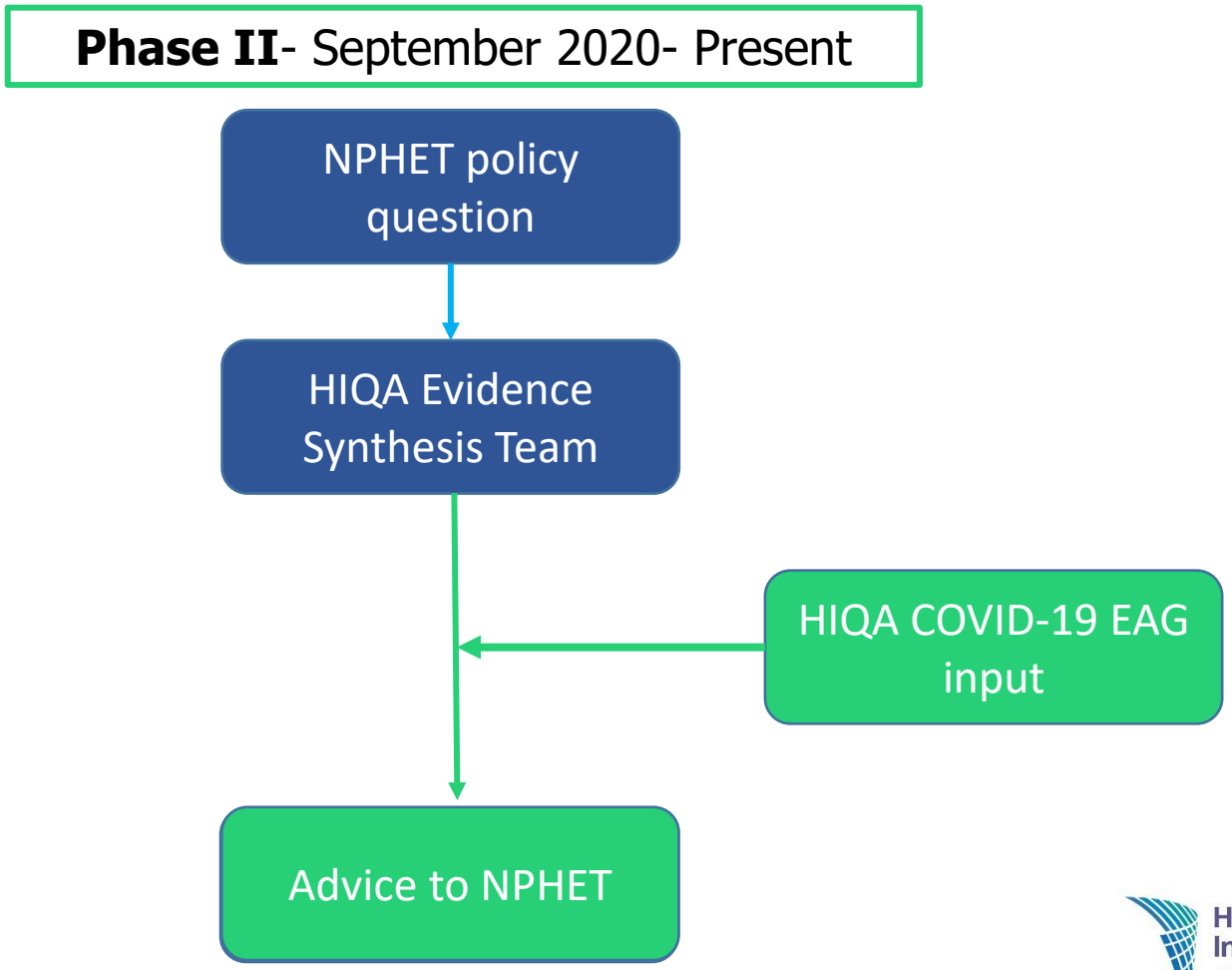
Phase II example:

Duration of restricted movements

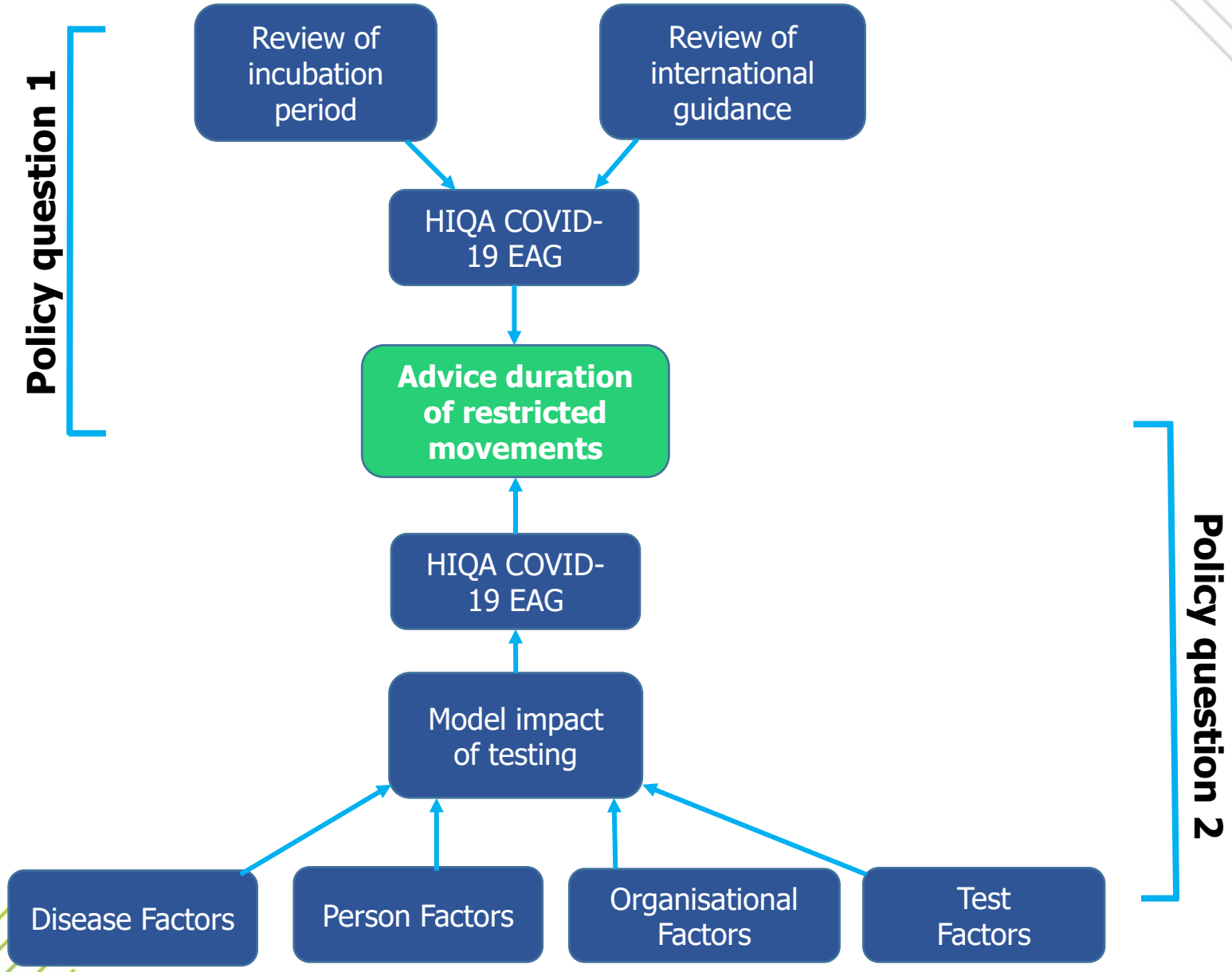
Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Processes- Phase II



Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Approach


Policy question 1
Review of incubation period
Review of international guidance
HIQA COVID-19 EAG
Advice duration of restricted movements
HIQA COVID-19 EAG
Model impact of testing
Disease Factors
Person Factors
Organisational Factors
Test Factors
Policy question 2

Policy question 1 and research questions

- Policy question 1:

"Does the evidence support the current 14-day period of restriction of movement for those exposed, or potentially exposed, to SARS-CoV-2?"

- Research questions:

1. What is the incubation period of COVID-19, or time to a first positive test, in individuals exposed to SARS-CoV-2?
2. What is the international public health guidance for restriction of movements?

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

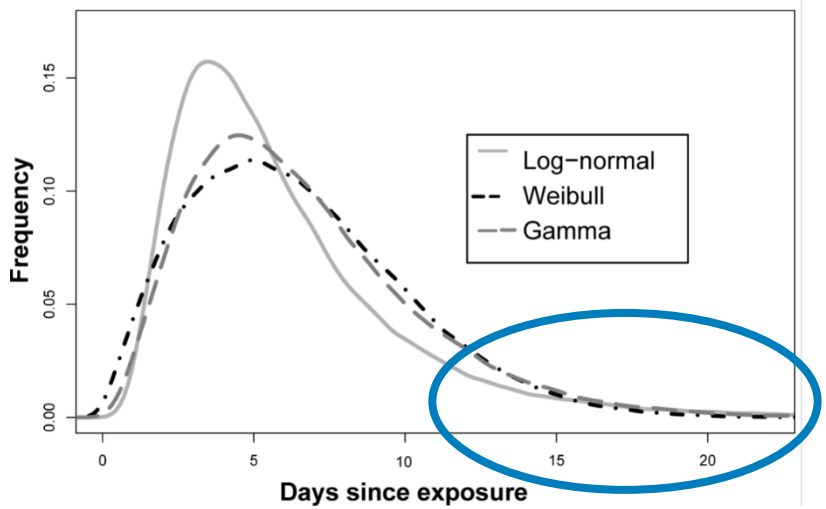
Methodology- data type (incubation period)

- Studies of central tendency (mean or median)
  - Not very informative in isolation
  - Tell us 'the average'

Secondary analysis

- Studies of distribution (log-normal, Weibull, gamma)
  - More informative, but less common
  - Tell us about the proportion of individuals at certain time points- lets us consider 'the tail'

