)	8.0% (4)
Deaths	1	0	1



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Table 4: Drug Treatment

	Prescriptions (N=38 unique patients)
Antibiotics	25*
Hydroxychloroquine	10
Steroids (oral/inh/IV)	9
*21 of 25 received Azithromycin	



Rethinking screening during and after COVID-19

Should things ever be the same again?

James A. Dickinson MBBS PhD CCFP FRACGP Gylène Thériault MD CCFP
Harinder Singh MD MPH FRCPC Olga Szafran MHSA Roland Grad MD CM MSc CCFP FCFP

COMMENTARY

A primary care prevention revolution?

Christina S. Korownyk MD CCFP

Recently I was quizzing my son about the industrial revolution. The memory of my grade 7 social studies class was faint, with vague recollections of the steam

or specialty groups that do not understand the entirety of roles in primary care or recognize opportunity costs in a finite system. Furthermore, the evidence for many

Messages principaux

1. Maintenir la vaccination
2. Réaliser un dépistage seulement pour les problèmes de santé où il est fortement recommandé de le faire
3. Effectuer des évaluations périodiques ciblées, pas des examens annuels

Table 2. Recommendations on screening for cardiovascular disease and cancer

SCREENING FOR ...	RECOMMENDATION BY CTFPHC	INTERVAL	NEED FOR CLINIC VISIT
Cardiovascular disease			
• Hypertension	Strong	3-5 y	No
• Dyslipidemia	No CTFPHC recommendation • Men > 40 y, women > 50 y ²¹	5 y	No, laboratory
• Type 2 diabetes	Conditional. Use risk calculator to assess • For high risk (> 30% 10-y risk) • For very high risk (> 50% 10-y risk)	3-5 y Annual	No, laboratory
• Abdominal aortic aneurysm	Conditional • Men 65-80 y	Once	Imaging centre
Cancer			
• Colorectal	Conditional for age 50-59 y Strong from age 60-74 y	2 y	No
• Cervical	Conditional from age 25 y Strong from age 30-65 y	3 y	Yes
• Breast	Conditional	2-3 y	Imaging centre
• Lung	Conditional if in high-quality centre	Annually for 3 y	Imaging centre

CTFPHC—Canadian Task Force on Preventive Health Care.



Commentary

Competing demands and opportunities in primary care

Christina Korownyk MD CCFP James McCormack PharmD Michael R. Kolber MD CCFP MSc
Scott Garrison MD CCFP PhD G. Michael Allan MD CCFP

Historically, preventive interventions have yielded dramatic improvements in population health, with

the number of cardiology guideline recommendations increased by 48%.⁹ Over a similar period, the number

