Public Health Ontario | Santé publique Ontario

To view an archived recording of this presentation please click the following link:

https://www.youtube.com/watch?v=uHIYrsW59oM

Please scroll down this file to view a copy of the slides from the session.

eCOVID19 RecMap & Gateway to Contextualization: Finding and Using Evidence on COVID-19 in Public Health

An online living map that catalogues all COVID-19 recommendations into one place.

Dr. Thomas Piggott

Medical Officer of Health/CEO, Peterborough Public Health

@twpiggott

covid19.recmap.org

Click here to visit

Peterborough Public Health

McMaster University

Cochrane Canada

CIHR IRSC

Declarations of Interest

- Land acknowledgement: Peterborough/Nogojiwanong is on the Treaty 20 Michi Saagiig territory of the Williams Treaties First Nations. PPH serves Curve Lake and Hiawatha First Nations.
- Employer: Peterborough Public Health. Previously Labrador-Grenfell Health Authority (2019-21).
- Education: McMaster University, LSHTM, University of Guelph.
- Personal: White Cis-Gendered Male Able-bodied Settler from a priviledged class background/upbringing.
- Intellectual Interests:
  - Member of GRADE Working Group and interest in evidence-based public health guidelines & practice;
  - Co-editor of a book called: Under-Served
- Financial Conflicts of Interest: No financial interests from industry of any kind, including pharmaceutical companies. Contributions for grant/consulting research, including travel reimbursement, from the WHO, European Commission, CIHR, Endocrine Society, MS International Federation.

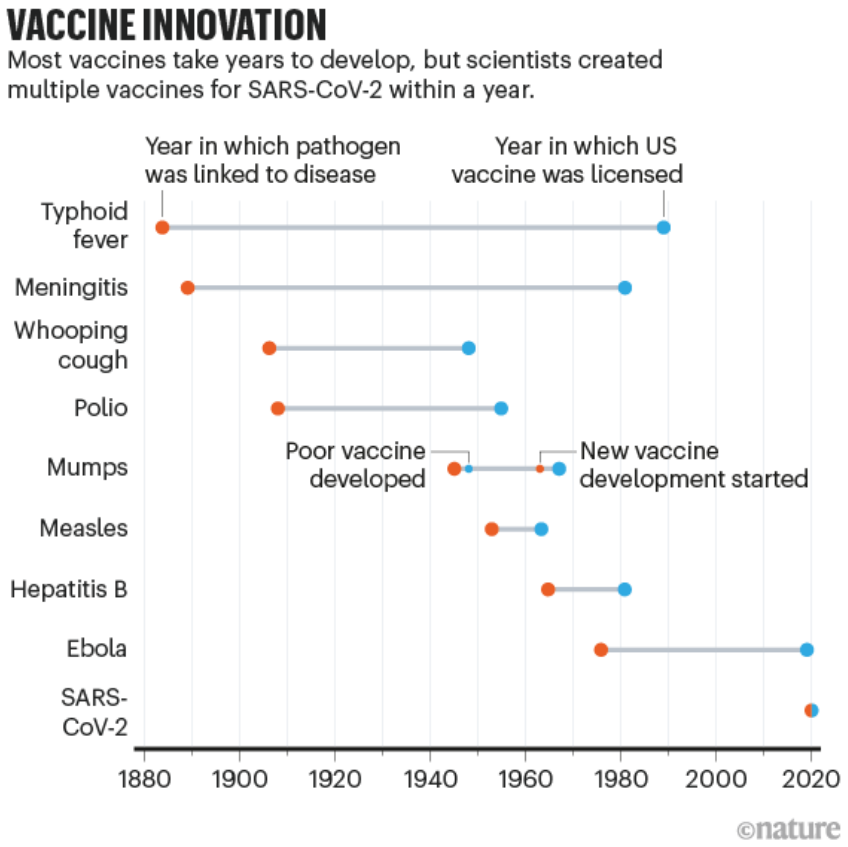
Outline

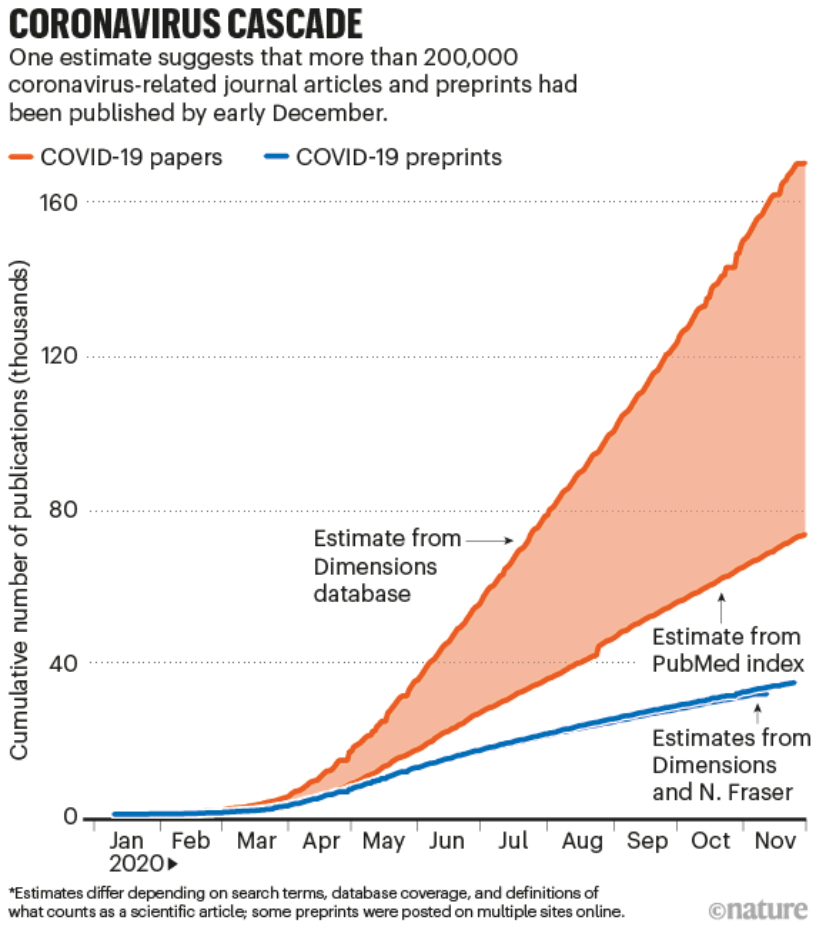
- Describe the role of **guideline development** in the COVID-19 pandemic.
- Provide public health practitioners and other stakeholders with an **introduction to the international e-COVID RecMap** project that presents easy-to-navigate trustworthy COVID-19 recommendations.
- Identify COVID-19 **recommendations** that are critically appraised and available for **contextualization** and **implementation**.
- Identify ways that the **RecMap could be further used by public health locally**, including introducing strategies that Peterborough Public Health will be using to present Plain Language Recommendations in public communication on COVID-19 evidence.

Science in the COVID-19 Pandemic (some assertions):

- Has moved at an **unprecedented rate**;
- With significant global **collaboration (e.g. trials)**, however;
- With significant **duplication** of work, particularly in evidence synthesis;
- The **pace** has challenged health decision-makers in new ways;
- The deluge of misinformation, facilitated with social media, has caused an **infodemic**;
- Disagreement and changing guidance has **eroded public trust**;
- In addition to bewildered practitioners;
- We are not left more prepared for the continued evolution of the pandemic and;
- future threats...

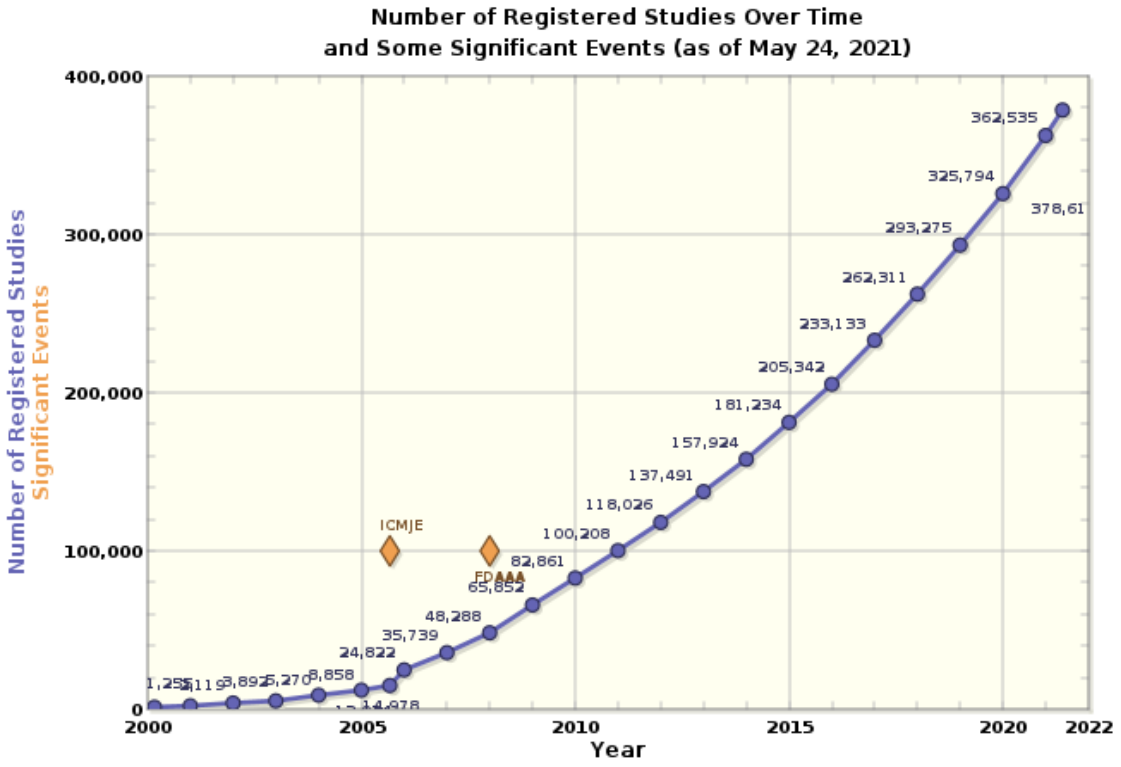
Unprecedented Pace & Collaboration in Science





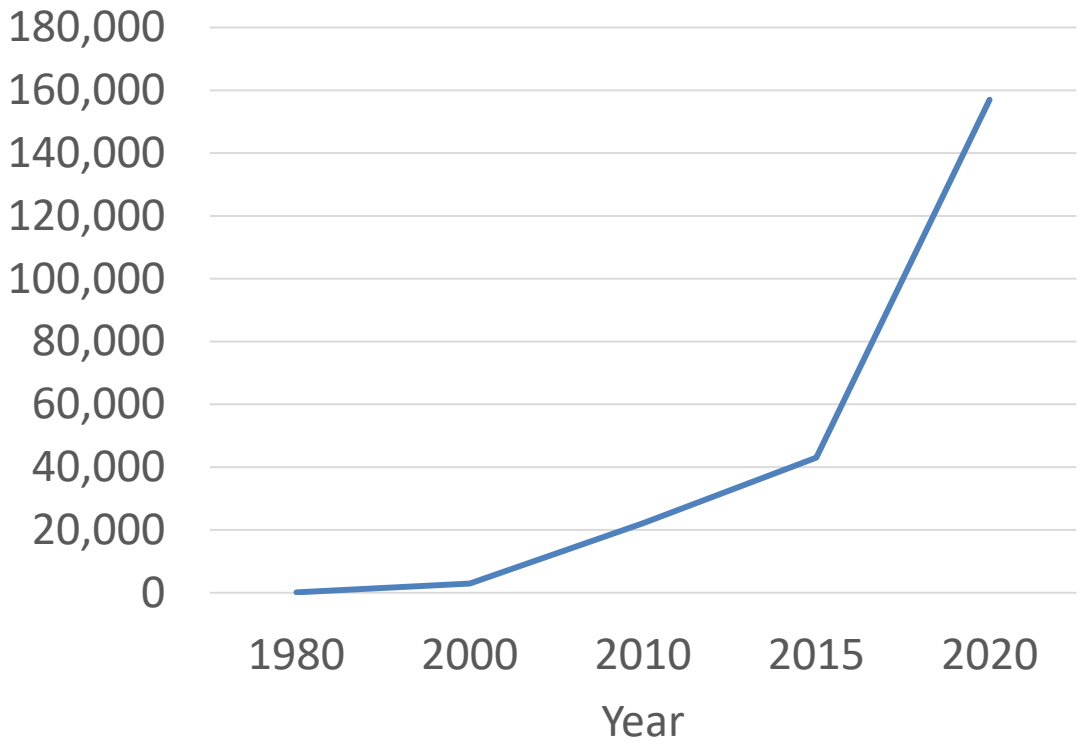
https://www.nature.com/articles/d41586-020-03564-y

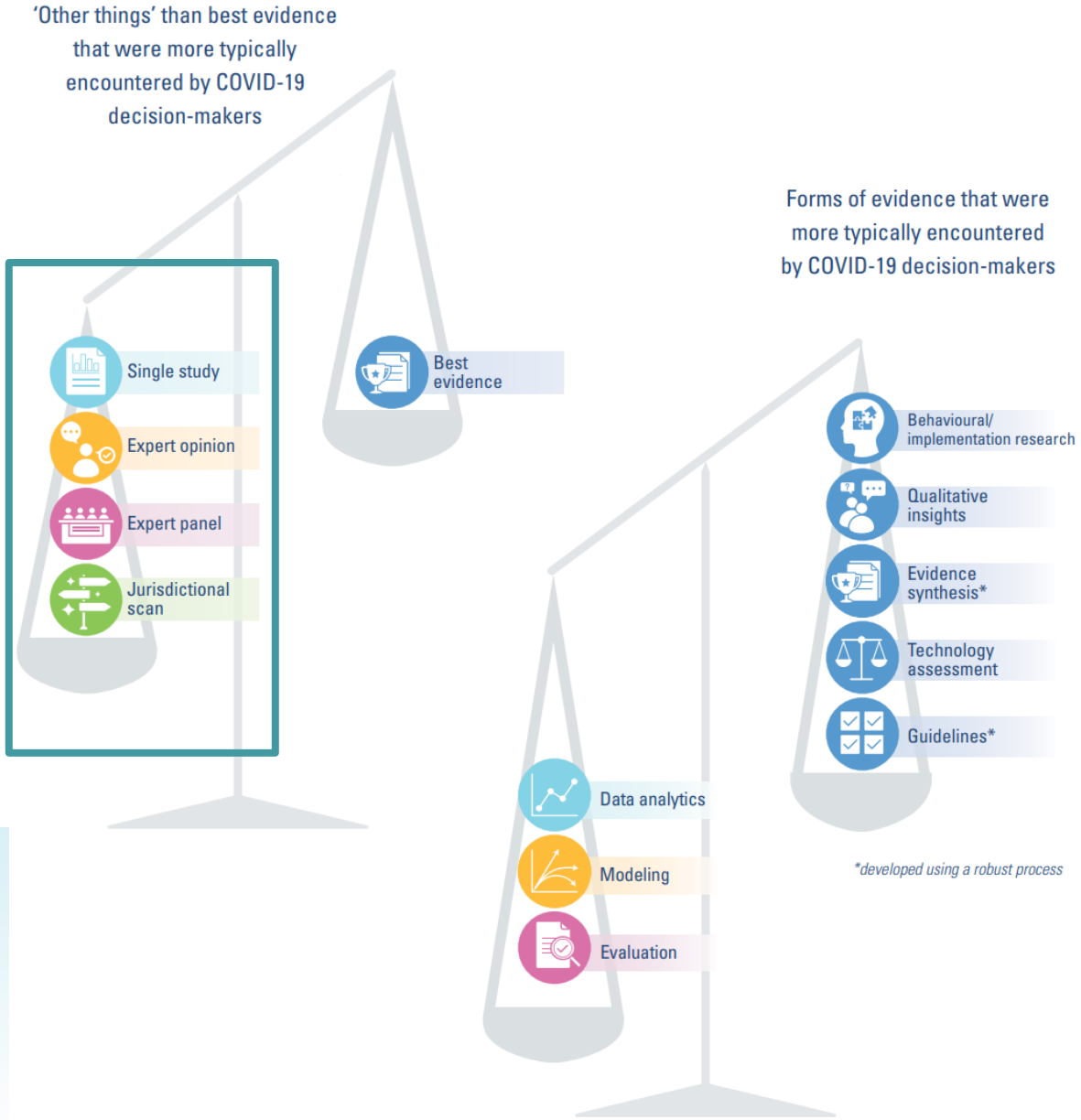
Increasing Challenges in Evidence Synthesis