Main analysis

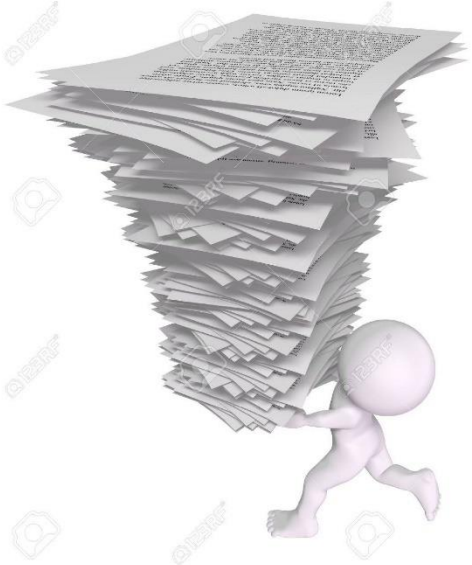


Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Findings

- 98 studies included

- 96 studies relevant to the incubation period
- Three studies relevant to serial testing of asymptomatic populations



Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Findings - incubation period

- Median 5 to 6 days
- 14-days
  - Approximately 95% become symptomatic
  - Estimates that 1 in 20 will do so after this time
- 10-days
  - Approximately 82% to 87% become symptomatic
  - Estimates that 1 in 6 will do so after this time
- 7-days
  - Approximately 61% to 71% become symptomatic
  - Estimates that 1 in 3 will do so after this time

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Findings- international guidance

Ireland recommendations	Other recommendations
Close-contact confirmed, or clinically suspected, case	
▪ 14 days restriction of movements ▪ Test day 0 and day 7 (unless within 24 hours) ▪ 14 days regardless of negative test	▪ 14 days quarantine widely recommended (WHO, CDC, ECDC, multiple countries) ▪ 10 days quarantine introduced by some (Norway, Netherlands, Austria) ▪ Negative test does not affect 10/14 days
Travel-related exposure	

▪ "Green list"- no restriction of movements
▪ Countries not on list - 14 days
	▪ Most include 'green lists' and 10/14 days, some include testing pre-departure and/or on-arrival
	▪ European Commission Common travel approach
	  ▪ Colour system
	  ▪ 14 days quarantine *OR* testing (testing preferred)

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

HIQA COVID-19 EAG (29 September 2020)

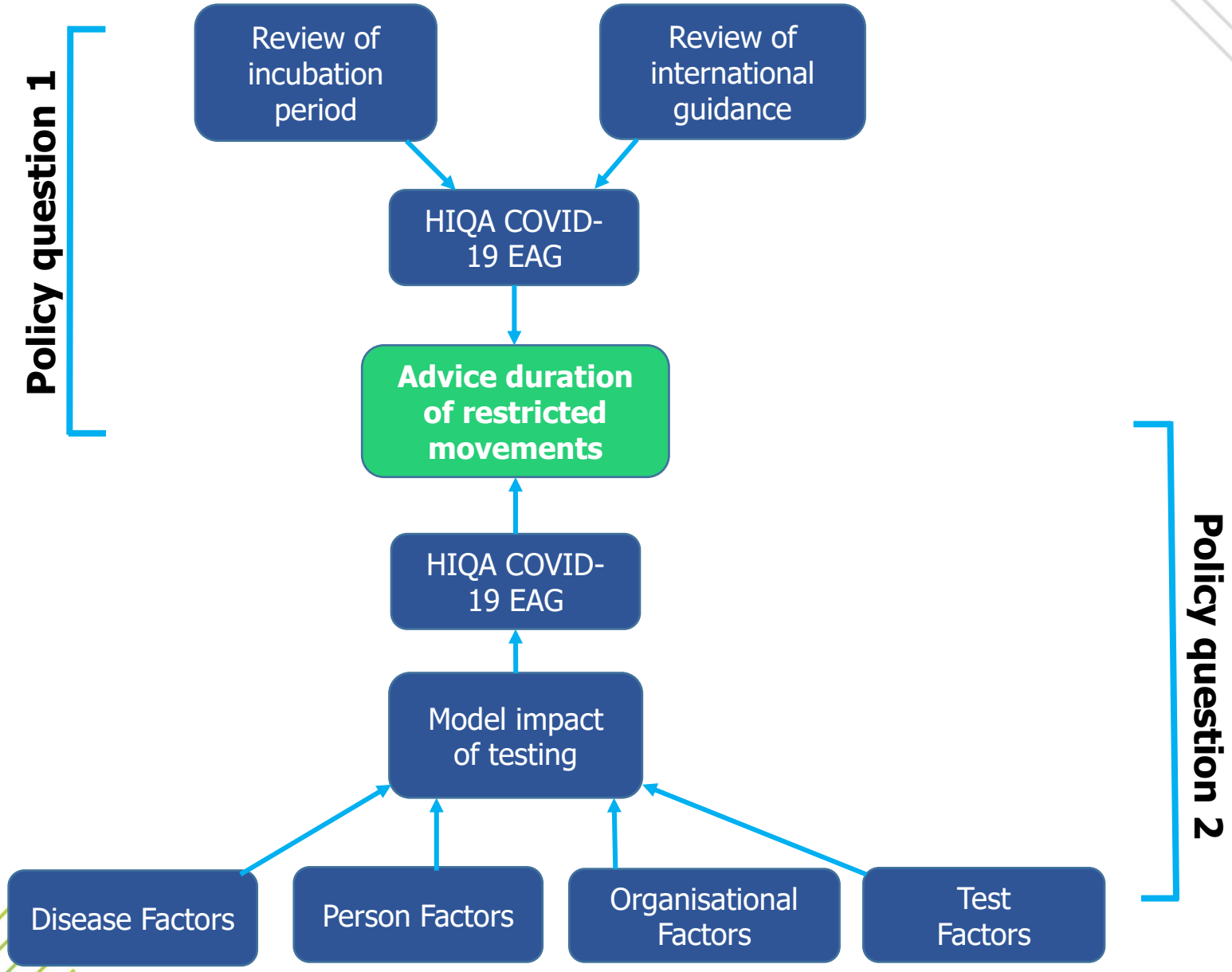
- Current evidence supports the ongoing use of the 14-day duration of restriction of movements