Table 2. Comparison of benefit of interventions across primary care

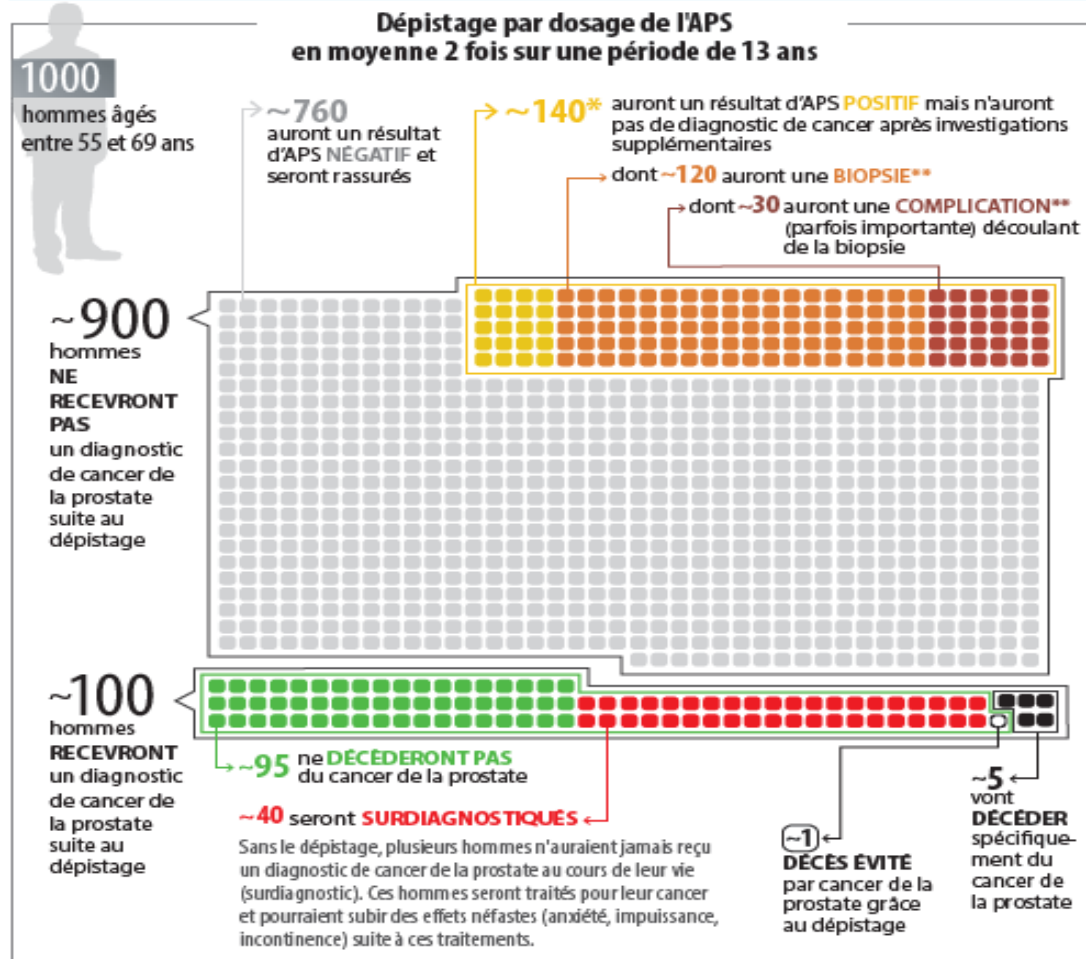
CATEGORY	ACUTE SYMPTOMS	LONG-TERM SYMPTOMATIC CONDITIONS	CVD (PRIMARY PREVENTION)	CANCER SCREENING (CANCER-SPECIFIC MORTALITY)	SOCIAL SCREENING OR HEALTH PROMOTION
Estimated benefit	NNT = about 5	NNT = about 7	NNT = about 40 over 5 years	NNS = about 1000 over 10 years	NNS = ∞
Encounters with benefit per year	176* to 720 [†]	143 [‡] to 617 [§]	3.25 to 12 [¶]	0.13 [#] to 0.36 ^{**}	0
Encounters with benefit over 30 years	5280 to 21 600	4290 to 18 540	98 to 360	4 to 11	0

CVD—cardiovascular disease, NNS—number needed to screen, NNT—number needed to treat.