Source: https://ClinicalTrials.gov

# of Health Sciences Systematic Reviews (indexed on Medline)

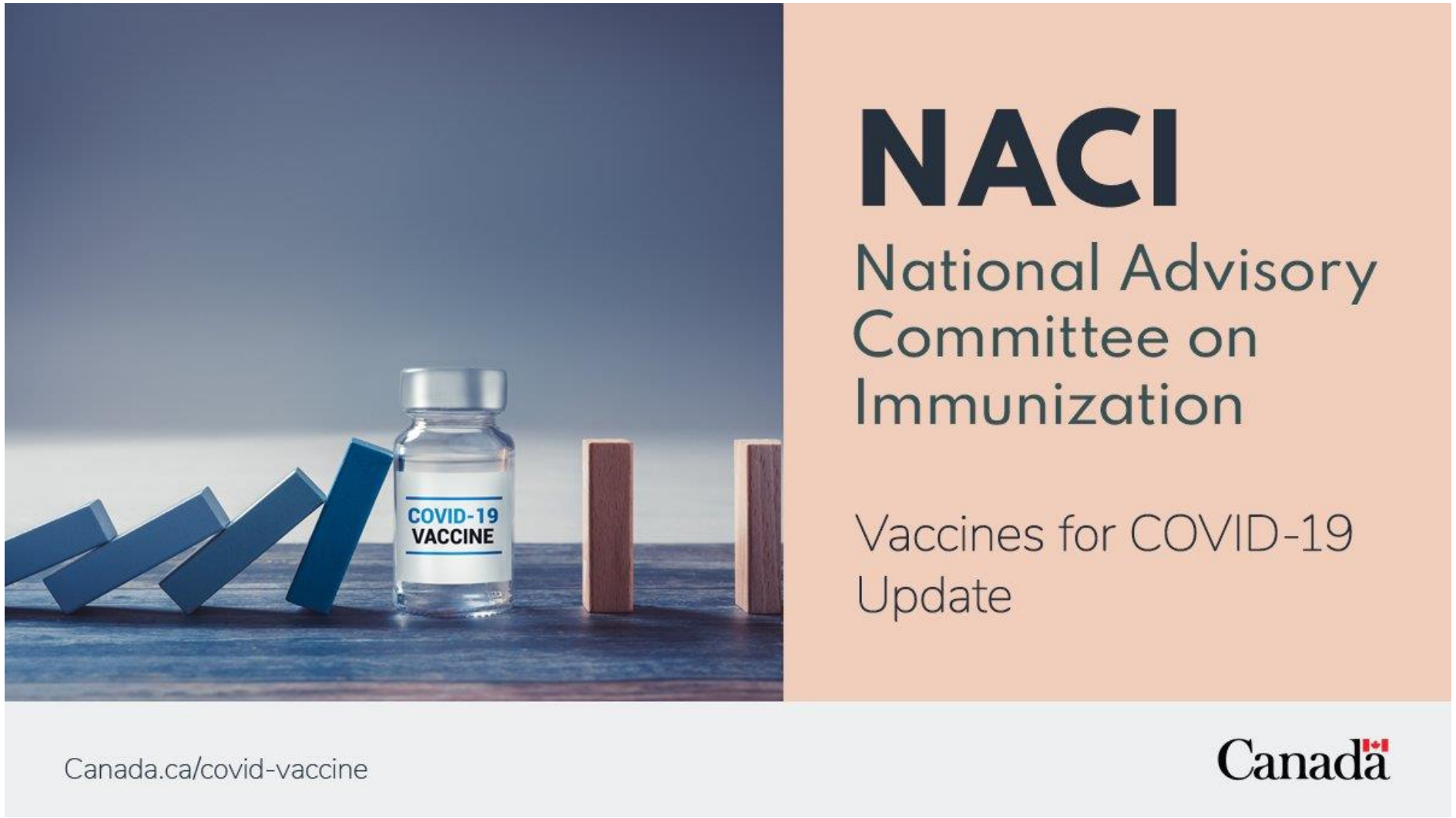




Global Commission on Evidence to Address Societal Challenges

https://www.mcmasterforum.org/networks/evidence-commission

Where it has worked well…



GOBSAT Method for Guidelines

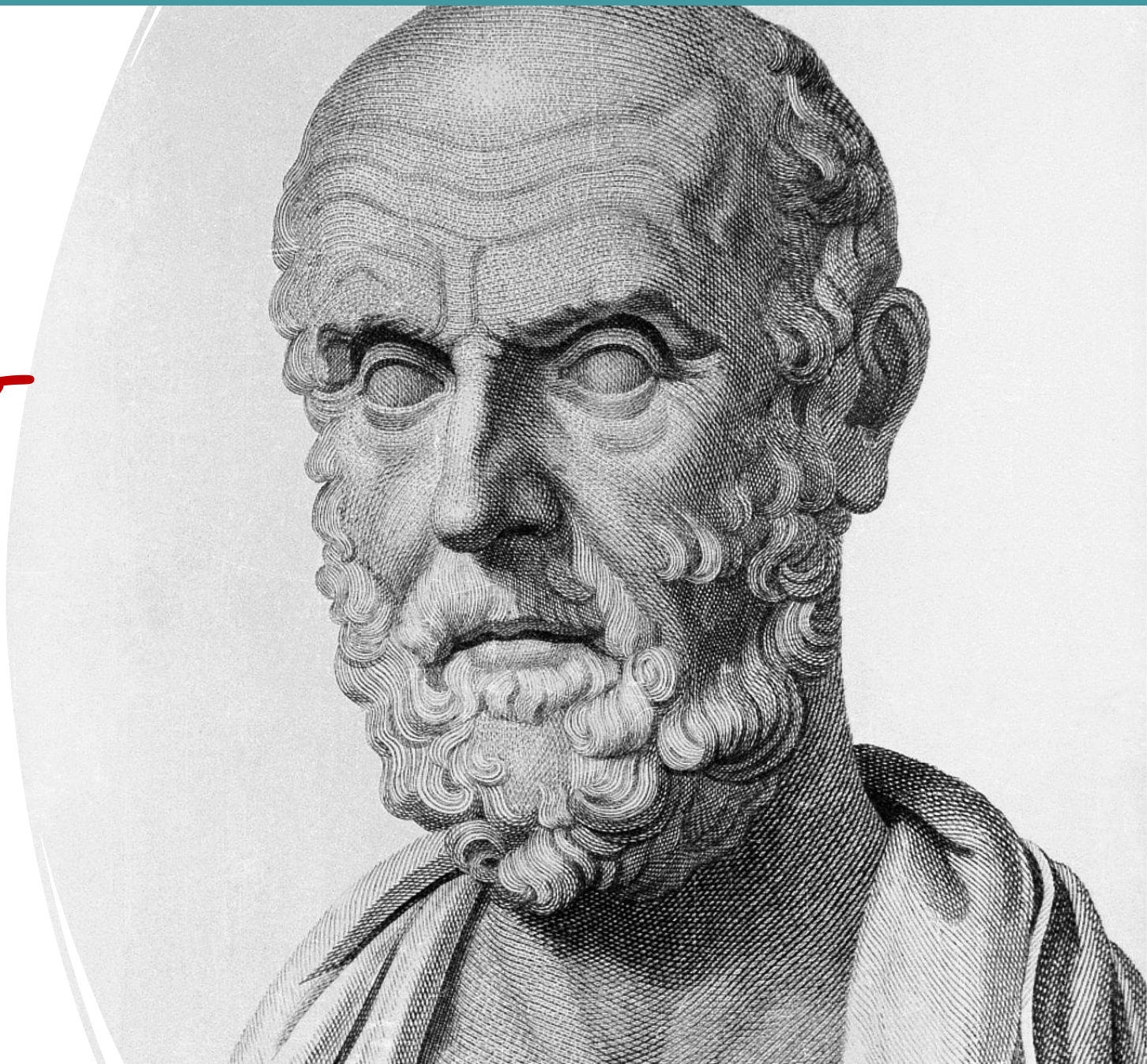
- **‘Good old boys sat around the table’**
- Initial approach to development of recommendations within guidelines
- Based on expert opinion, powerful figures, eminence based medicine

Coolidge - His Station and Four Aces (1903)

GRADE working group

- Began as an informal working group in 2000
- Informal collaboration of researchers/guideline developers with interest in methodology
- Purpose: to develop a common system for grading the quality (certainty) of evidence and the strength of recommendations that is transparent and sensible
- **Over 100** organizations endorse Grading of Recommendations Assessment, Development and Evaluation (GRADE) methods including: **World Health Organization (WHO,) National Institute for Health and Care Excellence (NICE), Centers for Disease Control and Prevention (CDC), Agency for Healthcare Research and Quality (AHRQ), JBI, Cochrane, professional societies, academic institutions since 2000 – over 100 use GRADE**

First Do No *NET* Harm



False Dichotomies in Public Health

Escandón *et al. BMC Infectious Diseases* (2021) 21:710
https://doi.org/10.1186/s12879-021-06357-4

BMC Infectious Diseases

REVIEW Open Access

COVID-19 false dichotomies and a comprehensive review of the evidence regarding public health, COVID-19 symptomatology, SARS-CoV-2 transmission, mask wearing, and reinfection

Kevin Escandón[1*], Angela L. Rasmussen[2,3], Isaac I. Bogoch[4], Eleanor J. Murray[5], Karina Escandón[6], Saskia V. Popescu[3,7] and Jason Kindrachuk[2,8]

STRENGTH

CERTAINTY

Figure 1. *Belief and confidence: a two-dimensional weather report. (Reprinted by permission from the Wall Street Journal).*

GRADE

Question

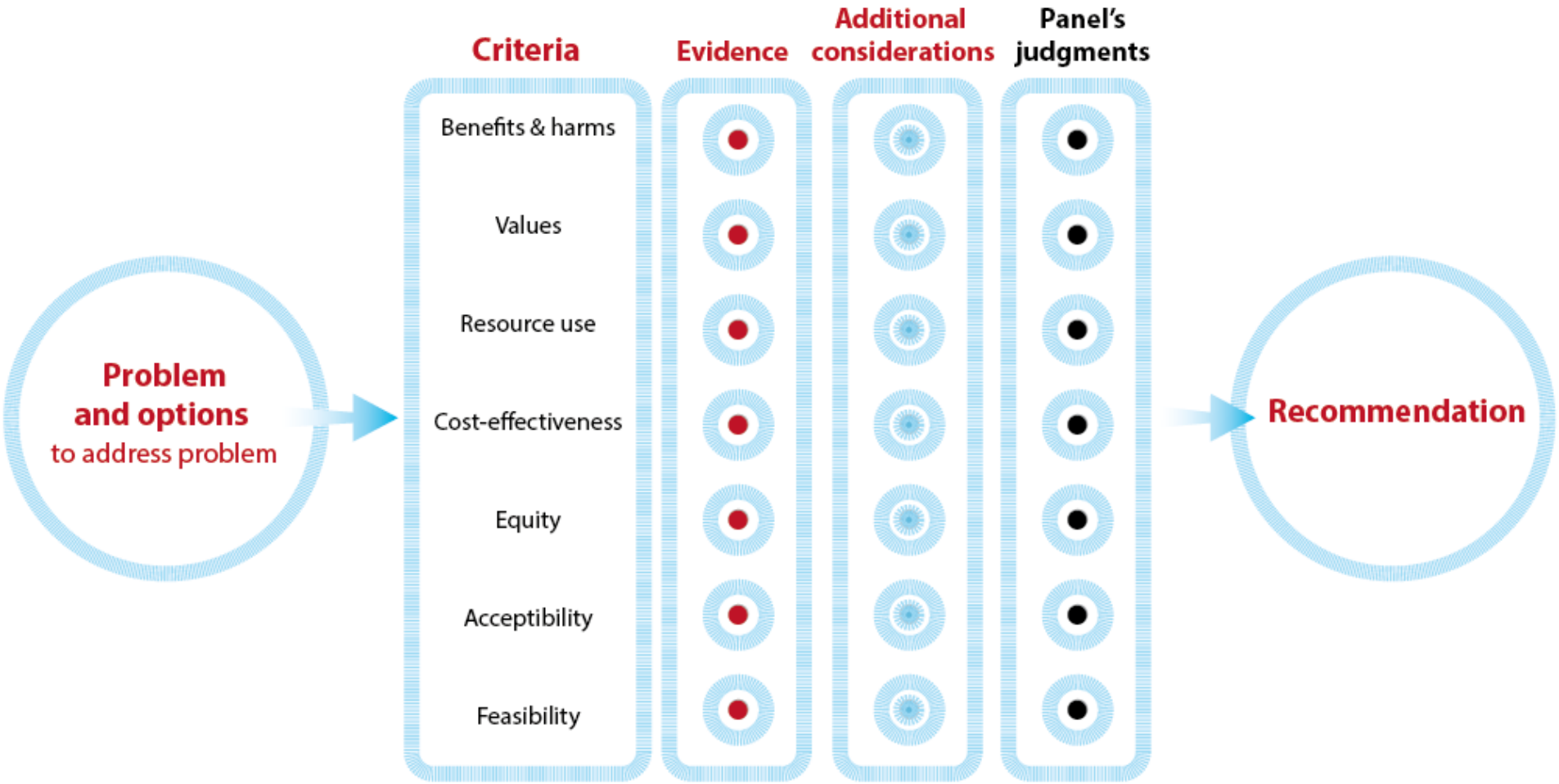
*Systematic Review

Evidence

*Evidence to Decision

Decision

GRADE Evidence to Decision



Diverging Recommendations

Table 2. Summary of diverging recommendation clusters

Overall summary of diverging clusters	(*n*)	(%)
Number of total diverging clusters	66	100
Number of clinical clusters	29	43.9
Number of nonclinical clusters (i.e., public health)	37	56.1
Summary of Type of Diverging Clusters		
Diverging in the explicit judgment of strength only	19	28.8
Diverging in the explicit judgment of direction only	9	13.6
Diverging in the explicit judgment of strength and direction[a]	6	9.1
Diverging in subgroup considerations of the population	6	9.1
Diverging in subgroup considerations of the intervention	26	39.4
Summary of Diverging Clusters Across Intervention Groups		
Pharmacological interventions	21	31.8
Other clinical interventions	8	12.1
Infection prevention and control measures	21	31.8
Vaccination-related measures	8	12.1
School-related measures	8	12.1

[a] At least one recommendation in the cluster diverges in strength and at least one different recommendation in the same cluster diverges in direction.

Are different recommendations addressing a same question saying the same thing?

ORIGINAL ARTICLE | ARTICLES IN PRESS

An evaluation of the eCOVID19 Recommendation Map identified diverging Clinical and Public Health guidance

Zil H. Nasir • Dominik Mertz • Robby Nieuwlaat • ... Ignacio Neumann • Holger J. Schünemann • for the eCOVID-19 recommendations map Collaborators • Show all authors

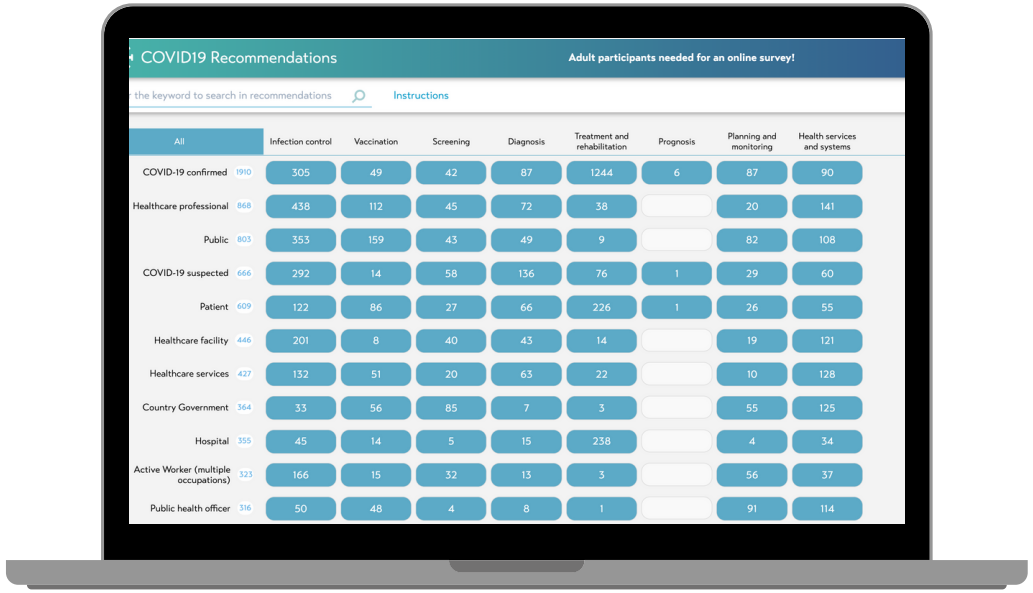
Published: March 23, 2022 • DOI: https://doi.org/10.1016/j.jclinepi.2022.03.008

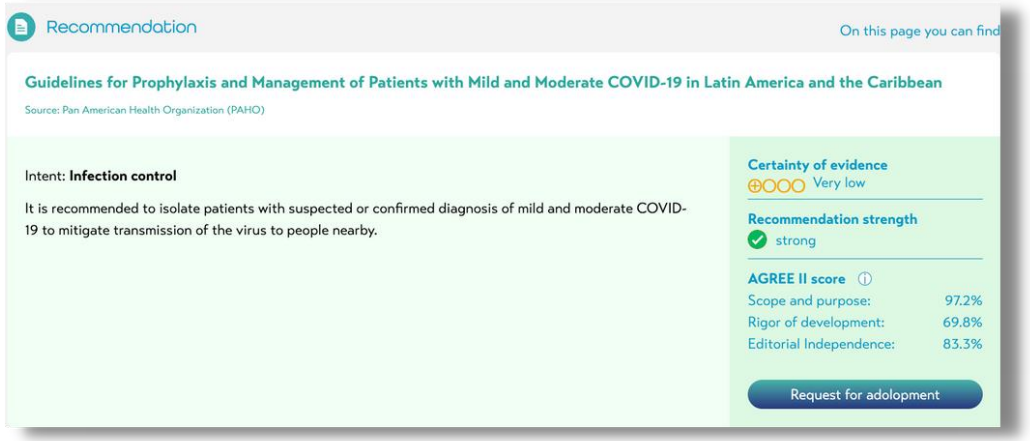
What is a living recommendations map?

A living recommendations map provides decision-makers and other stakeholders (including the public) with an:

- **Easy to navigate**
- **Living**
- **Freely Accessible**
- **Electronic Platform**

That includes all available and appraised recommendations and allows users to adapt recommendations to their context



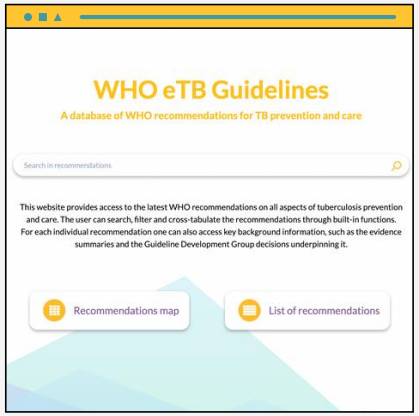


Poll #1

- Have you used the eCOVID RecMap before?
- Answers: *(please number your answers below (e.g. 1, 2, 3)*
  - *Yes*
  - *No*

A Timeline of Living Recommendation Maps

The first recommendations map was developed for WHO global tuberculosis recommendations but now is used globally for COVID19 Recommendations and by WHO for their COVID19 products



who.tuberculosis.recmap.org

covid19.recmap.org

who.covid19.recmap.org

2019

2020

2021

PLOS GLOBAL PUBLIC HEALTH

RESEARCH ARTICLE

Comparing the usability of the World Health Organization's conventional tuberculosis guidelines to the eTB recommendations map: A two-arm superiority randomised controlled trial

Micayla Matthews[1,2], **Tamara Lotfi**[1,2], **Nancy Santesso**[1,2], **Mark Loeb**[1,2], **Dominik Mertz**[1,3], **Zain Chagla**[1,3], **Anisa Hajizadeh**[1,4], **Thomas Piggott**[1], **Bart Dietl**[5], **Holger J. Schünemann**[1,2,6]*

1 McMaster University Department of Health Research Methods, Evidence and Impact, Hamilton, Ontario, Canada, **2** McMaster University Michael G. DeGroote Cochrane Canada and GRADE Centre, Hamilton, Ontario, Canada, **3** Department of Medicine, McMaster University, Hamilton, Ontario, Canada, **4** Department of Primary Care, Oxford University, Oxford, United Kingdom, **5** Evidence Prime Incorporated, Hamilton, Ontario, Canada, **6** Department of Biomedical Sciences, Humanitas University, Milano, Italy

* schuneh@mcmaster.ca

Participants (n=244) rated the eTB RecMap as more accessible, on average, when compared to the conventional website (on a seven-point scale, the mean difference {MD} was 0.9; 95% confidence interval {CI}: 0.6, 1.2; $p < 0.001$) and were more likely to correctly answer understanding questions.