- Further consideration should be given to the ECDC proposal (published 15 September 2020) allowing the period of restriction of movements to be reduced from the recommended 14 days, if a PCR test taken on or after day 10 following last exposure to the case is negative

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Advice to NPHET

Approach


Policy question 1
Review of incubation period
Review of international guidance
HIQA COVID-19 EAG
Advice duration of restricted movements
HIQA COVID-19 EAG
Model impact of testing
Disease Factors
Person Factors
Organisational Factors
Test Factors
Policy question 2

Policy question 2 and research question

- Policy question 2:

"Is there a rationale upon which to reduce the current period of restricted movement for close contacts from 14 days? If so, how will any change in guidance intersect with the current testing protocol (that is, a PCR test on day zero and a PCR test on day seven)?"

- Research questions:

1. What is the potential impact of different testing scenarios to reduce the duration of restriction of movement for close contacts of a COVID-19 case?
2. Update: What is the international public health guidance for restriction of movements?

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

ECDC- proposal

- Period of quarantine (restricted movements) may be reduced from 14 days if a PCR test taken on or after day 10 following last exposure to the case is negative (virus not detected)
  - Residual risk which may not be acceptable in certain circumstances, for example in the context of vulnerable individuals

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

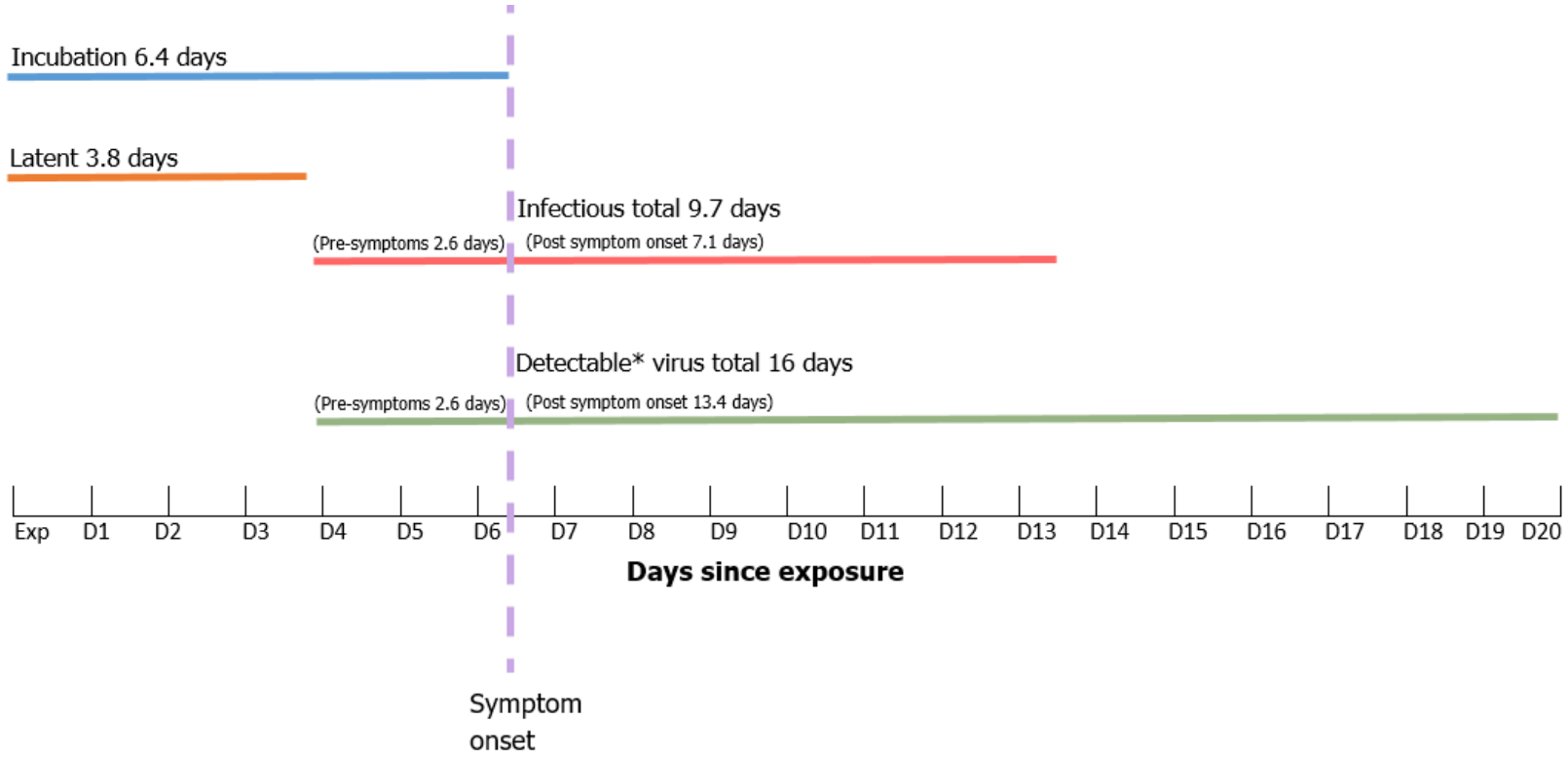
Methods- model of testing

- Population of interest
  - Close contacts of COVID-19 case irrespective of setting
- Outcomes of interest
  - person-days of restricted movement
  - person-days for infected individuals in community
  - potential additional infections generated by this group
  - number of tests carried out
- Base case analysis
  - Comparator current standard of practice in Ireland
- Scenarios
  - RT-PCR, RADT, or mixture
  - Various time points

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

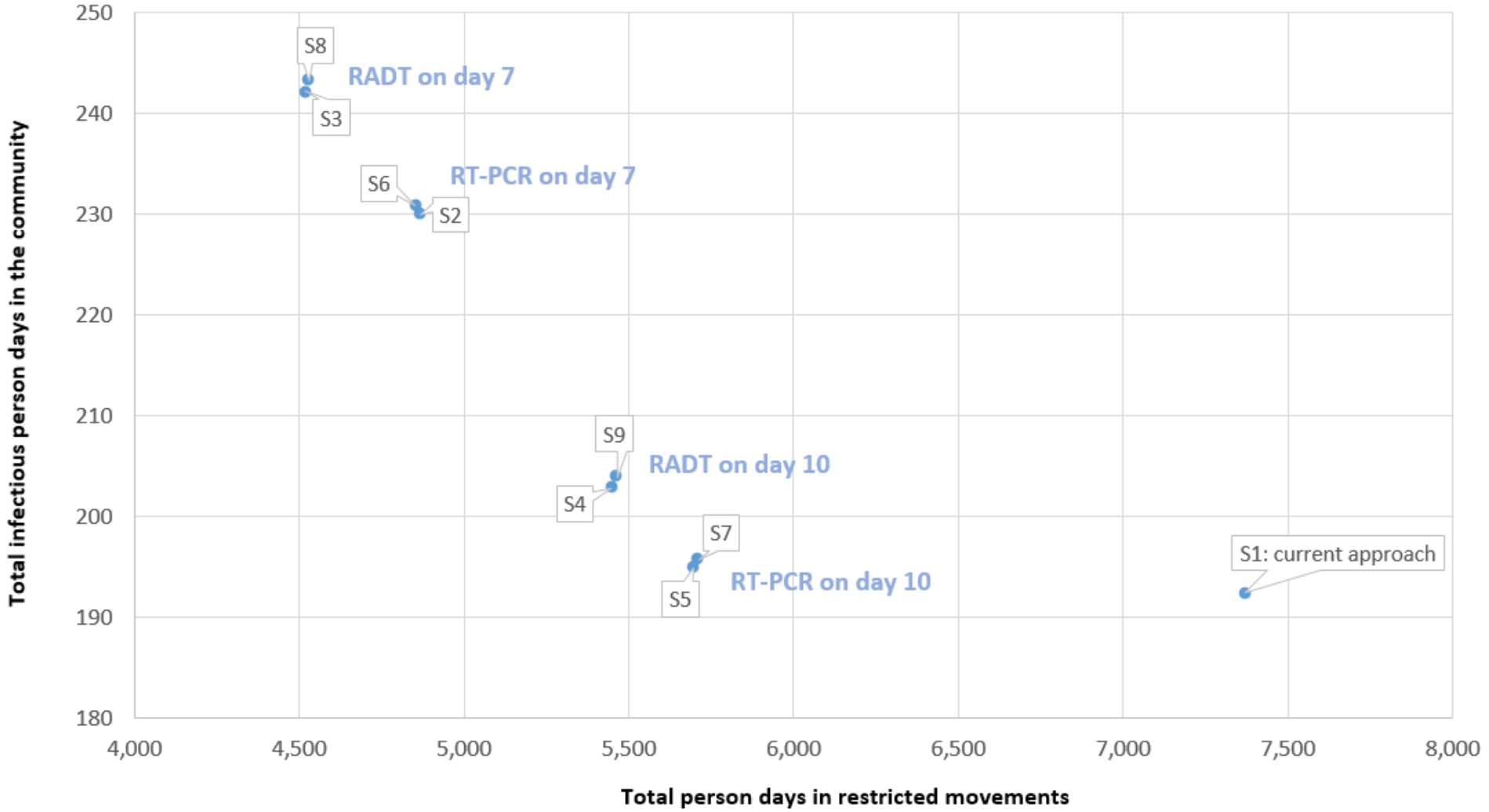
Methods- parameters

- Obtained from previous HIQA reviews, research evidence, Irish data sources, and approximation where required
- Disease, Person, Test, and Organisational factors