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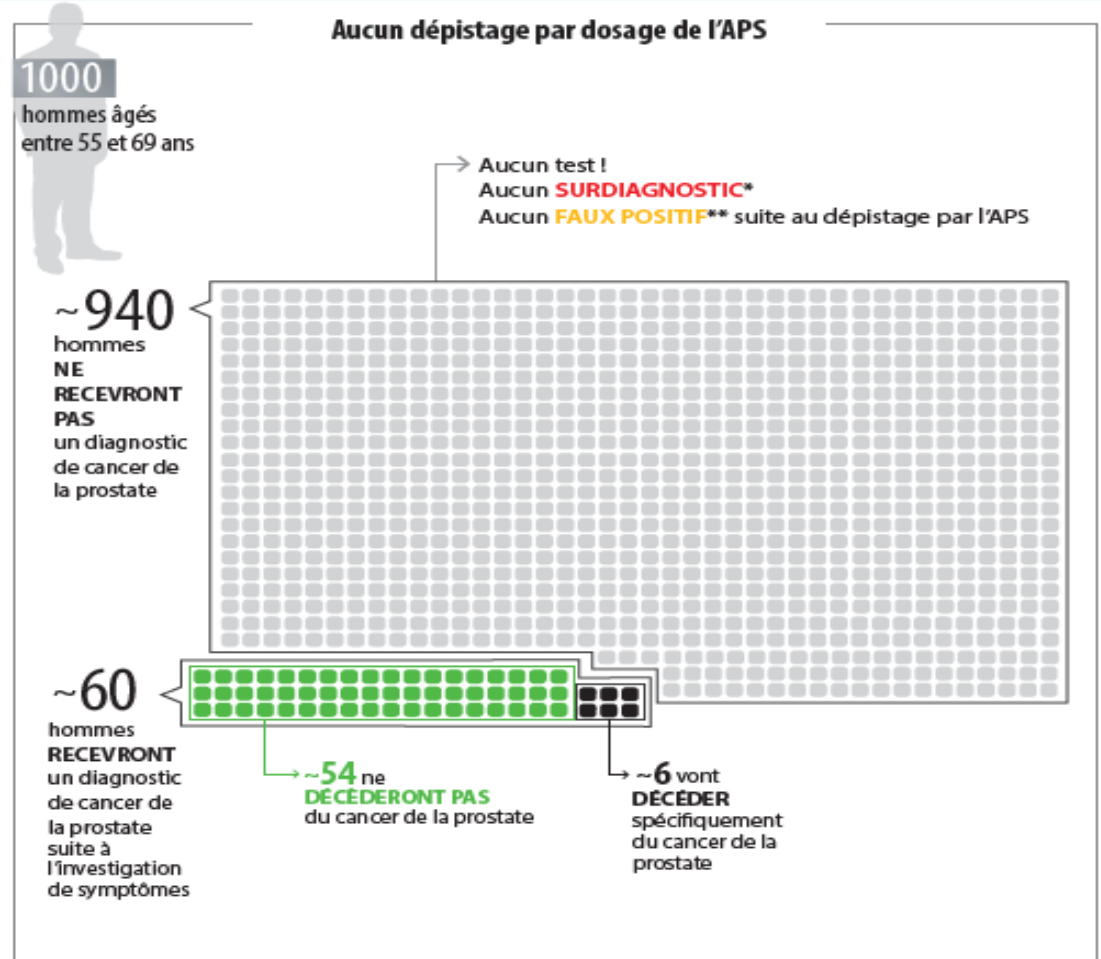
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Les données de l'European Randomised Study of Screening for Prostate Cancer (ERSPC) ont été utilisées pour illustrer la balance entre les risques et les bénéfices potentiels associés au choix de se faire dépister ou non. La présence d'incertitudes inhérente à ce type d'estimation, notamment à cause de limites méthodologiques et de l'évolution de la pratique, fait en sorte que les bénéfices et les risques potentiels présentés pourraient s'avérer supérieurs ou moindres selon la pratique clinique privilégiée.



* Au Québec, le seuil d'investigation a été établi à une concentration d'APS $\geq 4,0$ ng/mL alors que les estimations de l'ERSPC résultent d'un seuil $\geq 3,0$ ng/mL.

** La prise en charge des résultats positifs ayant évolué depuis les essais randomisés, il est très probable qu'il y ait moins de biopsies et donc moins de complications liées à celles-ci. L'impact de ce changement de pratique sur les complications et la survie n'est pas connu. Les complications possibles liées à la biopsie sont l'infection ou des saignements avec ou sans hospitalisation.