COVID19 Recommendations

The Project in Numbers

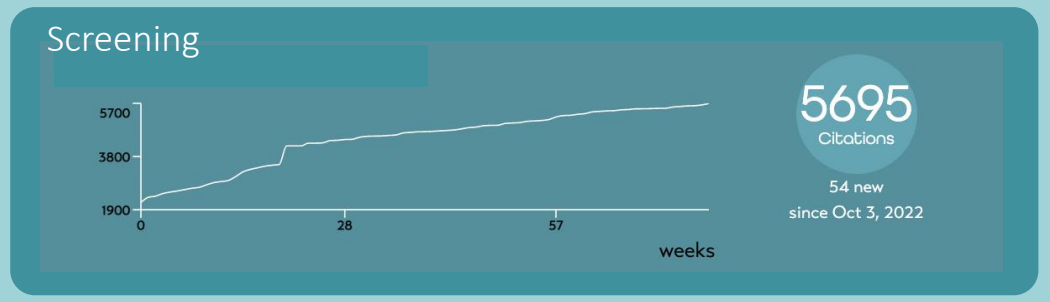
Our Team

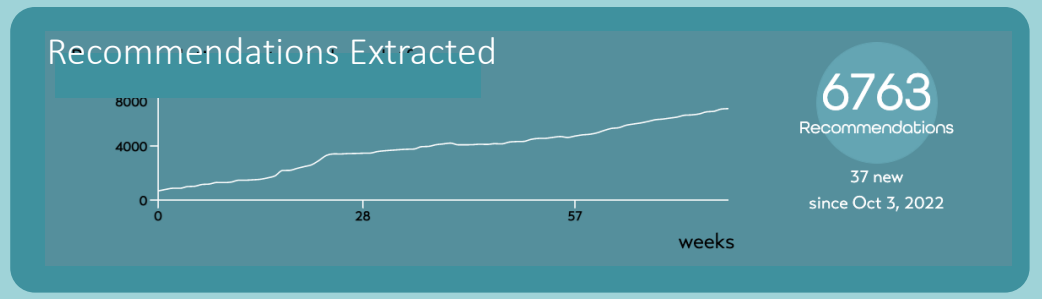
57 Researchers on our team extract, code, and post recommendations to the map, including language translators who collectively participate from **19 countries**

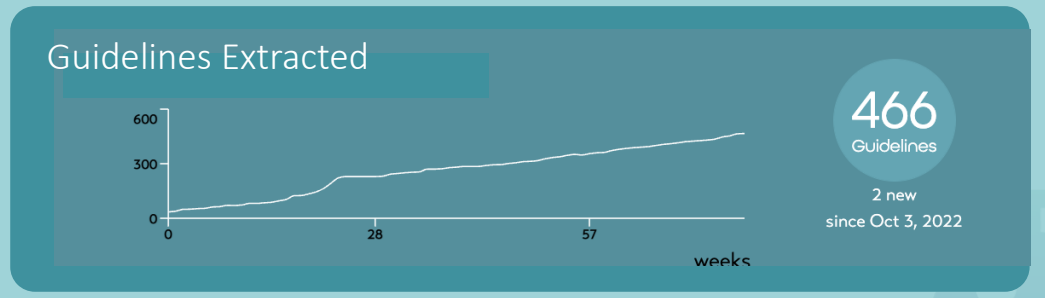
Users

Over **26 K** users from **169 countries**

As of October 3rd, 2022







eCOVID19 Recommendations Map & Gateway to Contextualization

Achievements in 2.5 Years

Development, Launch and Maintenance

- 6560 recommendations from 453 guidelines*
- 285 retired guidelines*

*As of September 20th, 2022

Plain Language Recommendations (PLR)

- 54 PLRs active on the RecMap
- 25 Retired PLRs
- 12 PLRs translated to 6 languages

Adolopment*

Projects by eCOVID19 executive members

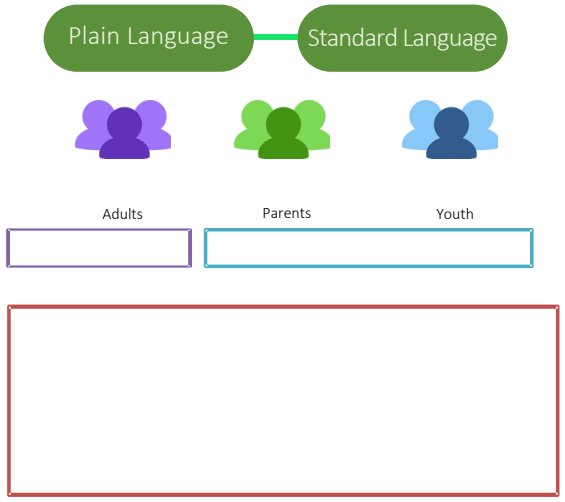
- 2 completed
- 2 ongoing

**adolopment refers to a contracted word - adapt / adopt / de novo development*

PLR Trial

We co-designed three randomized controlled trials (RCTs) to test adults', parents', and youths' understanding of COVID-19 guidelines when presented in a PLR format tailored to the target population versus the original guideline text format.
The trials aimed to assess:

- Understanding
- Accessibility and usability
- Satisfaction
- Intention to implement the recommendation and,
- Elicit a preference for health recommendations when presented as either PLRs or Standard Language Version.



Knowledge Mobilization

Using a co-design approach, we aim to increase awareness, use and engagement of the RecMap.

10 groups involved:

- Indigenous Peoples in Canada
- Non-digital public in Cameroon
- Guideline developers in China
- Professionals working with marginalized public in Slovakia
- Cochrane Authors in Africa
- Parents around the world
- Public Health in Ontario
- Migrants and refugees in Canada
- Policymakers in Canada
- Media in Canada

Webinar and Presentations

50+ webinars and presentations given globally

Publications

- 9 published
- 1 accepted
- 3 in progress

Awards

Rector Prize, Faculty of Medicine, Masaryk University
Best Creative Work Award
Miloslav and Jitka Klugar

David L Sackett Award, HEI Research Day
Best Oral Abstract Presentation
Tamara Lotfi

COVID19 Recommendations

ecommendations

d to search in recommendations Instructions

All	Infection control	Vaccination	Screening	Diagnosis	Treatment and rehabilitation	Prognosis	Planning and monitoring	Hea ano
COVID-19 confirmed 1400	236	44	32	50	918	1	51	6
Public 619	222	199	20	20	4		56	98
Healthcare professional 558	289	100	10	35	18		17	88
COVID-19 suspected 539	258	12	37	78	66	1	31	56
Hospital 280	43	14	3	8	175		6	31
Healthcare services 271	91	46	1	27	4		5	97
Healthcare facility 260	130	3	5	24	3		11	84
National government top managers 252	18	75	3	3			80	72
Public health officer 250	35	45	4	7	1		73	85
Patient 236	80	20	3	8	92	1	6	26
D-19 Vaccine (general) 222	18	137	11	8	19		2	2
risk for COVID-19 218	72	63	11	21	21		21	
stablishment 200	104	5	6	4	2		38	
School 187	115	17	6	3			33	

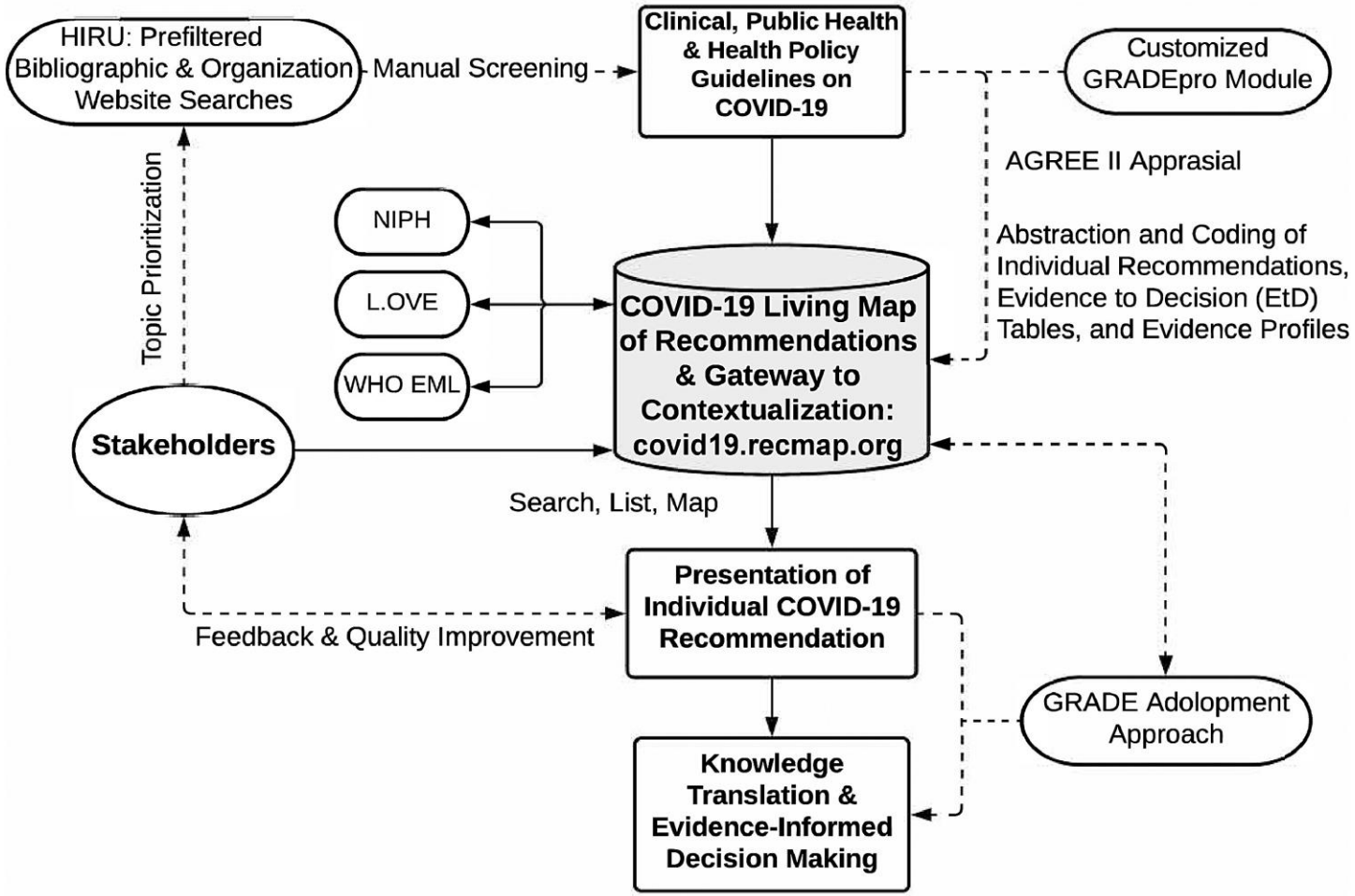
eCOVID-19 living recommendations map

- Provide decision-makers and other stakeholders (including patient representatives, the public, and users of recommendations) with:
  - an easy-to-navigate
  - living
  - freely accessible
  - electronic platform that includes
  - all available trustworthy COVID-19 recommendations
- Identify COVID-19 recommendations, critically appraise them, and make them available for **contextualization and implementation by decision-makers across** the globe

COVID19 Recommendations

COVID19 Recommendations

Getting trustworthy guidelines into the hands of decision-makers and supporting their consideration of contextual factors for implementation globally: recommendation mapping of COVID-19 guidelines



Abbreviations: GRADE: Grading of Recommendations Assessment, Development, and Evaluation; AGREE II: Appraisal of Guidelines, REsearch and Evaluation II; NIPH: Norwegian Institute of Public Health; L.OVE: COVID-19 Epistemonikos Platform; WHO EML: World Health Organization Essential Medicines List; HIRU: Health Information Research Unit at McMaster University

Identifying Guidelines on COVID19

Bibliographic databases - daily

- Ovid PubMed
- Searches prefiltered by HIRU team

API call & web scraping - daily

- ECRI Clinical Guidelines
- PAHO BIGG (GRADE guidelines)
- NICE
- WHO
- G-I-N Library

Grey literature sources – monthly

- CDC, ECDC, PHAC, CTFPHC, SIGN, COVID-NMA

Personal contacts – partners

- Researchers
- Guideline developers
- Global groups (e.g., other Cochrane groups)

Eligible guidelines

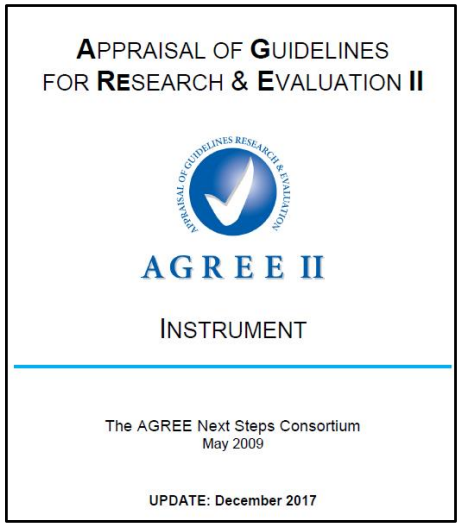
- Meet WHO definition of guideline;
- Any form: new, updated, adapted, recommendations w/ methods, recommendations based on earlier guideline;
- Any COVID-19 topic (causation, diagnosis, prognosis, management, etc.);
- Any population group
- No language restriction