Results- model of testing

Person days in restricted movement vs infectious person days in community

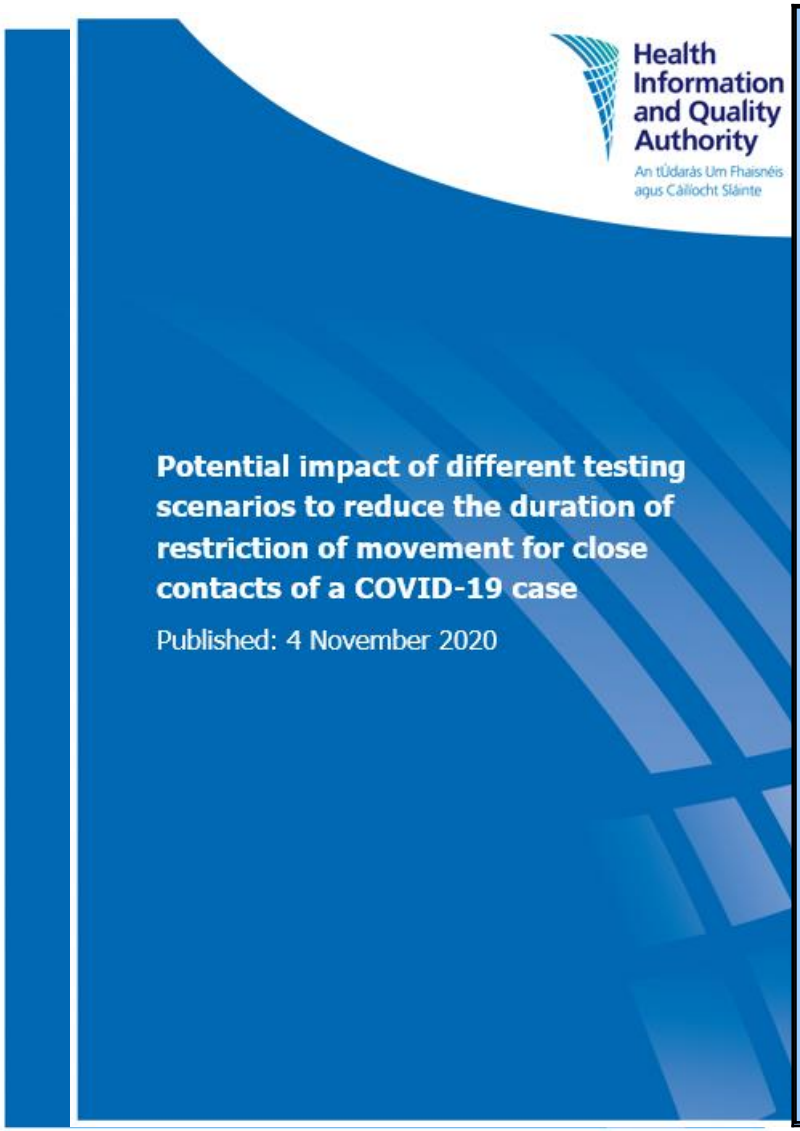


HIQA COVID-19 EAG (20 October 2020)

- Should a change to the current strategy be implemented, at a population-level the use of 'Day Zero' and 'Day 10' RT-PCR tests may offer the most balanced alternative to the current testing regimen in terms of benefit and risk.
- Healthcare workers
- Adherence to duration
- Adherence to testing regime
- Communication
- Test and trace impact