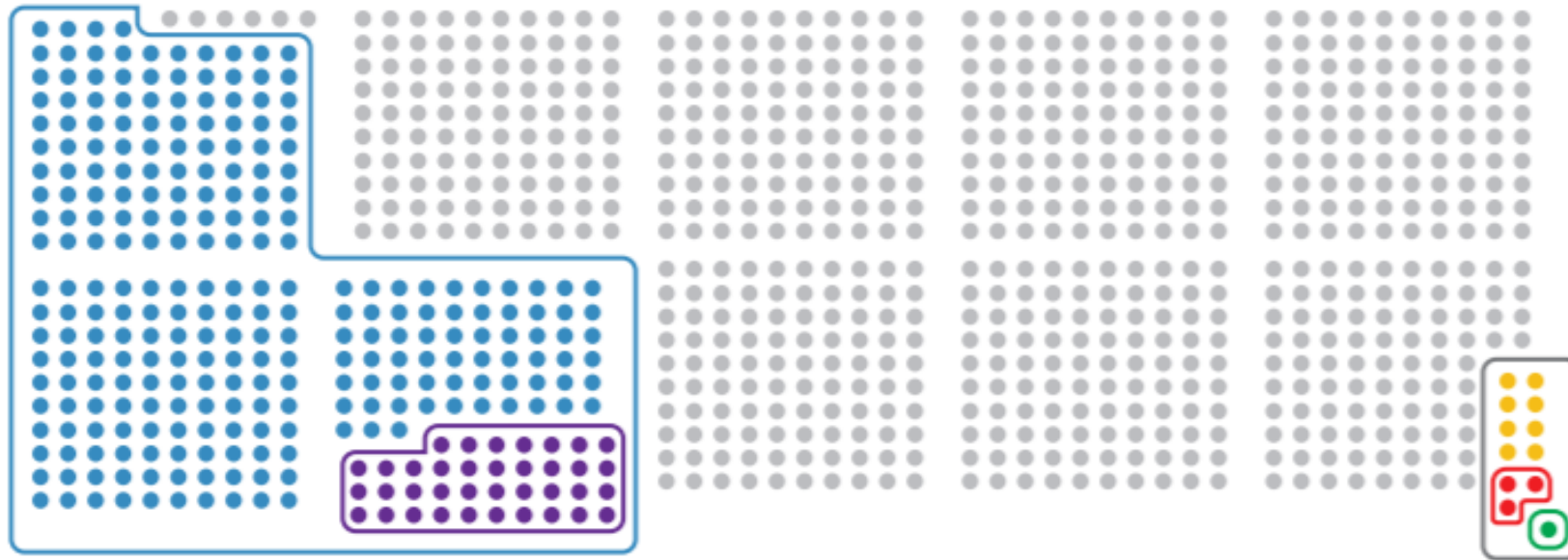


*~40 hommes vont ÉVITER UN SURDIAGNOSTIC. Pas de tests, pas de diagnostic, pas de traitement.

**~140 hommes vont ÉVITER DE RECEVOIR UN RÉSULTAT FAUSSEMENT POSITIF suite au dépistage par l'APS.



Screening 1000 women not at increased risk aged 50–59 over 7 years



With screening:

294 women will have a false positive test result

37 women will have an unnecessary biopsy

12 women will be diagnosed with breast cancer. Among these 12 women:

8 will die of breast cancer despite screening, detection and management

3 will be treated for breast cancer that would have never caused a problem

1 breast cancer death will be prevented

1333 women in this age group would need to be screened to prevent one death

Perception du risque

VIEWPOINT

How (or Do) People “Think” About Cancer Risk, and Why That Matters

**William M. P. Klein,
PhD**
Behavioral Research
Program, National
Cancer Institute.

Much of clinical oncology hinges on the assessment, management, and communication of risk. Screening and genetic testing help identify future cancer risk; treatment decisions involve weighing competing risks; and

diseased lungs and gums to be placed on cigarette packs, based on a wealth of evidence that such labels increase public acknowledgment of smoking risk.⁵ The labels failed to survive litigation because, in part, a US court

Review | LESS IS MORE

Patients' Expectations of the Benefits and Harms of Treatments, Screening, and Tests A Systematic Review

Tammy C. Hoffmann, PhD; Chris Del Mar, MD, FRACGP

Clinicians' Expectations of the Benefits and Harms of Treatments, Screening, and Tests A Systematic Review