Translation

- Team network
- Cochrane TaskExchange

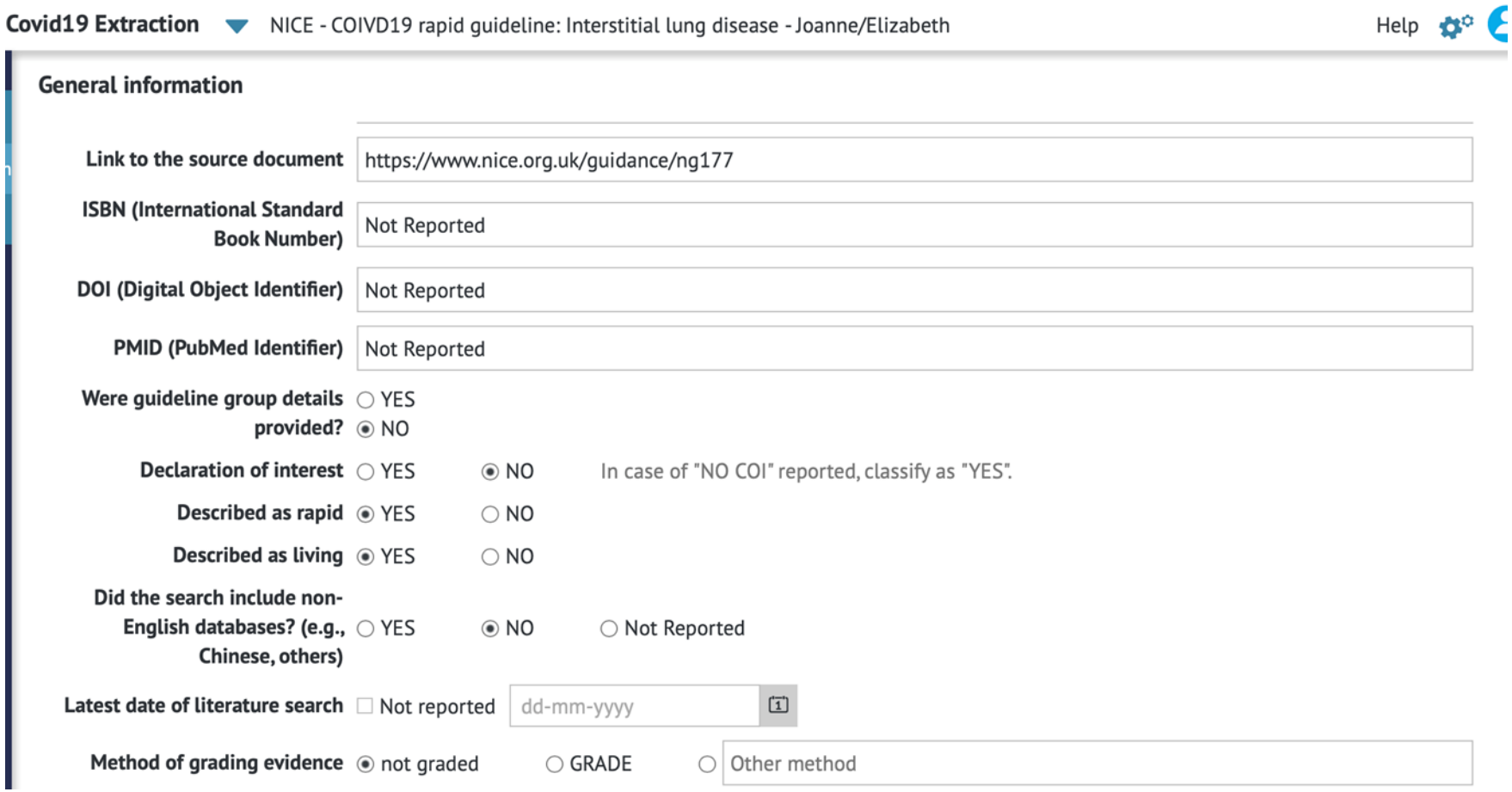
AGREE-II scores

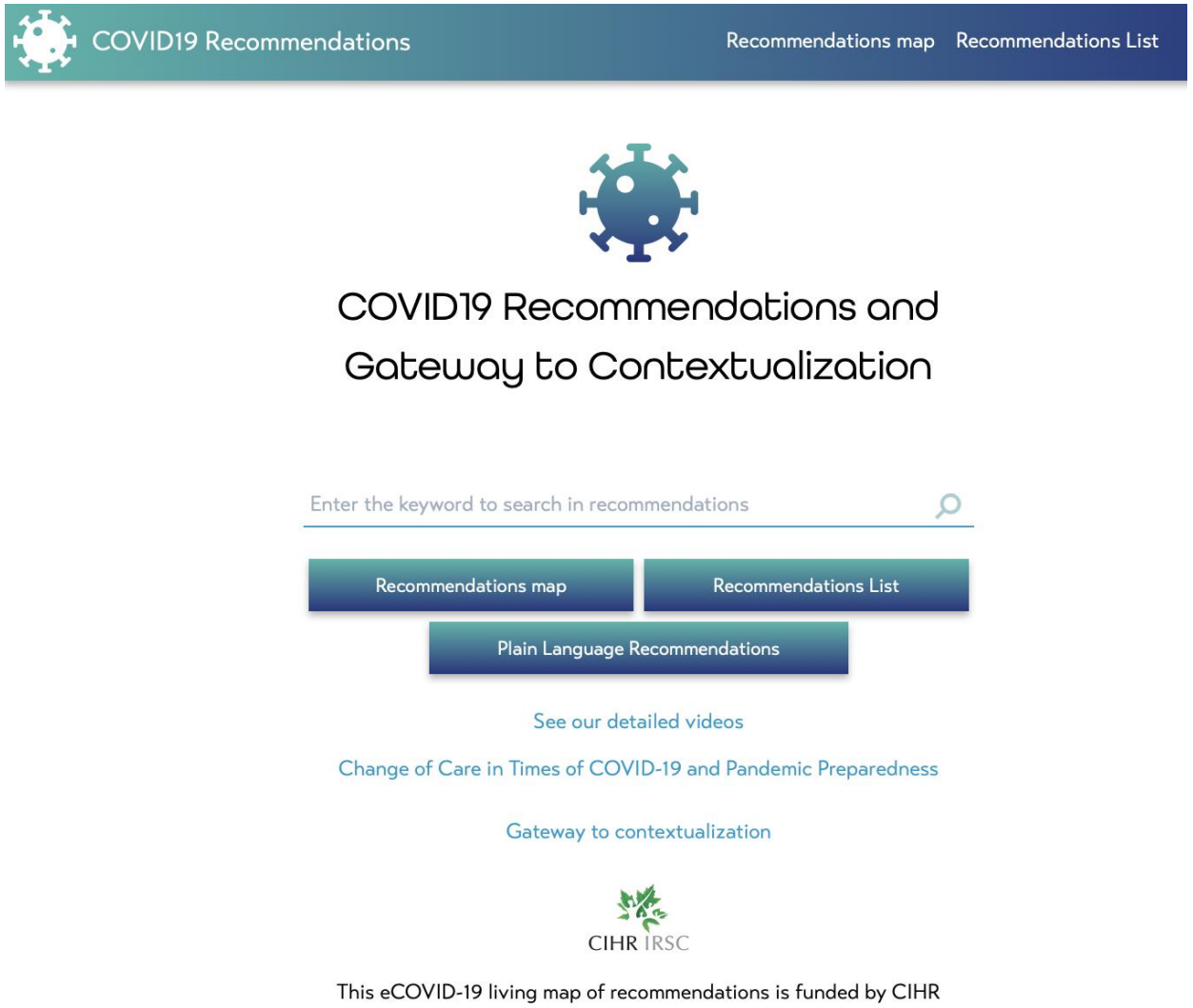
- 3 of 6 domains available on the RecMap: Scope & Purpose, Rigour of development, Editorial process
  - Each domain has multiple items
  - All items scored on 7-point Likert
  - Each domain then scored on 7-point Likert
- The other 3 domains available upon request



Extraction

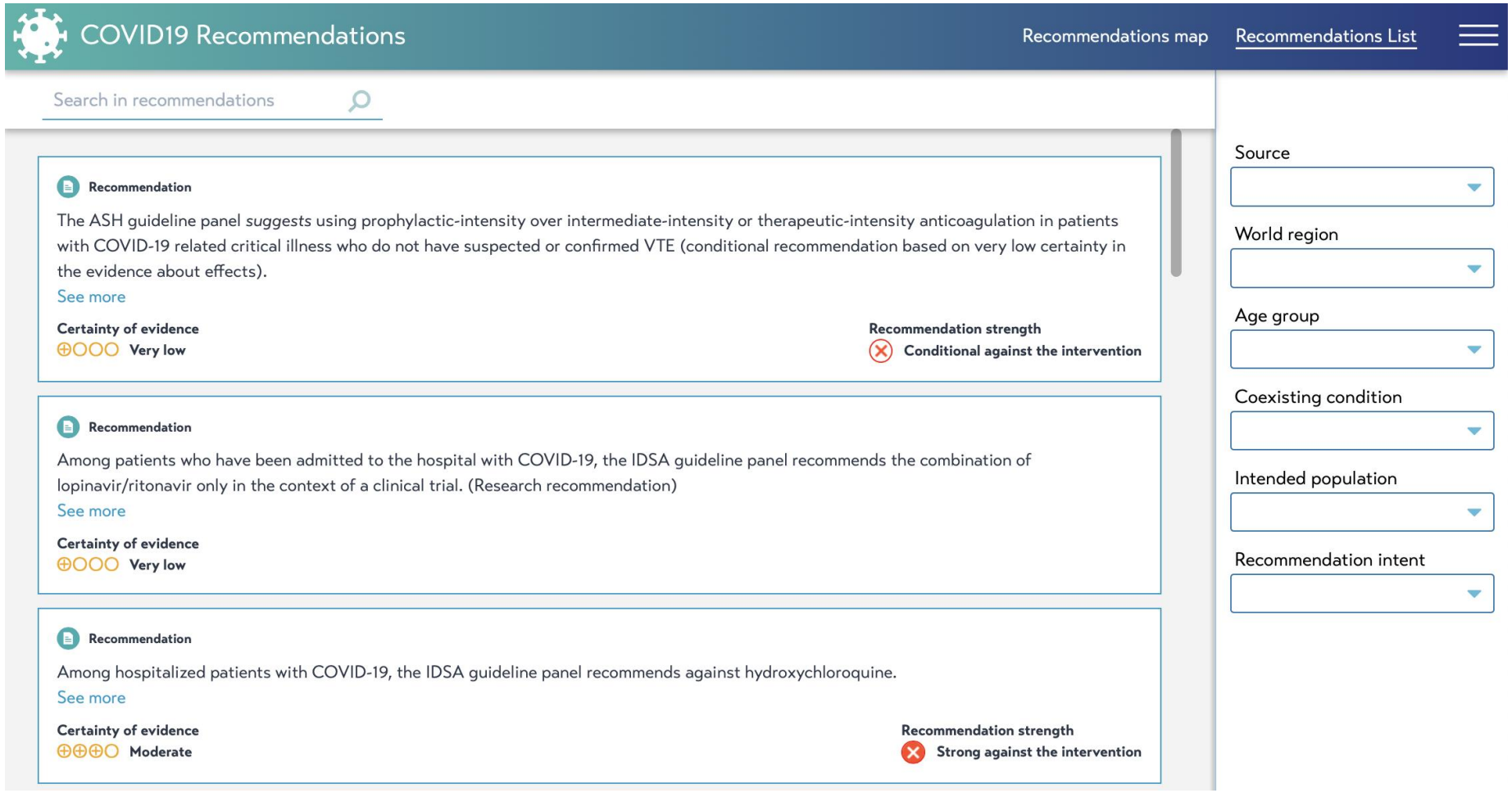
GRADEpro




COVID19 Recommendations
Recommendations map
Recommendations List
COVID19 Recommendations and
Gateway to Contextualization
Enter the keyword to search in recommendations
Recommendations map
Recommendations List
Plain Language Recommendations
See our detailed videos
Change of Care in Times of COVID-19 and Pandemic Preparedness
Gateway to contextualization
CIHR IRSC
This eCOVID-19 living map of recommendations is funded by CIHR
(FRN VR4-172741 & GA3-177732).

Living eCOVID-19 recommendations map (covid19.evidenceprime.com)

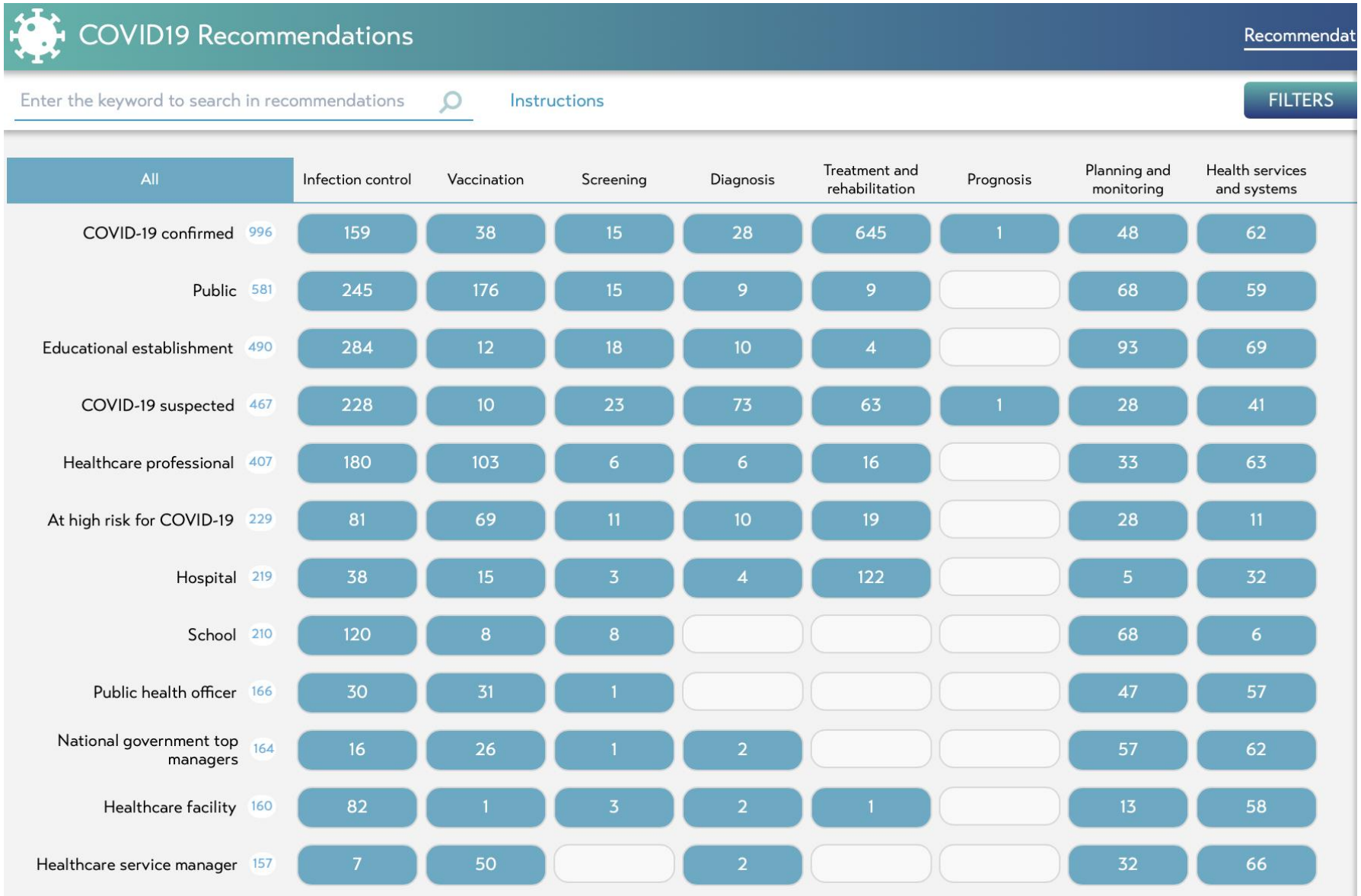
List view



Living

eCOVID-19 recommendations map (covid19.evidenceprime.com)

Map view



	All	Infection control	Vaccination	Screening	Diagnosis	Treatment and rehabilitation	Prognosis	Planning and monitoring	Health services and systems
COVID-19 confirmed	996	159	38	15	28	645	1	48	62
Public	581	245	176	15	9	9		68	59
Educational establishment	490	284	12	18	10	4		93	69
COVID-19 suspected	467	228	10	23	73	63	1	28	41
Healthcare professional	407	180	103	6	6	16		33	63
At high risk for COVID-19	229	81	69	11	10	19		28	11
Hospital	219	38	15	3	4	122		5	32
School	210	120	8	8				68	6
Public health officer	166	30	31	1				47	57
National government top managers	164	16	26	1	2			57	62
Healthcare facility	160	82	1	3	2	1		13	58
Healthcare service manager	157	7	50		2			32	66

Living

eCOVID-19 recommendations map (covid19.evidenceprime.com)