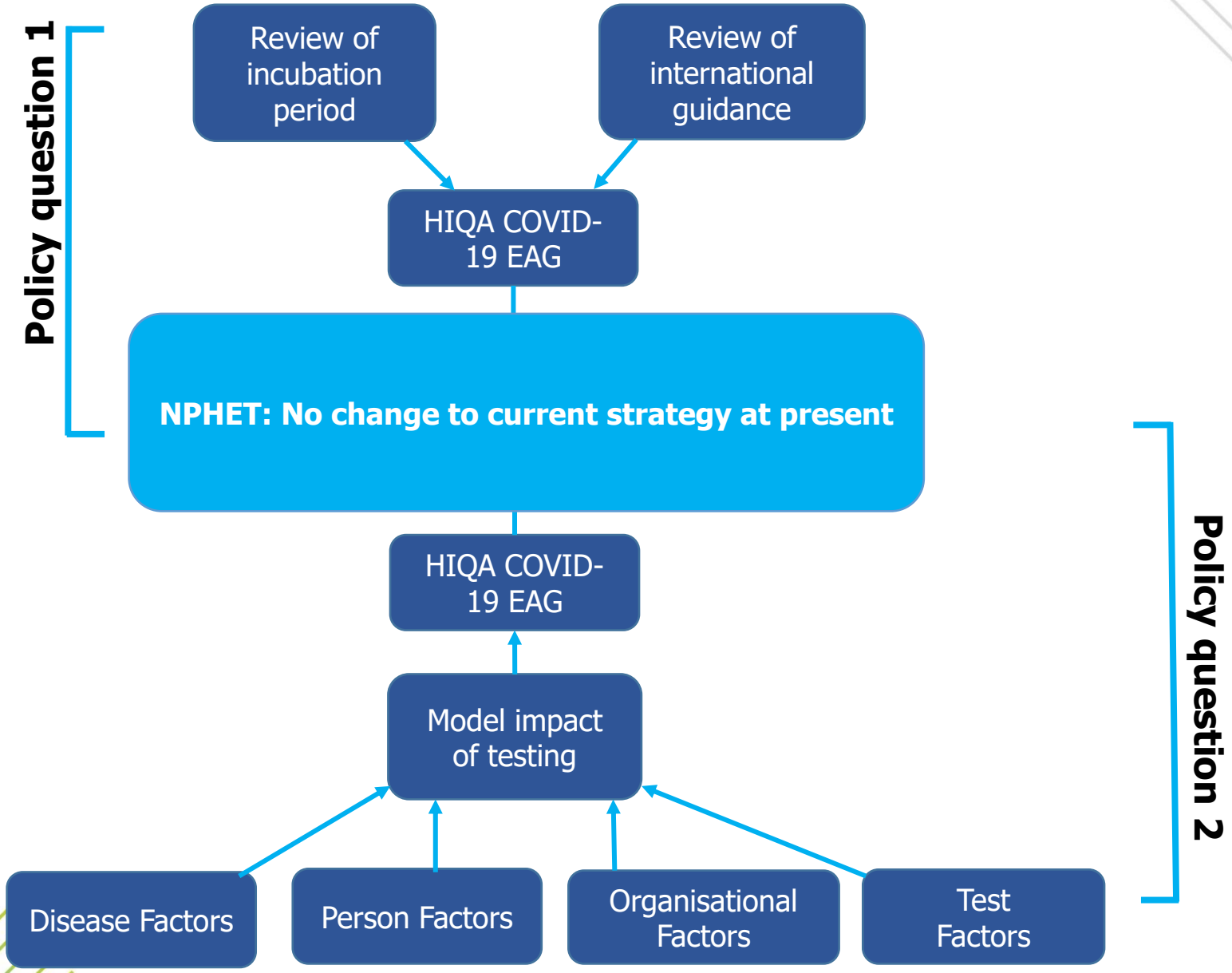
Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Advice to NPHET



- Consideration should be given to what constitutes an acceptable level of risk relative to current practice in the context of the current and future disease trajectory, possible broader public and mental health considerations, and the capacity to resource essential services. Additionally, the impact that any change would have on the current Test and Trace processes in Ireland should be taken into account.
- When considering a reduction in duration of restricted movements based on testing, attention needs to be paid to the impact on certain groups such as vulnerable individuals or those in high-risk settings, in which the associated residual risk of onward infection may not be acceptable.
- These is an urgent need for a communication strategy that clarifies the rationale for the first and second tests, the implications of a 'not detected' first test result, and the importance of ongoing adherence to all aspects of COVID-19 public health guidance.
- Should a change in the current strategy be implemented, the duration of restricted movements would be contingent on completion of all testing requirements. That is, should an individual not present for testing, then they should continue to restrict their movements for the full 14-day duration.

Policy decision



Challenges, outputs and impact

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

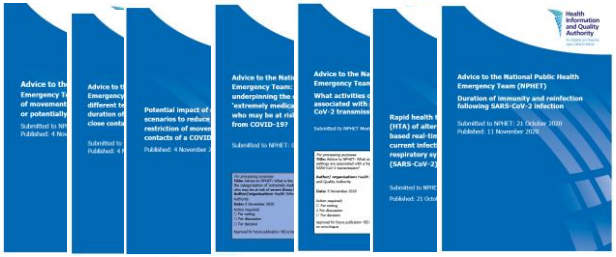
Challenges

- Tight timelines
- Volume of literature
- Scope of questions
- Use of pre-prints
- Quality appraisal
- Formulation of advice
  - Low quality evidence
  - Complexity of data
  - Conflicting findings/perspectives
- Need for clear messaging
- Media and public interest

Health Information and Quality Authority
An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Outputs

Evidence summaries

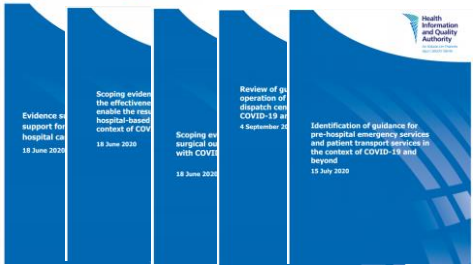


NPHET Advice

Rapid HTAs

Reviews of international guidance

Scoping reports



Reviews of care pathways

Analyses/ Models

Database of public health guidance on COVID-19
Status: Published on 09 Nov 2020

Guidance database for pre-hospital emergency and patient transport services and COVID-19
Status: Published on 17 Jul 2020