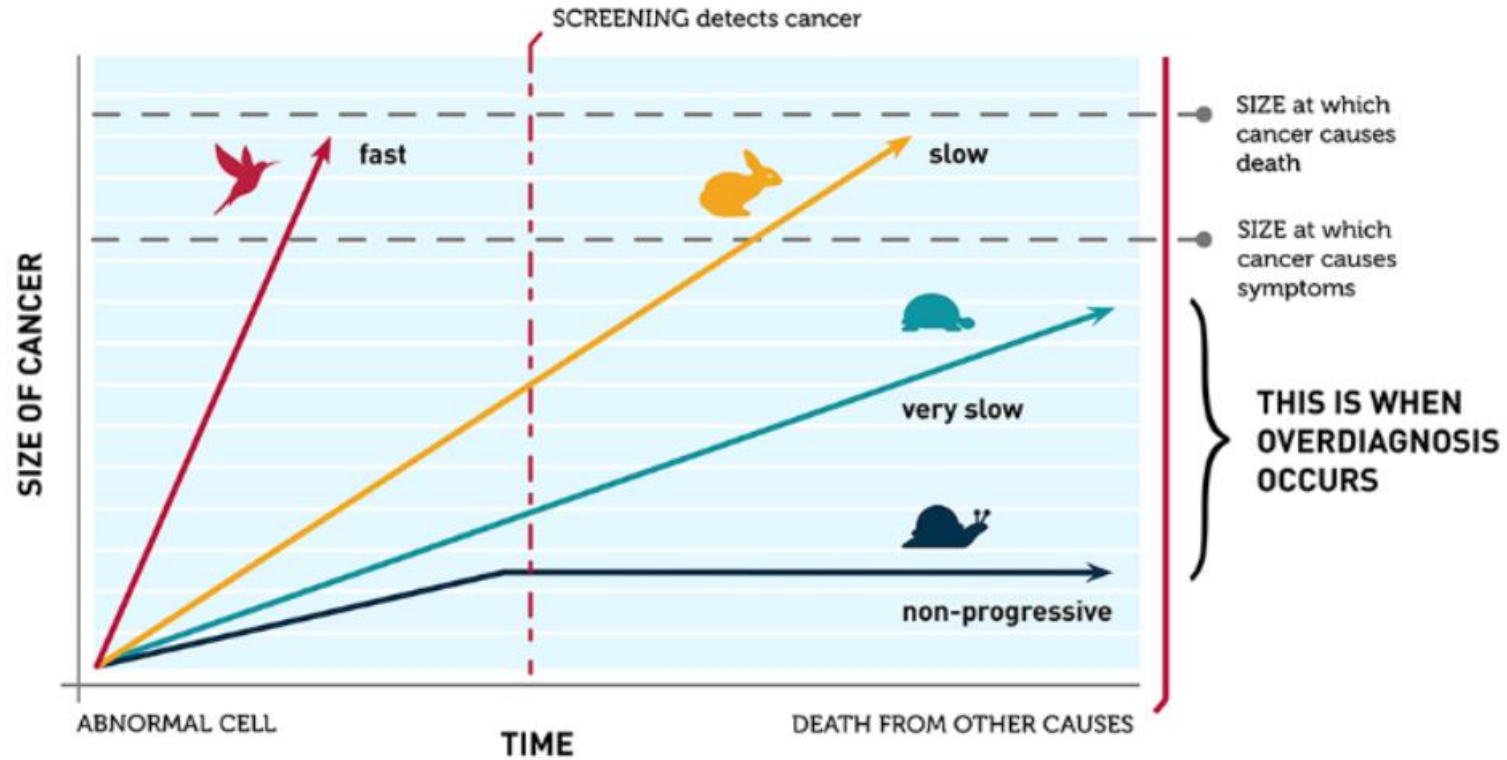
Tammy C. Hoffmann, PhD¹; Chris Del Mar, MD, FRACGP¹

» [Author Affiliations](#)

JAMA Intern Med. 2017;177(3):407-419. doi:10.1001/jamainternmed.2016.8254

OVERDIAGNOSIS

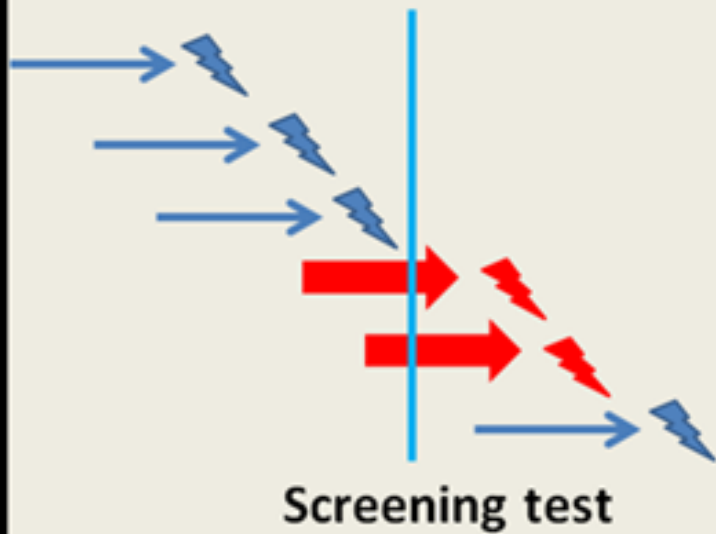
occurs when screen-detected cancers are either **non-growing** or so **slow-growing** that they would never cause medical problems



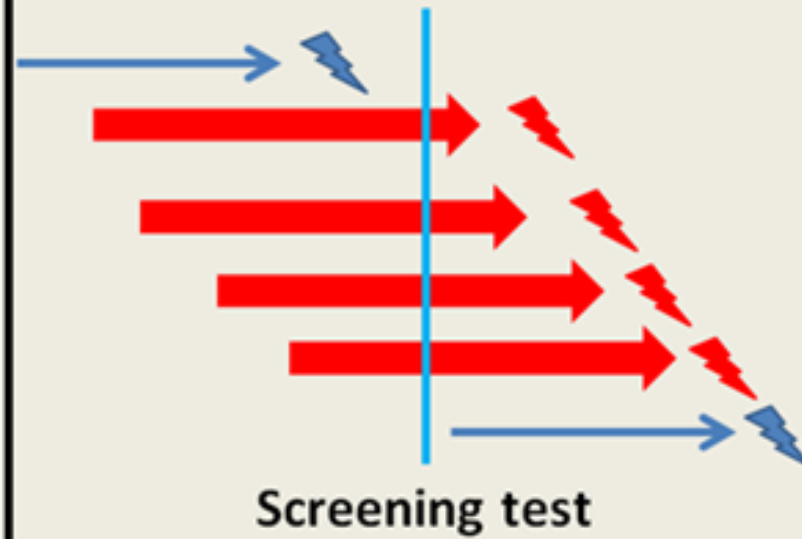
*Adapted from a figure courtesy of
H. Gilbert Welch, Dartmouth Medical School*




Length Bias

Rapidly Progressive Disease



Slowly Progressive Disease



-  = Clinical Onset of Disease
-  = Case Detected by Screened
-  = Case Missed by Screened



Opinion Political Op-Eds Social Commentary

The unexpected side effect of Covid-19

Opinion by H. Gilbert Welch and Vinay Prasad

🕒 Updated 7:48 PM ET, Wed May 27, 2020

<https://www.cnn.com/2020/05/27/opinions/unexpected-side-effect-less-medical-care-covid-19-welch-prasad/>



The unexpected side effect of Covid-19

Opinion by H. Gilbert Welch and Vinay Prasad

🕒 Updated 7:48 PM ET, Wed May 27, 2020

later date. But it is important to consider another possible outcome: some do better with less medical care.

The unexpected side effect of Covid-19

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🕒 Updated 7:48 PM ET, Wed May 27, 2020

or, in fact, declines. Clearly, it will be important to carefully study 2020 mortality trends and disentangle Covid-related deaths from other causes of death. It will be equally important to distinguish the well-off from the poor: we may find that medical care disruption decreases mortality among the well-off, yet increases mortality among the poor.

The unexpected side effect of Covid-19

Opinion by H. Gilbert Welch and Vinay Prasad

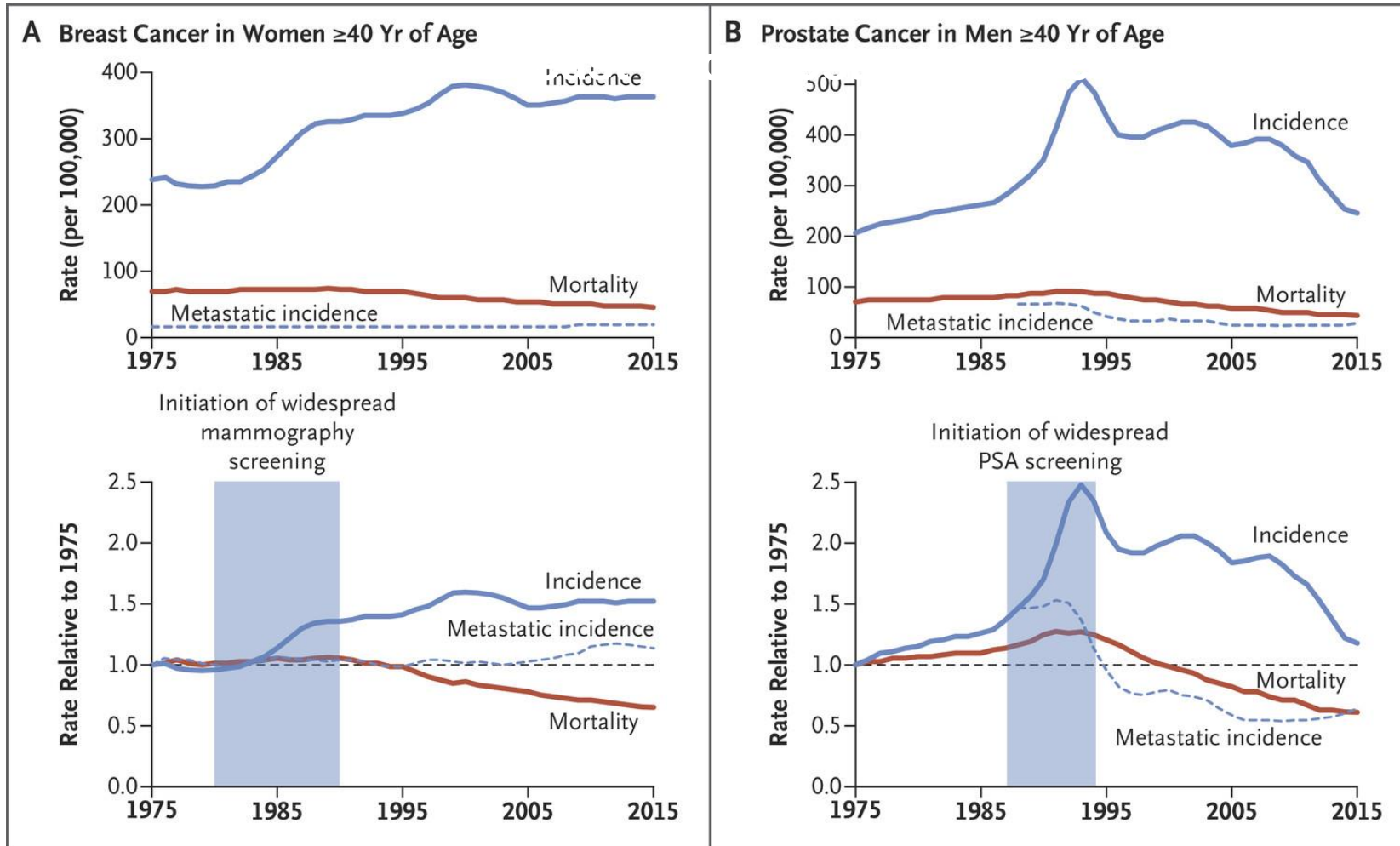
🕒 Updated 7:48 PM ET, Wed May 27, 2020

Suspending cancer screening is another important area to study. There is little doubt, for example, that the decline in mammography will lead to fewer breast cancers diagnosed. But is that a bad thing or good thing?

ORIGINAL INVESTIGATION

The Natural History of Invasive Breast Cancers Detected by Screening Mammography

Per-Henrik Zahl, MD, PhD; Jan Mæhlen, MD, PhD; H. Gilbert Welch, MD, MPH



HG Welch *et al.* N Engl J Med 2019;381:1378-1386.



Qu'apprendrons-
nous?



**DÉPISTER AVEC SOIN : OUTIL DE COMMUNICATION AVEC LES PATIENTS
QUI DEMANDENT DES TESTS FORTEMENT DÉCONSEILLÉS**



Lorsqu'un patient demande un test fortement déconseillé : écouter, reconnaître, recentrer

- Écouter ses propos : Essayer de découvrir les raisons derrière sa demande.
- Reconnaître ses besoins : Répéter ses inquiétudes et ses priorités.
- Recentrer ses priorités : Lui expliquer pourquoi le Groupe d'étude canadien déconseille fortement le test en question et pourquoi il faut se concentrer sur des problèmes de santé plus importants (lorsque pertinent).

Exemple discussion avec un patient désirant un dépistage du dysfonctionnement thyroïdien

Patient

J'ai lu sur le dépistage du dysfonctionnement thyroïdien et j'aimerais en subir un.

Clinicien

Pourquoi êtes-vous préoccupé par le dysfonctionnement thyroïdien?



Respecter l'incertitude



Tous les modèles sont erronés, mais certains sont utiles

Ce que nous ne savons pas doit nous rendre humbles

¹ University of Bristol, Bristol, UK

² Winton Centre for Risk and Evidence Communication, Centre for Mathematical Sciences, University of Cambridge, Cambridge, UK

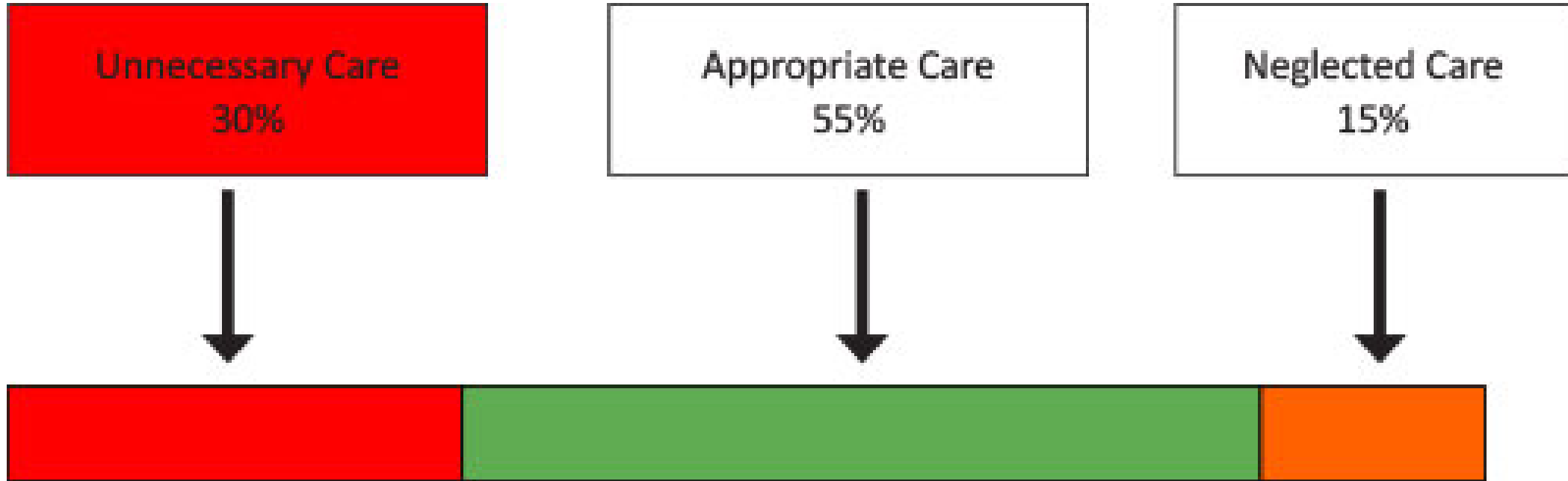
Covid-19's known unknowns

The more certain someone is about covid-19, the less you should trust them

George Davey Smith, ¹ Michael Blastland, ² Marcus Munafò¹



Changements
concernant le recours
aux soins de santé
durant la pandémie :
revue systématique



**Thank
You** *Mahalo*
Tack **Kiitos**
Grazie **Toda**
Obrigado **Thanks**
Takk **Merci**
Gracias



Réseau-1 Québec

Prochain webinaire :

Mener un projet de recherche multi-provinces en partenariat avec des patients : l'expérience de l'équipe PriCARE

11 décembre 2020 de 12h à 13h

Dre Catherine Hudon

YouTube : webinaires enregistrés et disponibles

Devenez membres : <http://reseau1quebec.ca/membres-et-partenaires/>

Question ou idée de webinaire : webinaires@reseau1quebec.ca

Merci de compléter le sondage sur le webinaire d'aujourd'hui !



@reseau1quebec