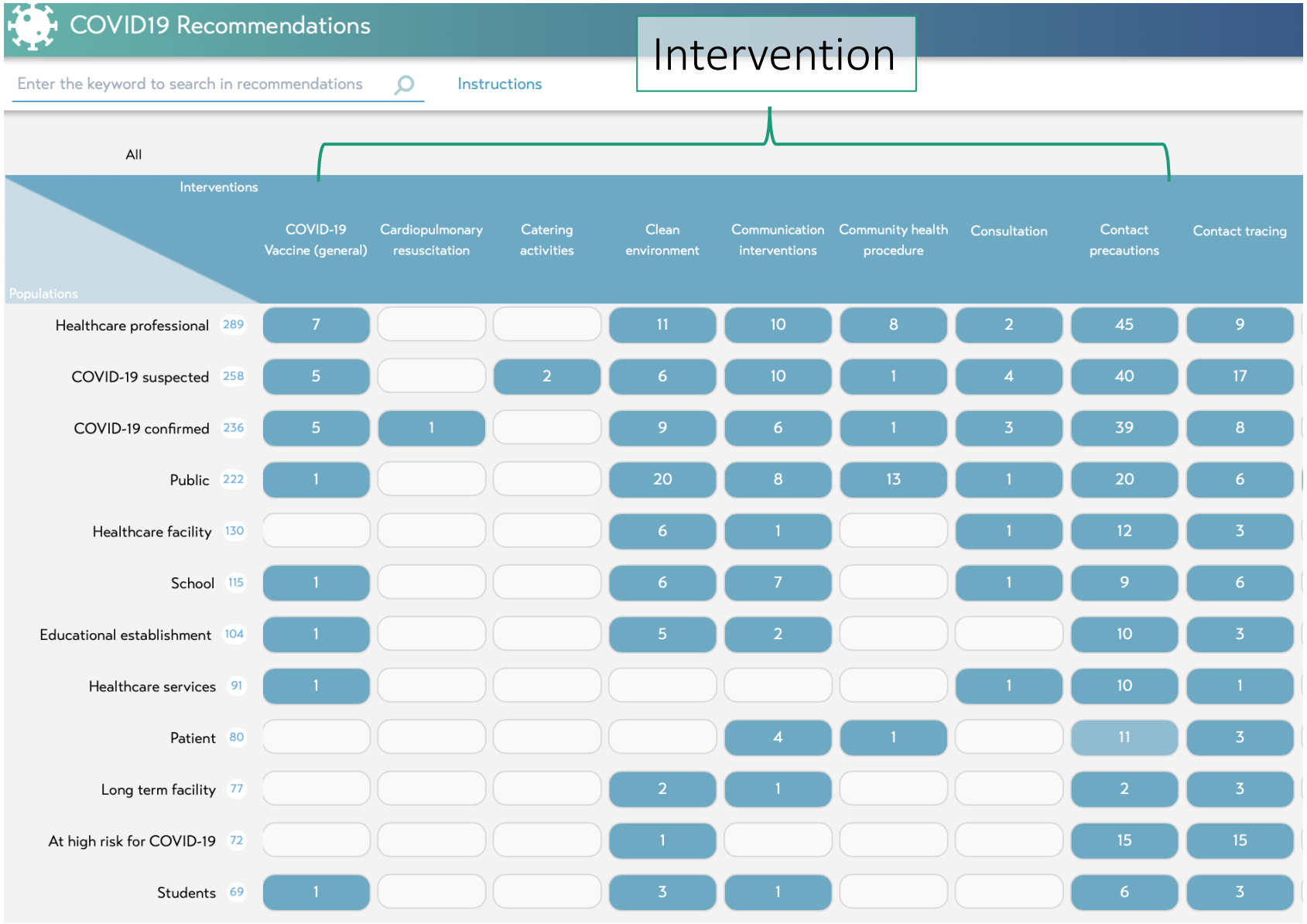
Map view

Intervention

Population

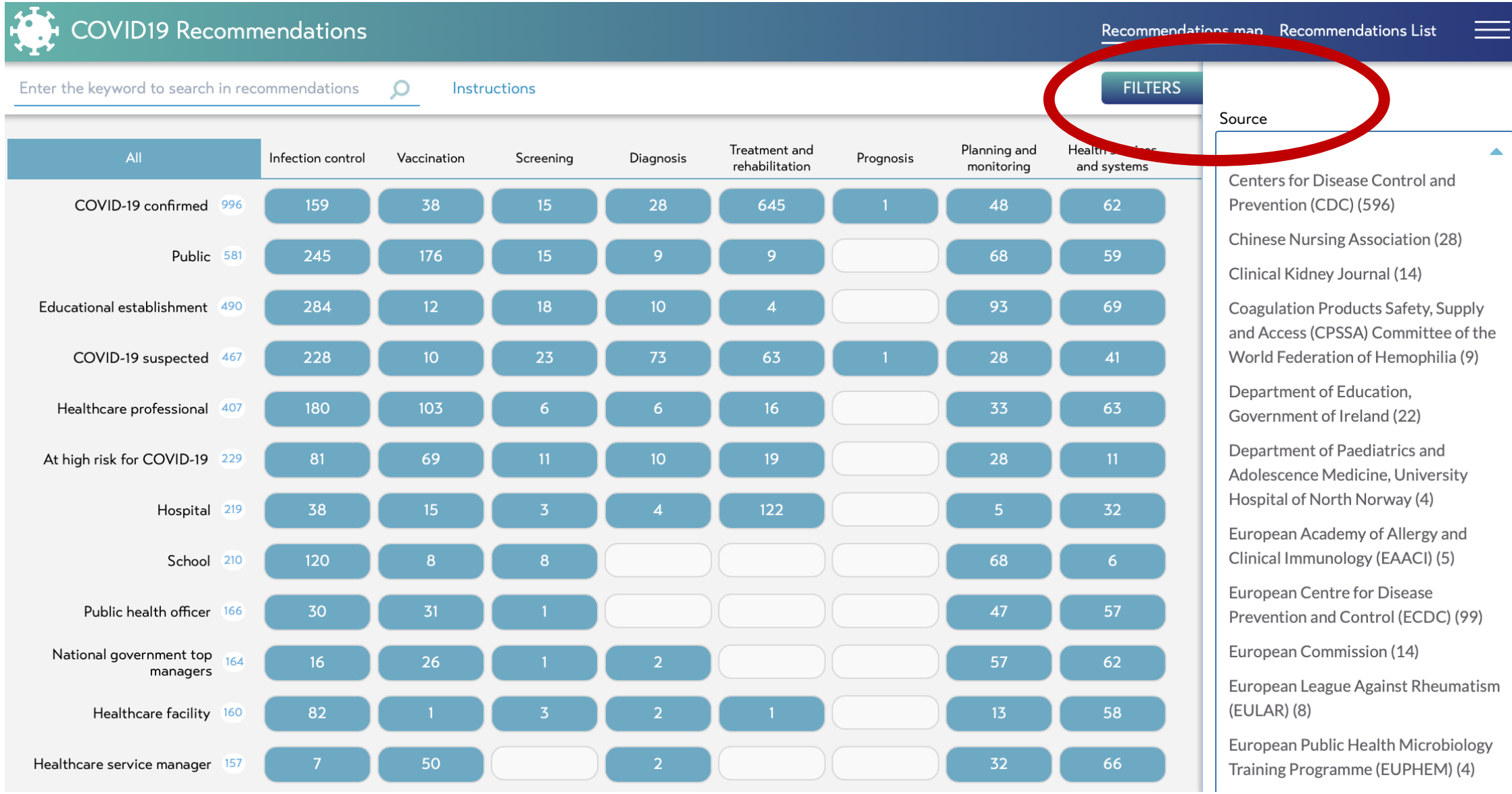
eCOVID-19 recommendations map (covid19.evidenceprime.com)

Map view



Living eCOVID-19 recommendations map (covid19.evidenceprime.com)

Filters



Back

Recommendation

On this page you can find

Use of Anticoagulation in Patients with COVID-19

Source: American Society of Hematology (ASH)

Intent: **Treatment and rehabilitation**

The ASH guideline panel *suggests* using prophylactic-intensity over intermediate-intensity or therapeutic-intensity anticoagulation in patients with COVID-19 related critical illness who do not have suspected or confirmed VTE (conditional recommendation based on very low certainty in the evidence about effects).

Remark:
Between the time this recommendation was published online (October 27, 2020) and when it was published in *Blood Advances*, a press release was issued describing the results of a planned interim analysis of three randomized controlled trials, REMAP-CAP, ACTIV-4, and ATTACC (NCT 02735707, 04505774, and 04372589, respectively). In these trials, therapeutic-intensity anticoagulation was compared with prophylactic-intensity anticoagulation in patients with COVID-19 related critical illness. The ASH guideline panel plans to update this recommendation when the full results of REMAP-CAP, ACTIV-4, and ATTACC become available. Clinicians should weigh the potential benefits and harms based on the most up to date available evidence in caring for their patients.

Patients with COVID-19 related critical illness are defined as those suffering from an immediately life-

Certainty of evidence
⊕◯◯◯ Very low

Recommendation strength
⊗ Conditional

AGREE II score ⓘ

Scope and purpose:	91.7%
Rigor of development:	89.6%
Editorial Independence:	91.7%

Check credibility

Back

Recommendation

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⊗ Conditional

AGREE II score ⓘ

Scope and purpose:	91.7%
Rigor of development:	89.6%
Editorial Independence:	91.7%

Access all other information

Lessons Learnt

01

Map highlights gaps in responding to some priority COVID19 topics, and multiplicity in other topics

02

Recommendations for COVID19 should be available for different audience at the time of need

03

COVID19 guidelines are continuously developed and the RecMap needs to be maintained to host them

Challenges with Guideline Development

- Time & Money
  - SIGN: 24 months
  - NICE: 12-18 months
  - NICE short guidance: 6-12 months
  - Slovakia: 30 months
  - US Preventive Services Task Force: 9-15 months to finish the work, another 9 months for publication
- Human resources requirements:
  - Methodological expertise in systematic reviews
  - Methodological expertise in guideline development
  - Content expertise

Adolopment*

ELSEVIER

CrossMark

Journal of Clinical Epidemiology 81 (2017) 101–110

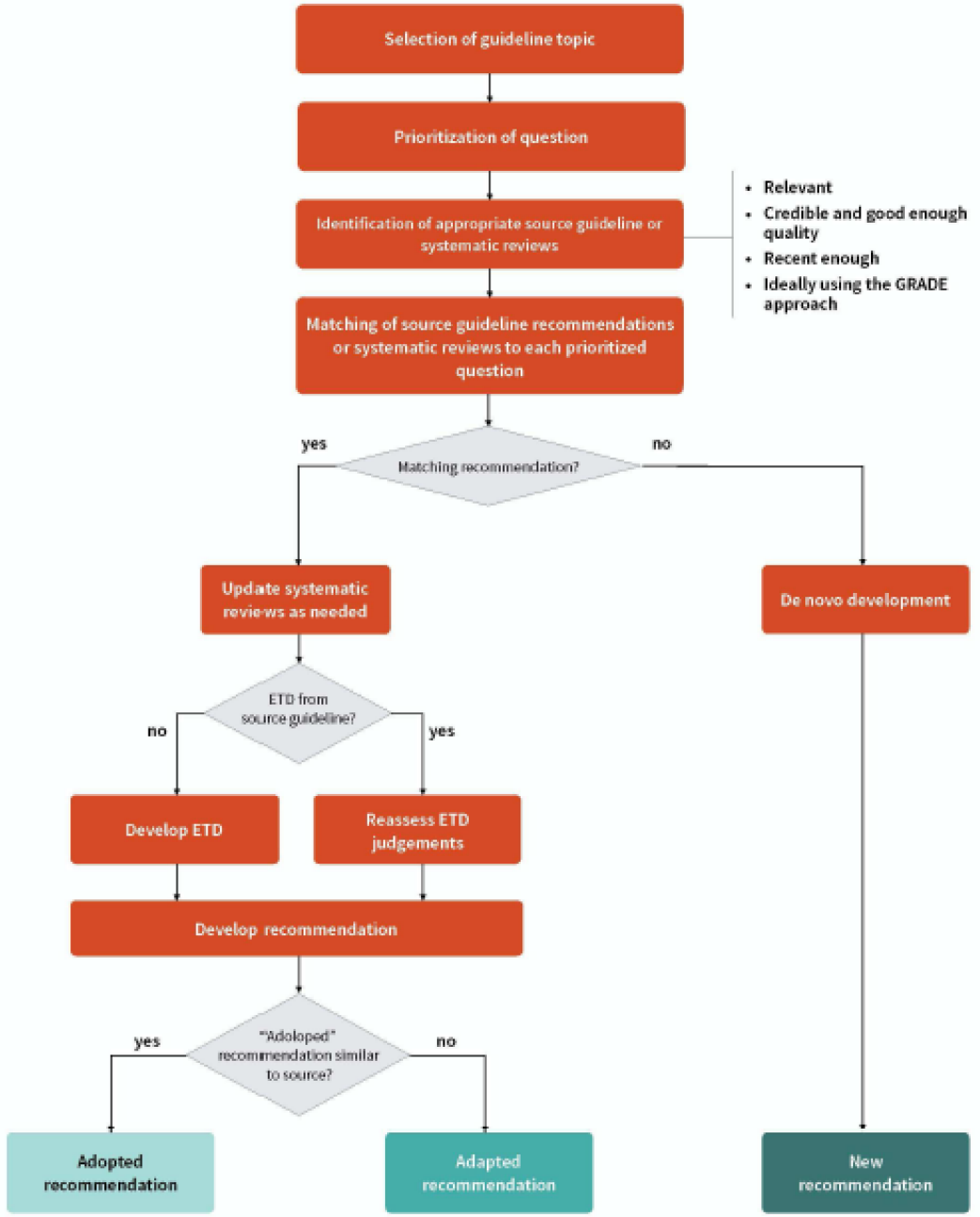
Journal of Clinical Epidemiology

GRADE Evidence to Decision (EtD) frameworks for adoption, adaptation, and de novo development of trustworthy recommendations: GRADE-ADOLOPMENT

Holger J. Schünemann[a,b,*], Wojtek Wiercioch[a], Jan Brozek[a,b], Itziar Etxeandia-Ikobaltzeta[a], Reem A. Mustafa[a,c,d], Veena Manja[e,f], Romina Brignardello-Petersen[g,h], Ignacio Neumann[a,i], Maicon Falavigna[j,k], Waleed Alhazzani[a,b], Nancy Santesso[a], Yuan Zhang[a], Jörg J. Meerpohl[l,m], Rebecca L. Morgan[a], Bram Rochwerg[a], Andrea Darzi[d], Maria Ximenas Rojas[n], Alonso Carrasco-Labra[a,i], Yaser Adi[o], Zulfa AlRayees[p], John Riva[a,q], Claudia Bollig[l], Ainsley Moore[a,q], Juan José Yepes-Nuñez[a], Carlos Cuello[a,r], Reem Waziry[s,t], Elie A. Akl[a,s]

Three choices:

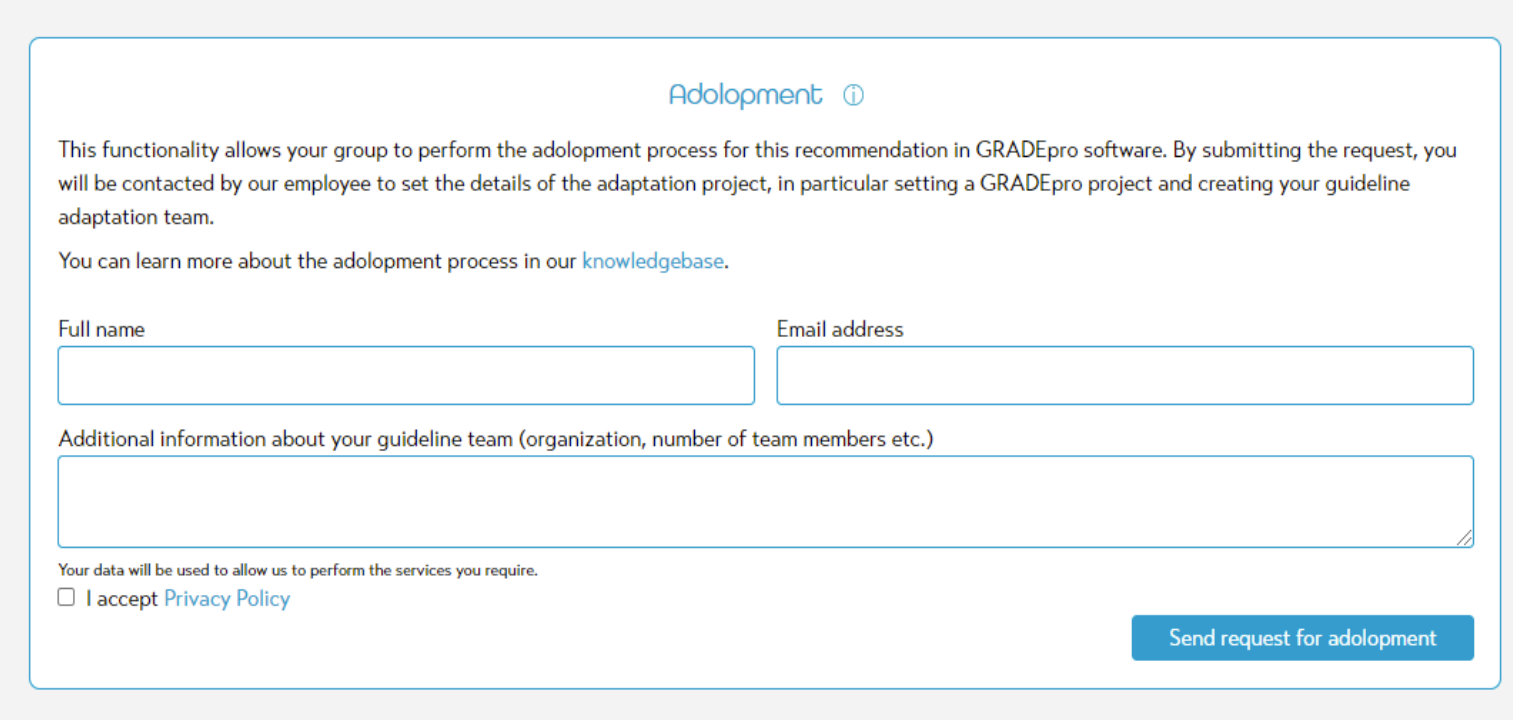
1) <u>adopt</u> existing recommendations as they are;
2) <u>adapt</u> existing recommendations to own context;
3) <u>develop</u> recommendations de novo based on available or new evidence syntheses



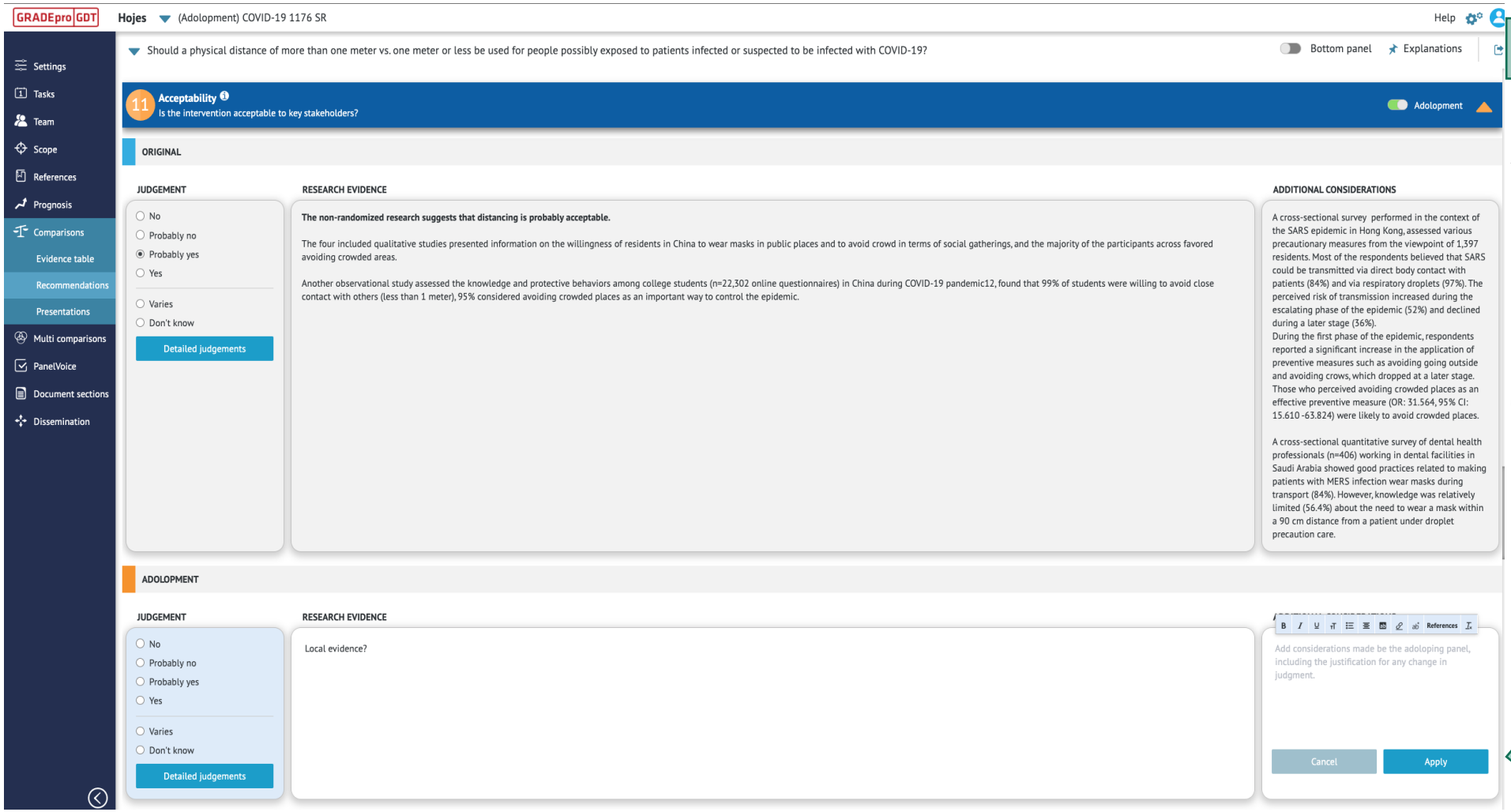
**adolopment refers to a contracted word - adapt / adopt / de novo development*

Gateway to contextualization

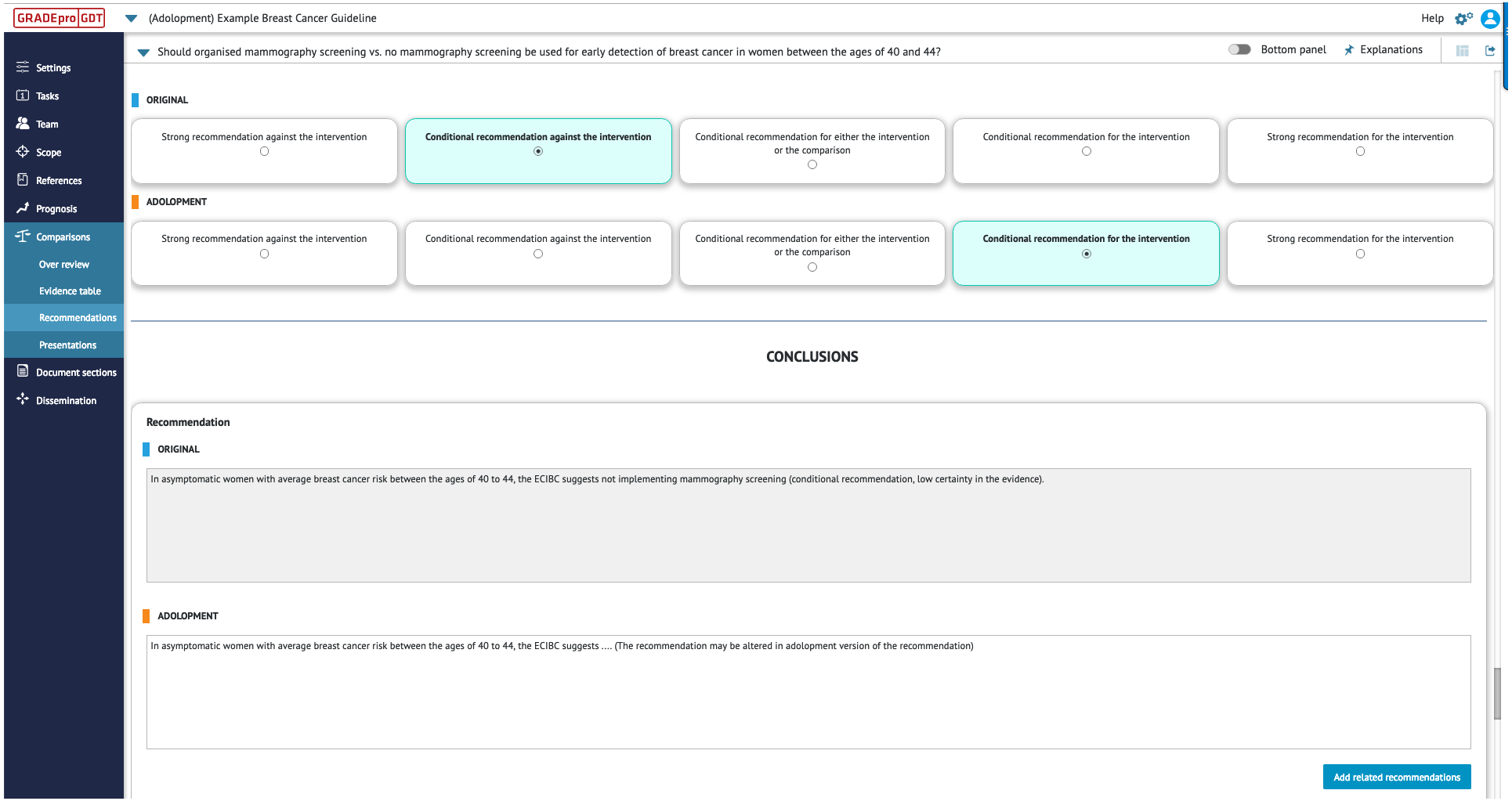
- Request access to **Adolopment** module
- Contribute back to map
- Others can benefit from your decision-making
- Labelled as ‘adoloped’ on map



Adolopment



Contextual evidence regarding people's values, equity, resource utilization, acceptability, and feasibility to support development of the EtDs



Change recommendation direction/strength, details as needed

Clarity in language to communicate to the public…

Developing plain language recommendations: to enhance usability and understanding by any stakeholder

Should people aged 16 years and older get the Pfizer-BioNTech vaccine to prevent COVID-19?

Recommendation

The World Health Organization (WHO) recommends the Pfizer-BioNTech vaccine to prevent COVID-19 in people aged 16 years and older.

Who is this for?

- You are 16 years of age or older.
- You are the parent, guardian, or caregiver of a person who is 16 years of age or older.
- You do not have an active case of COVID-19.

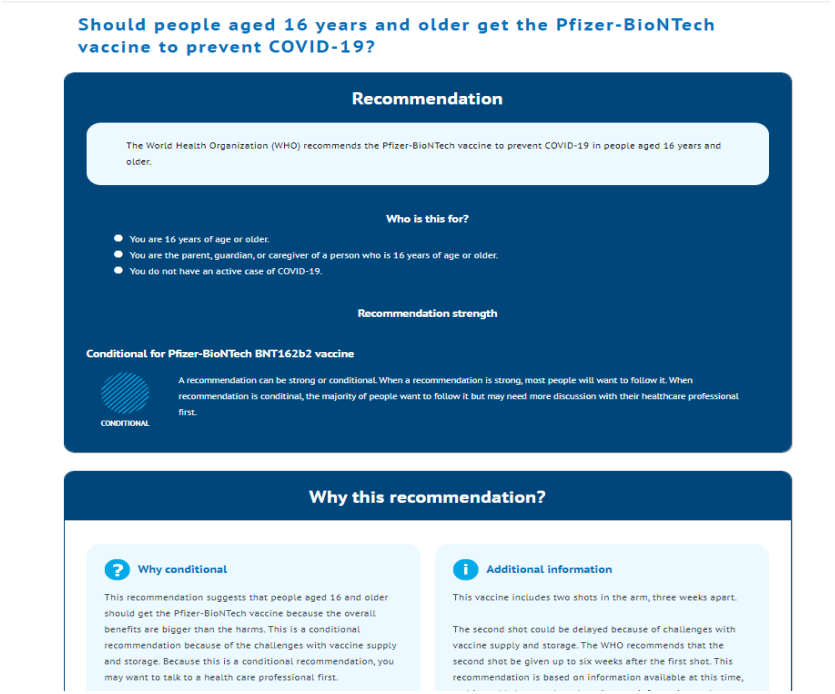
Recommendation strength

Conditional for Pfizer-BioNTech BNT162b2 vaccine

CONDITIONAL

A recommendation can be strong or conditional. When a recommendation is strong, most people will want to follow it. When recommendation is conditinal, the majority of people want to follow it but may need more discussion with their healthcare professional first.

Developing plain language recommendations: to enhance usability and understanding by any stakeholder



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CONDITIONAL

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Why this recommendation?

Why conditional

This recommendation suggests that people aged 16 and older should get the Pfizer-BioNTech vaccine because the overall benefits are bigger than the harms. This is a conditional recommendation because of the challenges with vaccine supply and storage. Because this is a conditional recommendation, you may want to talk to a health care professional first.

Additional information

This vaccine includes two shots in the arm, three weeks apart.

The second shot could be delayed because of challenges with vaccine supply and storage. The WHO recommends that the second shot be given up to six weeks after the first shot. This recommendation is based on information available at this time,

All Topics (31)

9 - Vaccines
7 - Clinical Management
2 - Face Masks
2 - Long term care
2 - COVID-19 Death
2 - Pregnancy & Breastfeeding
2 - Vaccine Induced Thrombocytopenia
2 - Variants
1 - Workplace, Gatherings, Travel
1 - Schools
1 - Children

What is a Plain Language Recommendation?

Randomized control trial under way - ClinicalTrials.gov Identifier: NCT05358990

Guideline Documents

Interim recommendations for use of the Pfizer–BioNTech COVID-19 vaccine, BNT162b2, under Emergency Use Listing

Interim guidance

8 January 2021

World Health Organization

Background

This interim guidance has been developed based on the advice issued by the Strategic Advisory Group of Experts on Immunization (SAGE) at its 5 January 2021 extraordinary meeting [1].

Declarations of interests were collected from all external contributors and assessed for any conflicts of interest. Summaries of the reported interests can

Methods

SAGE applies the prin updating recommenda be found in the SAGE data emerging from cl

General goal and str

The COVID-19 pande and economic disrupti COVID-19 mRNA va validation from WHO procedure for assessin availability of these p

BNT162b2, an mRNA approximately 95%, b that the known and po be immediately availa Roadmap [4] and the are very limited (stage that priority be given health workers has a h the COVID-19 pande greatest public health groups should be vacc and other relevant con

Morbidity and Mortality Weekly Report

The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Moderna COVID-19 Vaccine — United States, December 2020

Sara E. Oliver, MD[1]; Julia W. Gargano, PhD[1]; Mona Marin, MD[1]; Megan Wallace, DrPH[1,2]; Kathryn G. Curran, PhD[1]; Mary Chamberland, MD[1,3]; Nancy McClung, PhD[1]; Doug Campos-Outcalt, MD[4]; Rebecca L. Morgan, PhD[5]; Sarah Mbaeyi, MD[1]; José R. Romero, MD[6]; H. Keipp Talbot, MD[7]; Grace M. Lee, MD[8]; Beth P. Bell, MD[9]; Kathleen Dooling, MD[1]

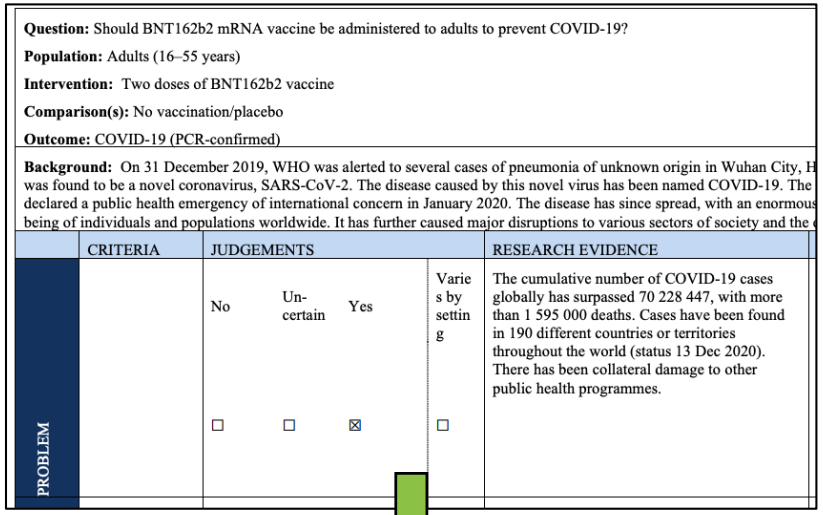
On December 20, 2020, this report was posted as an MMWR *Early Release on the* MMWR *website (https://www.cdc.gov/mmwr).*

On December 18, 2020, the Food and Drug Administration (FDA) issued an Emergency Use Authorization (EUA) for the Moderna COVID-19 (mRNA-1273) vaccine (ModernaTX, Inc; Cambridge, Massachusetts), a lipid nanoparticle-encapsulated, nucleoside-modified mRNA vaccine encoding the stabilized prefusion spike glycoprotein of SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19) (*1*). This vaccine is the second COVID-19 vaccine authorized under an EUA for the prevention of COVID-19 in the United States (*2*). Vaccination with the Moderna COVID-19 vaccine consists of 2 doses (100 μg, 0.5 mL each) administered intramuscularly, 1 month (4 weeks) apart. On December 19, 2020, the Advisory Committee on Immunization Practices (ACIP) issued an interim recommendation* for use of the Moderna COVID-19 vaccine in persons aged ≥18 years for the prevention of COVID-19. To guide its deliberations regarding the vaccine, ACIP employed the Evidence to Recommendation (EtR) Framework,† using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.§ Use of all COVID-19 vaccines authorized under an EUA, including the Moderna COVID-19 vaccine, should be implemented in conjunction with ACIP's interim recommendations for allocating initial supplies of COVID-19 vaccines (*3*). The ACIP recommendation for the use of the Moderna COVID-19 vaccine under EUA is interim and will

Work Group, comprising experts in infectious diseases, vaccinology, vaccine safety, public health, and ethics, held 28 meetings to review COVID-19 surveillance data, evidence for vaccine efficacy and safety, and implementation considerations for COVID-19 vaccines, including the Moderna COVID-19 vaccine. After a systematic review of available data, the Work Group used the GRADE approach to assess the certainty of evidence for outcomes related to the vaccine, rated on a scale of 1 (high certainty) to 4 (very low certainty) (*5*). Work Group conclusions regarding certainty of evidence for the Moderna COVID-19 vaccine were presented to ACIP at public meetings.

The body of evidence for the Moderna COVID-19 vaccine was primarily informed by one large, randomized, double-blind, placebo-controlled Phase III clinical trial that enrolled approximately 30,000 participants aged 18–95 years (median = 52 years) (*6–9*). Interim findings from this clinical trial, using data from participants with a median of 2 months of follow-up, indicate that the Moderna COVID-19 vaccine efficacy after 2 doses was 94.1% (95% confidence interval = 89.3%–96.8%) in preventing symptomatic, laboratory-confirmed COVID-19 among persons without evidence of previous SARS-CoV-2 infection, which was the primary study endpoint. High efficacy (≥86%) was observed across age, sex, race, and ethnicity categories and among persons with underlying medical conditions. Ten hospitalizations due to COVID-19 were documented; nine in the placebo group and one in the vaccine group (*9*). Preliminary data suggest that the Moderna COVID-19 vaccine might also

Recommendations



Question: Should BNT162b2 mRNA vaccine be administered to adults to prevent COVID-19?

Population: Adults (16–55 years)

Intervention: Two doses of BNT162b2 vaccine

Comparison(s): No vaccination/placebo

Outcome: COVID-19 (PCR-confirmed)

Background: On 31 December 2019, WHO was alerted to several cases of pneumonia of unknown origin in Wuhan City, H was found to be a novel coronavirus, SARS-CoV-2. The disease caused by this novel virus has been named COVID-19. The declared a public health emergency of international concern in January 2020. The disease has since spread, with an enormous being of individuals and populations worldwide. It has further caused major disruptions to various sectors of society and the

	CRITERIA	JUDGEMENTS				RESEARCH EVIDENCE
PROBLEM		No	Un-certain	Yes	Varies by setting	The cumulative number of COVID-19 cases globally has surpassed 70 228 447, with more than 1 595 000 deaths. Cases have been found in 190 different countries or territories throughout the world (status 13 Dec 2020). There has been collateral damage to other public health programmes.
		☐	☐	☒	☐	

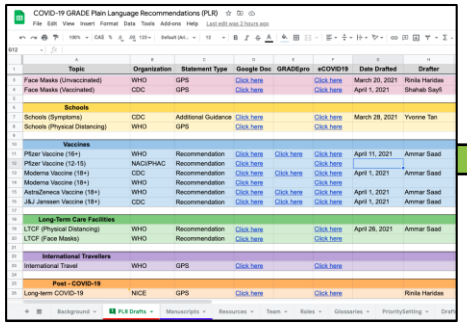
"Vaccination with BNT162b2 is recommended in persons aged 16 and above."

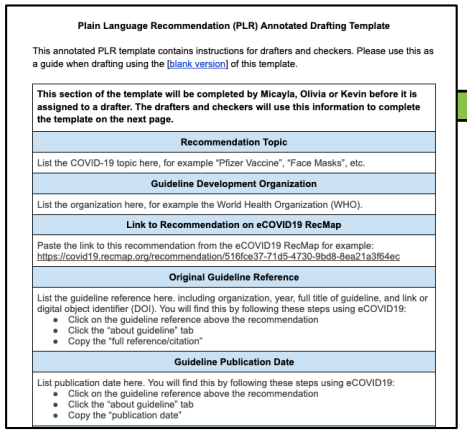
Plain Language Recommendations

Clear, easy-to-read summaries of published and quality-checked recommendations from leading guideline development organizations. They are balanced statements that include an explanation of the recommendation, what is means for patients and the public, and the guideline source.

"The World Health Organization (WHO) recommends the Pfizer-BioNTech vaccine to prevent COVID-19 in people aged 16 years and older."

PLR Process Overview

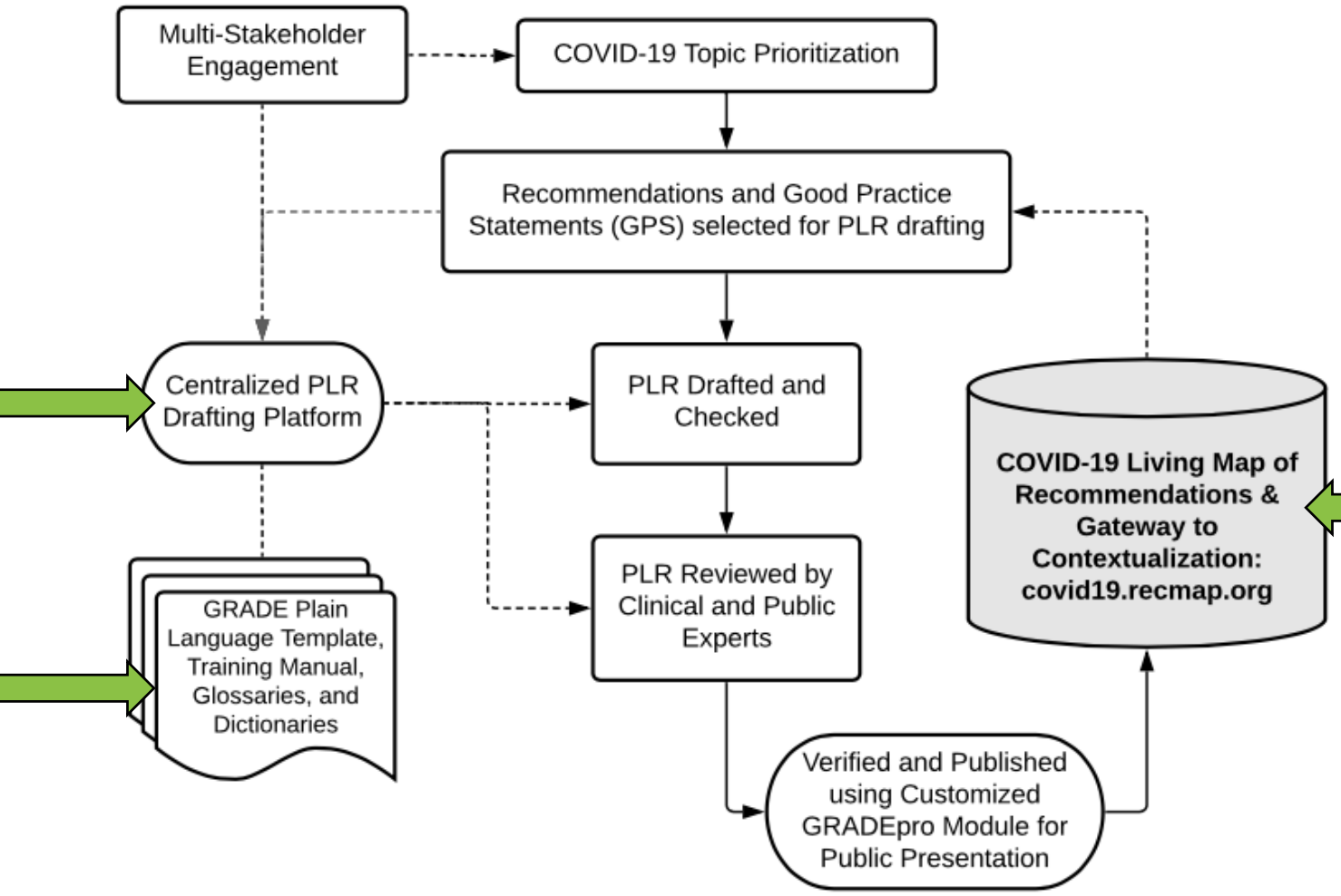




Plain Language Recommendation (PLR) Annotated Drafting Template

This annotated PLR template contains instructions for drafters and checkers. Please use this as a guide when drafting using the [blank version] of this template.

This section of the template will be completed by Micayla, Olivia or Kevin before it is assigned to a drafter. The drafters and checkers will use this information to complete the template on the next page.
Recommendation Topic
List the COVID-19 topic here, for example "Pfizer Vaccine", "Face Masks", etc.
Guideline Development Organization
List the organization here, for example the World Health Organization (WHO).
Link to Recommendation on eCOVID19 RecMap
Paste the link to this recommendation from the eCOVID19 RecMap for example: https://covid19.recmap.org/recommendation/516fce37-71d5-4730-9bd8-8ea21a3f64ec
Original Guideline Reference
List the guideline reference here. including organization, year, full title of guideline, and link or digital object identifier (DOI). You will find this by following these steps using eCOVID19: • Click on the guideline reference above the recommendation • Click the "about guideline" tab • Copy the "full reference/citation"
Guideline Publication Date
List publication date here. You will find this by following these steps using eCOVID19: • Click on the guideline reference above the recommendation • Click the "about guideline" tab • Copy the "publication date"



Abbreviations: PLR: Plain Language Recommendations; GPS: Good Pracice Statements; GRADE: Grading of Recommendations Assessment, Development, and Evaluation

Local Perspective on Guidance

COVID19 Recommendations and Gateway to Contextualization

Enter the keyword to search in recommendations

Recommendations map | Recommendations List

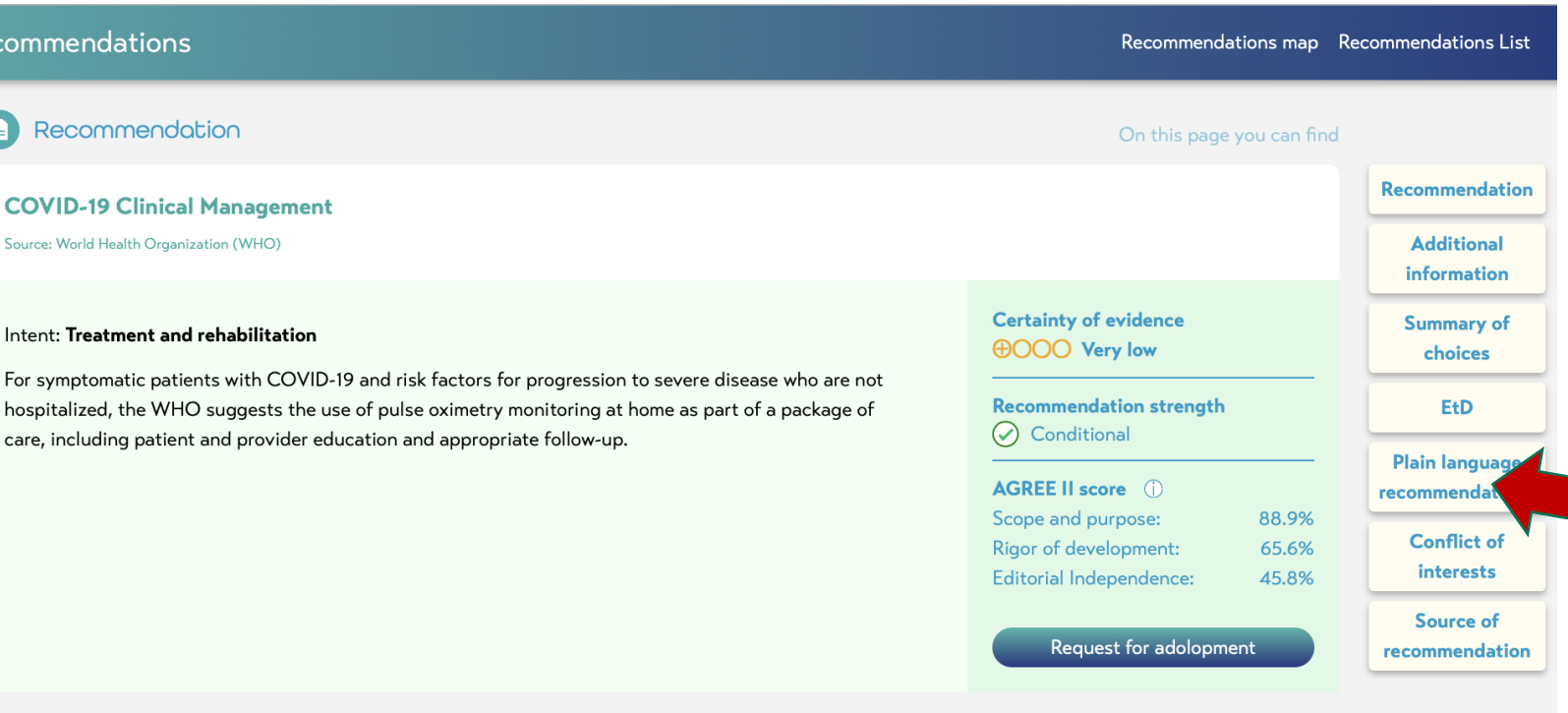
Plain Language Recommendations

See our detailed videos

Change of Care in Times of COVID-19 and Pandemic Preparedness

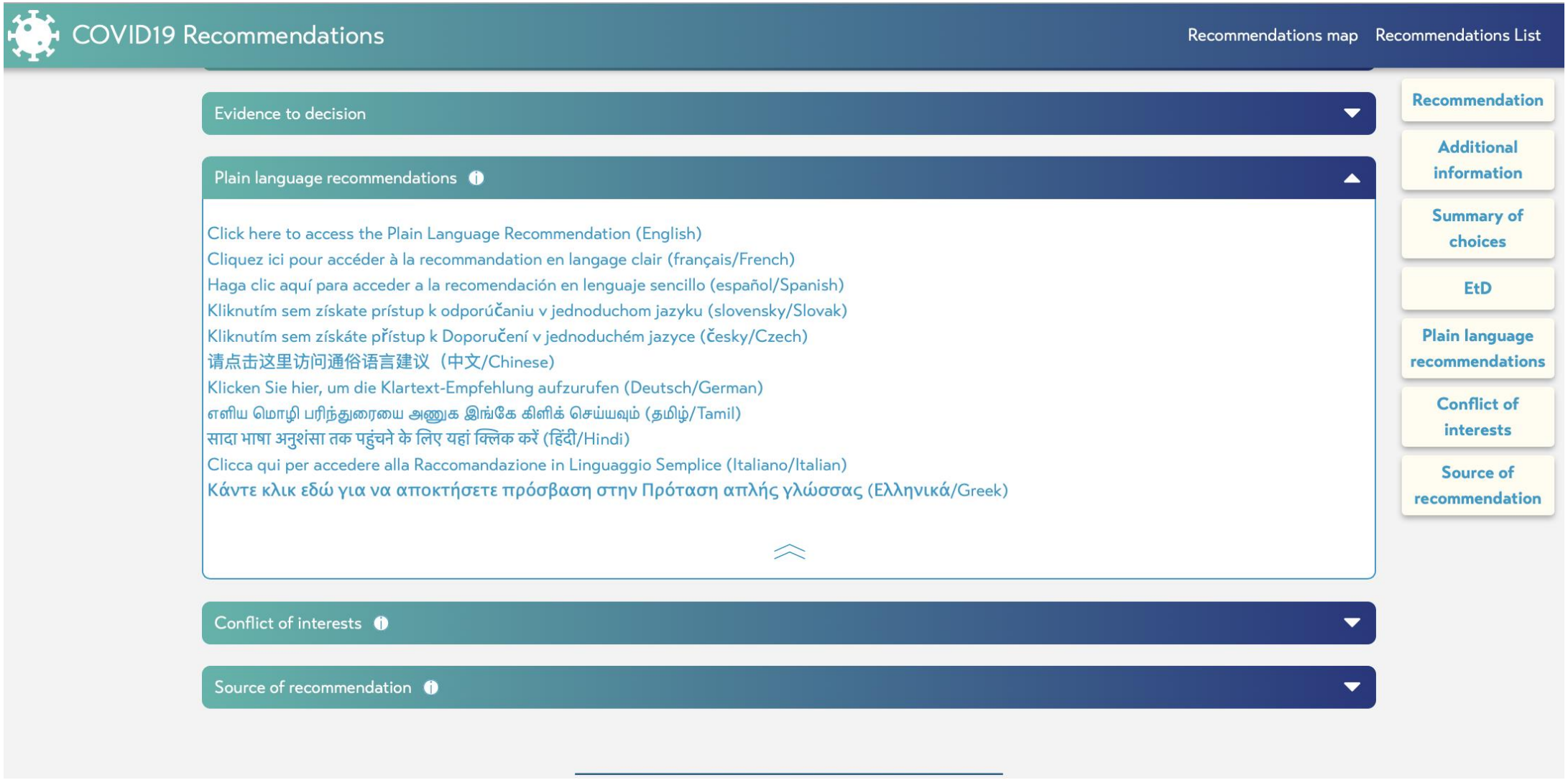
Gateway to contextualization

Access directly PLRs



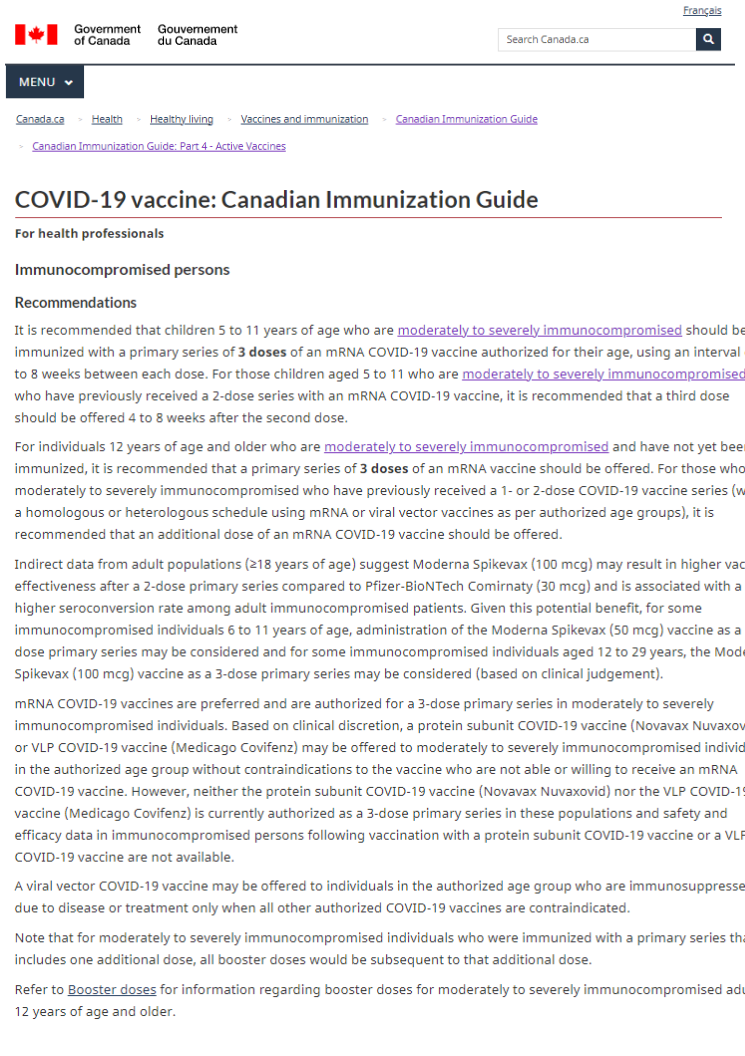
Filter on Map view

Access PLR by recommendation



Plain language recommendations in up to 13 languages

Public Health Recommendations



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Français

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MENU

Canada.ca > Health > Healthy living > Vaccines and immunization > Canadian Immunization Guide > Canadian Immunization Guide: Part 4 - Active Vaccines

COVID-19 vaccine: Canadian Immunization Guide

For health professionals

Immunocompromised persons

Recommendations

It is recommended that children 5 to 11 years of age who are moderately to severely immunocompromised should be immunized with a primary series of **3 doses** of an mRNA COVID-19 vaccine authorized for their age, using an interval of 4 to 8 weeks between each dose. For those children aged 5 to 11 who are moderately to severely immunocompromised who have previously received a 2-dose series with an mRNA COVID-19 vaccine, it is recommended that a third dose should be offered 4 to 8 weeks after the second dose.

For individuals 12 years of age and older who are moderately to severely immunocompromised and have not yet been immunized, it is recommended that a primary series of **3 doses** of an mRNA vaccine should be offered. For those who are moderately to severely immunocompromised who have previously received a 1- or 2-dose COVID-19 vaccine series (with a homologous or heterologous schedule using mRNA or viral vector vaccines as per authorized age groups), it is recommended that an additional dose of an mRNA COVID-19 vaccine should be offered.

Indirect data from adult populations (≥18 years of age) suggest Moderna Spikevax (100 mcg) may result in higher vaccine effectiveness after a 2-dose primary series compared to Pfizer-BioNTech Comirnaty (30 mcg) and is associated with a higher seroconversion rate among adult immunocompromised patients. Given this potential benefit, for some immunocompromised individuals 6 to 11 years of age, administration of the Moderna Spikevax (50 mcg) vaccine as a 3-dose primary series may be considered and for some immunocompromised individuals aged 12 to 29 years, the Moderna Spikevax (100 mcg) vaccine as a 3-dose primary series may be considered (based on clinical judgement).

mRNA COVID-19 vaccines are preferred and are authorized for a 3-dose primary series in moderately to severely immunocompromised individuals. Based on clinical discretion, a protein subunit COVID-19 vaccine (Novavax Nuvaxovid) or VLP COVID-19 vaccine (Medicago Covifenz) may be offered to moderately to severely immunocompromised individuals in the authorized age group without contraindications to the vaccine who are not able or willing to receive an mRNA COVID-19 vaccine. However, neither the protein subunit COVID-19 vaccine (Novavax Nuvaxovid) nor the VLP COVID-19 vaccine (Medicago Covifenz) is currently authorized as a 3-dose primary series in these populations and safety and efficacy data in immunocompromised persons following vaccination with a protein subunit COVID-19 vaccine or a VLP COVID-19 vaccine are not available.

A viral vector COVID-19 vaccine may be offered to individuals in the authorized age group who are immunosuppressed due to disease or treatment only when all other authorized COVID-19 vaccines are contraindicated.

Note that for moderately to severely immunocompromised individuals who were immunized with a primary series that includes one additional dose, all booster doses would be subsequent to that additional dose.

Refer to Booster doses for information regarding booster doses for moderately to severely immunocompromised adults 12 years of age and older.

CRA SCR
CANADIAN RHEUMATOLOGY ASSOCIATION | SOCIÉTÉ CANADIENNE DE RHUMATOLOGIE

CRA Recommendation on Three Doses of mRNA Vaccine for Preventing COVID-19

Version 1.0, November 23, 2021

The Canadian Rheumatology Association guideline panel suggests using a third dose of mRNA COVID-19 vaccination [BNT 162b2 (Pfizer-BioNTech) or mRNA-1273 (Moderna)] in persons aged 18 and older with autoimmune rheumatic disease.

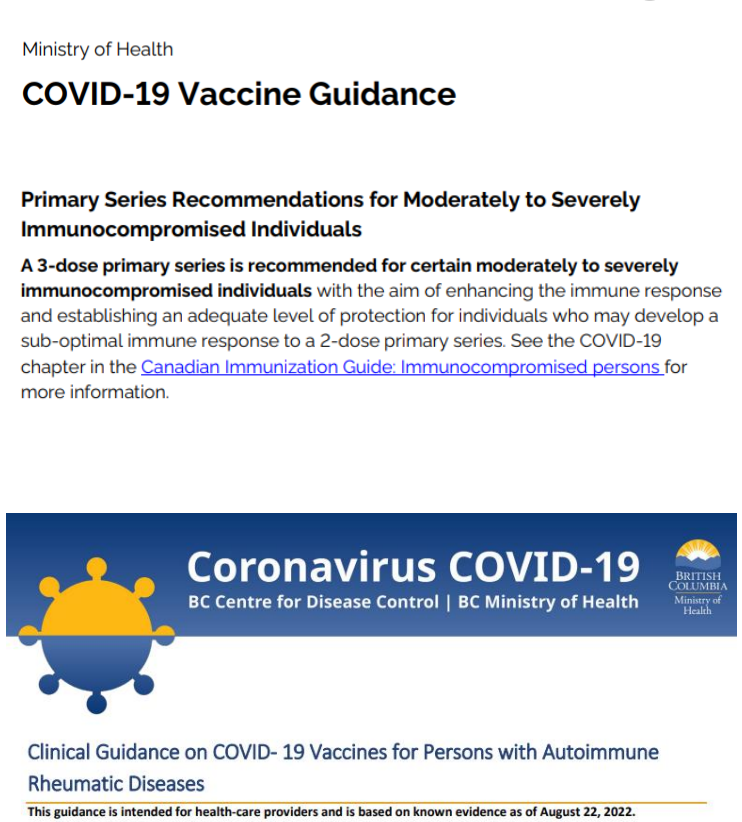
(Conditional recommendation, very low certainty of the evidence about effects.)

Remarks:

- This recommendation is based on evidence for mRNA-1273 (Moderna).
- The recommendation needs to be viewed in the context of any guidance or restrictions for vaccine use set by national or provincial bodies, that may change over time. This includes guidance in people who have had a mixed initial vaccine series (2 different vaccines).

Primary justification:

- The panel judged that for the majority of patients the potential benefits outweigh the potential harms in people with autoimmune rheumatic diseases, although this may vary considerably by person, based on their medications, age, other comorbidities. The recommendation was graded as conditional because of very low certainty of the evidence about effects in the population of interest.



Ontario

Ministry of Health

COVID-19 Vaccine Guidance

Primary Series Recommendations for Moderately to Severely Immunocompromised Individuals

A 3-dose primary series is recommended for certain moderately to severely immunocompromised individuals with the aim of enhancing the immune response and establishing an adequate level of protection for individuals who may develop a sub-optimal immune response to a 2-dose primary series. See the COVID-19 chapter in the Canadian Immunization Guide: Immunocompromised persons for more information.

Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health

BRITISH COLUMBIA Ministry of Health

Clinical Guidance on COVID- 19 Vaccines for Persons with Autoimmune Rheumatic Diseases

This guidance is intended for health-care providers and is based on known evidence as of August 22, 2022.

Interactive Summary of Findings

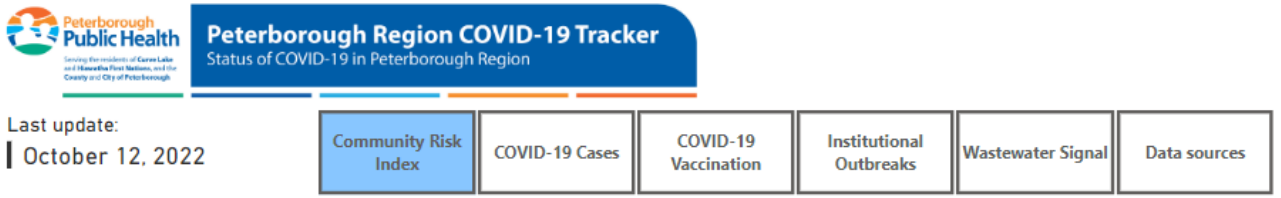
Data provided in the Summary of Findings table is supplemented with data extracted from the guideline text.

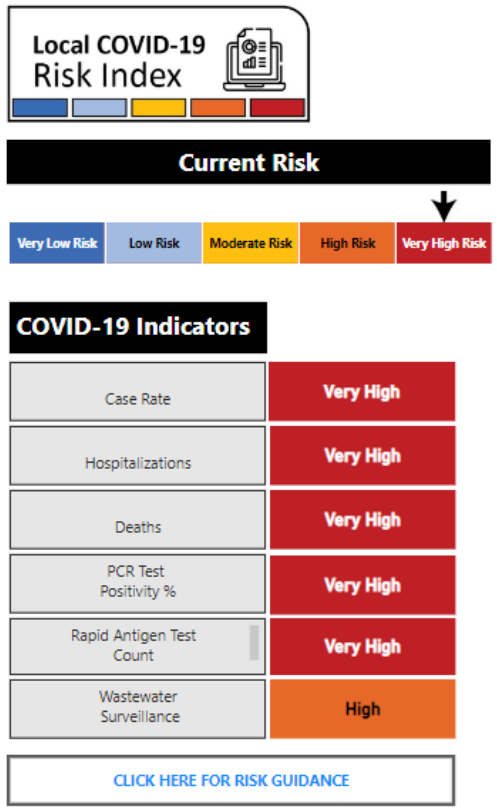
Plain language statements OFF | Absolute effect ON | Relative effect OFF | Visual overview OFF

Outcomes	Absolute Effect: With Two doses of mRNA-1273 vaccine plus placebo	Absolute Effect: With Three doses of mRNA-1273 vaccine	Certainty of the evidence (GRADE)
Symptomatic Infection by COVID-19 (follow-up: 6 months)	68 per 100000	22 per 100000	ⓘ
	Difference: 46 fewer per 100000 patients (95% CI: 56 to 29 fewer per 100000 patients) Based on data from 200000 patients in 1 study		
Surrogate outcome: Serological response	175 per 1000	543 per 1000	⊕OOO VERY LOW ⓘ Due to very serious indirectness. Due to serious imprecision.
	Difference: 368 more per 1000 patients (95% CI: 123 to 842 more per 1000 patients) Based on data from 117 patients in 1 study		

Local Perspective on Guidance

COVID-19 Risk Communication – Integrating Evidence Into Peterborough Public Health's Risk Index





Guidance at all levels

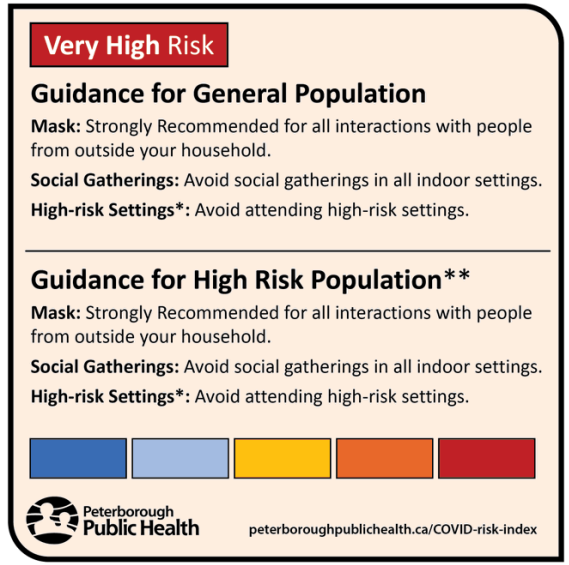
For all risk levels, we strongly recommend:

•Be vaccinated against COVID-19 with all doses you are eligible for (please view **immunization schedule**).

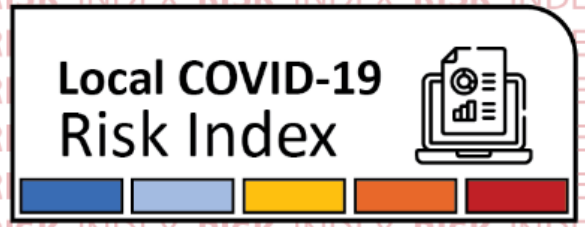
•Monitor for symptoms, seek testing/treatment as you are eligible for and stay home if you are sick.

•Be respectful of the risk tolerance of those around you. When someone may have a lower risk tolerance due to their personal preference or risk factors for severe COVID-19 we recommend the lower risk tolerance be respected (e.g. asking or by wearing your mask).

Guidance at risk level



PPH Risk Index



COVID-19 Risk Guidance

- **Very Low Risk**
- **Low Risk**
- **Moderate Risk**
- **High Risk**
- **Very High Risk**
- **Guidance for Workplaces, Businesses and Organizations**
- **Notes**

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To view evidence-based recommendations on the COVID-19 pandemic communicated in plain language format, please visit the **eCOVID RecMap**.

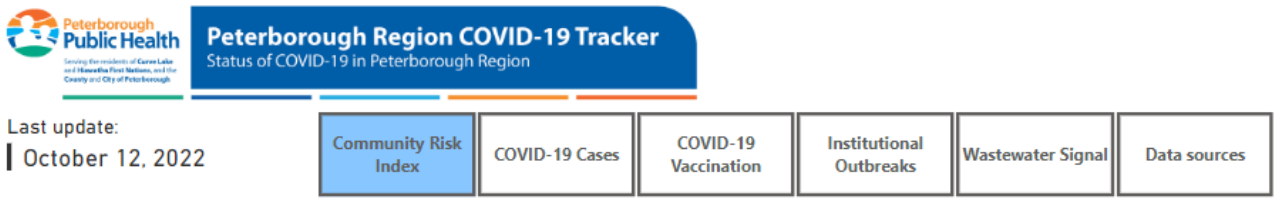
COVID19 Recommendations

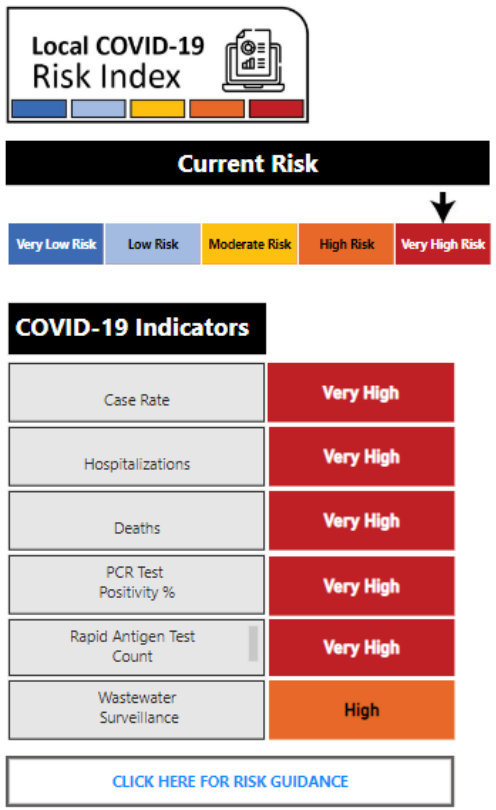
A A A

QUICK LINKS

- **COVID-19**
- COVID-19 Prevention
- Information for Health Professionals
- Local COVID-19 Risk Index
- Public Health Orders
- Reporting Complaints
- Vaccine Information
- Vaccine for 6 Months to 11 Years Old

COVID-19 Risk Communication – Integrating Evidence Into Peterborough Public Health's Risk Index





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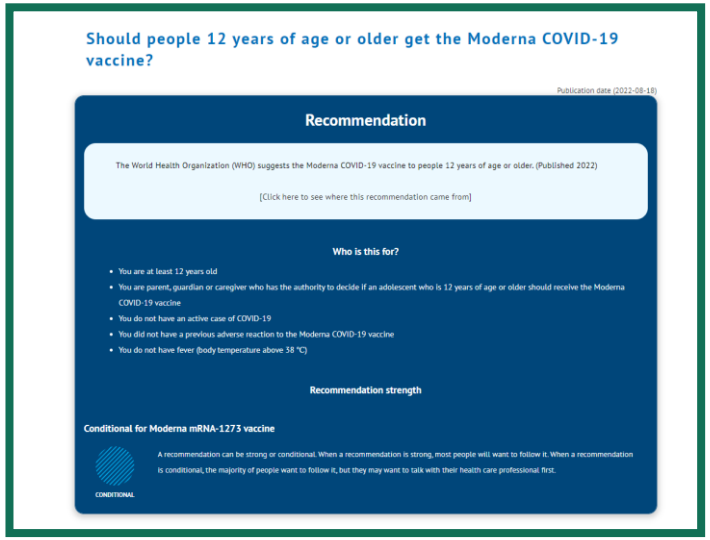
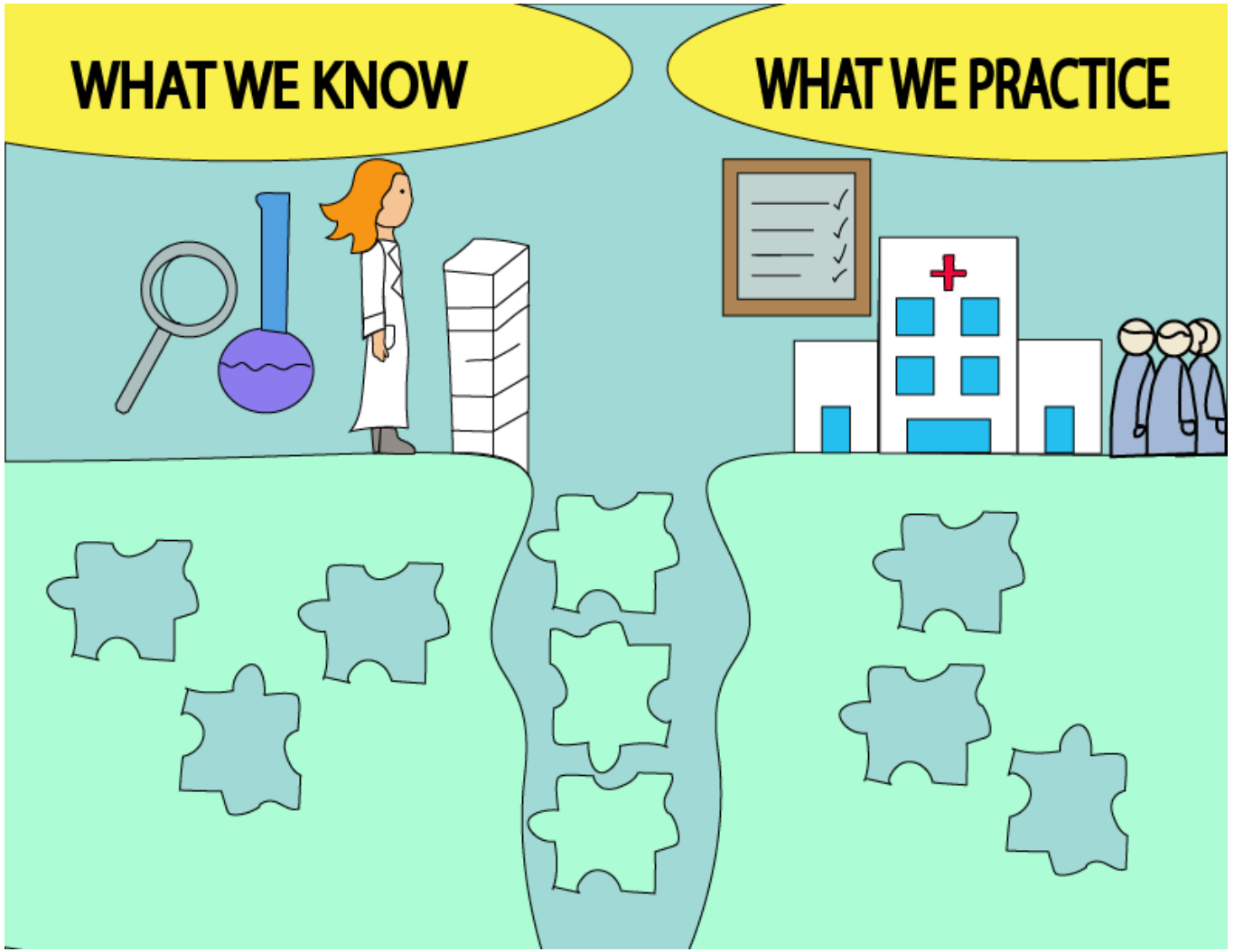
Plain Language Recommendations



Implementation Gap



Implementation Equity Gap

Next Steps

- Reviewing the RecMap for key gaps in guidance, e.g. Canadian vaccine guidance.
- Organizing a key stakeholder workshop in early 2023 to discuss utilization of the RecMap by the public health community in Canada, and implementing linked to established guidance.

Poll #2

- What are barriers to you using evidence-based guidance in your practice?

Answers: *(please number your answers below(e.g. 1, 2,3)) [select all]*

- Difficulty finding needed information;
- I don’t know where to go to find guidance;
- I don’t have the time to review evidence/recommendations;
- I don’t create or access guidance in my work;
- Guidance is changing too quickly;
- Other

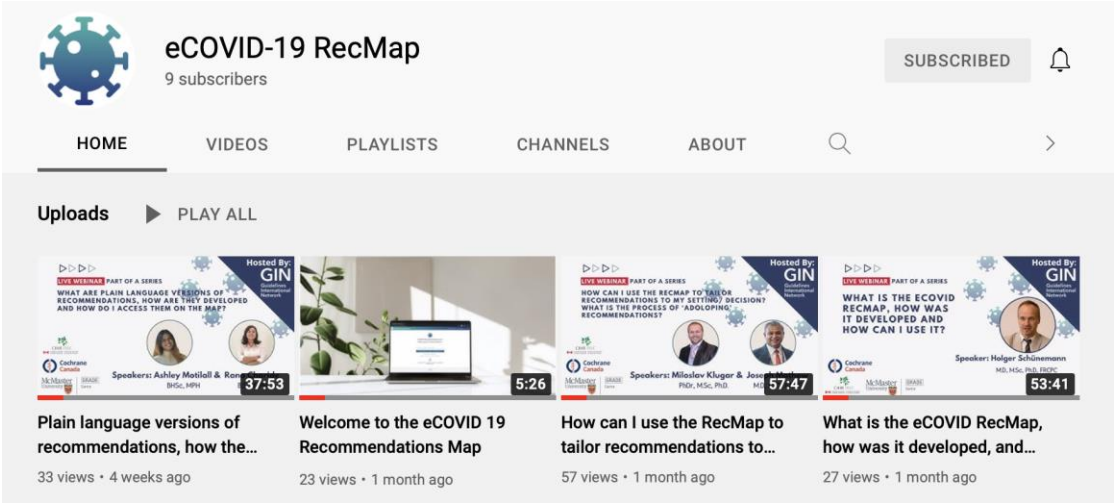
Acknowledgment

- Professor Holger Schunemann (PI)
- Dr Tamara Lotfi
- Ashley Motilall
- Margaret Gassanov
- Large international team of collaborators

Thank you!

@ecovid19recmap

@twpiggott



https://covid19.recmap.org

Key resources

1. The eCOVID19 RecMap: https://covid19.recmap.org
2. Getting trustworthy guidelines into the hands of decision-makers and supporting their consideration of contextual factors for implementation globally: recommendation mapping of COVID-19 guidelines https://doi.org/10.1016/j.jclinepi.2021.03.034
3. A taxonomy and framework for identifying and developing actionable statements in guidelines suggests avoiding informal recommendations https://doi.org/10.1016/j.jclinepi.2021.09.028
4. Good or best practice statements: proposal for the operationalisation and implementation of GRADE guidance http://dx.doi.org/10.1136/bmjebm-2022-111962
5. Which actionable statements qualify as good practice statements In Covid-19 guidelines? A systematic appraisal http://dx.doi.org/10.1136/bmjebm-2021-111866
6. An evaluation of the eCOVID19 Recommendation Map identified diverging Clinical and Public Health guidance https://doi.org/10.1016/j.jclinepi.2022.03.008