Databases

Academic publications

Contents lists available at ScienceDirect

Journal of Infection

journal homepage: www.elsevier.com/locate/jinf

Review

SARS-CoV-2 detection, viral load and infectivity over the course of an infection

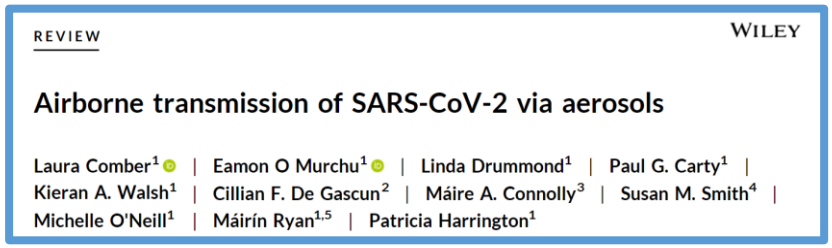
Kieran A. Walsh[a,*], Karen Jordan[a], Barbara Clyne[a,b], Daniela Rohde[a], Linda Drummond[a], Paula Byrne[a], Susan Ahern[a], Paul G. Carty[a], Kirsty K. O'Brien[a], Eamon O'Murchu[a], Michelle O'Neill[a], Susan M. Smith[b], Máirín Ryan[a,c,1], Patricia Harrington[a,1]

REVIEW

WILEY

Immune response following infection with SARS-CoV-2 and other coronaviruses: A rapid review

Eamon O Murchu[1,2] | Paula Byrne[1] | Kieran A. Walsh[1] | Paul G. Carty[1] | Máire Connolly[3] | Cillian De Gascun[4] | Karen Jordan[1] | Mary Keoghan[5] | Kirsty K. O'Brien[1] | Michelle O'Neill[1] | Susan M. Smith[6] | Conor Teljeur[1] | Máirín Ryan[1,7] | Patricia Harrington[1]



REVIEW

WILEY

Airborne transmission of SARS-CoV-2 via aerosols

Laura Comber[1] | Eamon O Murchu[1] | Linda Drummond[1] | Paul G. Carty[1] | Kieran A. Walsh[1] | Cillian F. De Gascun[2] | Máire A. Connolly[3] | Susan M. Smith[4] | Michelle O'Neill[1] | Máirín Ryan[1,5] | Patricia Harrington[1]

Contents lists available at ScienceDirect

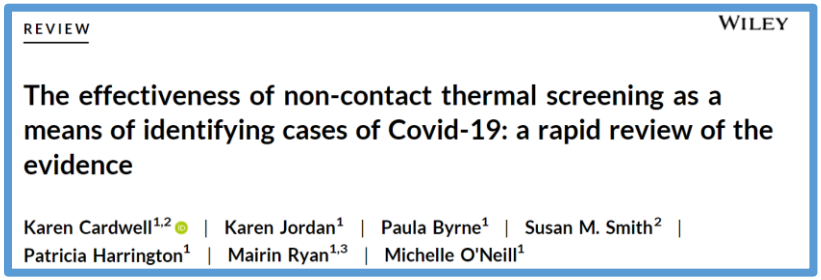
Journal of Infection

journal homepage: www.elsevier.com/locate/jinf

Review

The duration of infectiousness of individuals infected with SARS-CoV-2

Kieran A. Walsh[a,1,*], Susan Spillane[a,1], Laura Comber[a], Karen Cardwell[a,b], Patricia Harrington[a], Jeff Connell[c], Conor Teljeur[a], Natasha Broderick[a], Cillian F. de Gascun[c], Susan M. Smith[b], Máirín Ryan[a,d,2], Michelle O'Neill[a,2]

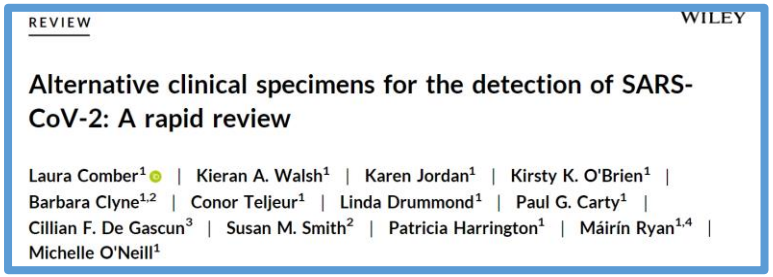


REVIEW

WILEY

The effectiveness of non-contact thermal screening as a means of identifying cases of Covid-19: a rapid review of the evidence

Karen Cardwell[1,2] | Karen Jordan[1] | Paula Byrne[1] | Susan M. Smith[2] | Patricia Harrington[1] | Mairin Ryan[1,3] | Michelle O'Neill[1]



REVIEW

WILEY

Alternative clinical specimens for the detection of SARS-CoV-2: A rapid review

Laura Comber[1] | Kieran A. Walsh[1] | Karen Jordan[1] | Kirsty K. O'Brien[1] | Barbara Clyne[1,2] | Conor Teljeur[1] | Linda Drummond[1] | Paul G. Carty[1] | Cillian F. De Gascun[3] | Susan M. Smith[2] | Patricia Harrington[1] | Máirín Ryan[1,4] | Michelle O'Neill[1]

SYSTEMATIC REVIEW

Effectiveness of face masks worn in community settings at reducing the transmission of SARS-CoV-2: A rapid review [version 1; peer review: 1 approved with reservations]

Daniela Rohde[1], Susan Ahern[1], Barbara Clyne[2], Laura Comber[1], Susan Spillane[1], Kieran A. Walsh[1], Paul G. Carty[1], Linda Drummond[1], Tina Boland[1], Susan M. Smith[2], Máire A. Connolly[3], Patricia Harrington[1], Máirín Ryan[1,4*], Michelle O'Neill[1*]

Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte