Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Protocol for evidence synthesis for groups in vaccine allocation group nine: those aged 18-64 years living or working in crowded settings

11 March 2021

Purpose and aim

The purpose of this protocol is to outline the process by which the Health Information and Quality Authority's (HIQA's) Health Technology Assessment (HTA) Team will synthesise evidence to inform advice from HIQA to the National Public Health Emergency Team (NPHET). The advice will take account of expert interpretation of the evidence by HIQA's COVID-19 Expert Advisory Group.

This evidence synthesis relates to the provisional vaccine allocation group nine; that is, people aged 18-64 years living or working in crowded settings where self-isolation and social distancing is difficult to maintain. The following policy question was outlined by NPHET:

> "Groups at increased risk of COVID-19 due to crowded living and or working conditions may include groups such as Travellers, Roma, international protection applicants, homeless, prisoners and those working in food processing plants. Based on the available national and international evidence in relation to the increased risk of infection with COVID-19, and the increased risk of severe disease from COVID-19 (including hospitalisation, ICU admission and death), is the above list complete and appropriate?"

The following research questions (RQs) were formulated to inform this policy question:

1. Is the potential composition of the vaccine allocation group nine, which comprises named groups of adults aged 18-64 years perceived to be at increased risk of infection with COVID-19 and or serious disease due to their living or working conditions, consistent with international public health guidance and policy?
    - Do other guidance or policy documents prioritise groups of adults aged 18-64 years for vaccination due to their living or working conditions? If yes, are any relevant at-risk groups omitted from the proposed Irish grouping.
2. What is the rate of infection and rate of severe disease in each of the groups listed as potentially applicable to vaccine allocation group nine (and any additional groups identified as potentially relevant to the Irish context from RQ1), compared with the general population in Ireland?

Process outline

Given the policy question under consideration, three elements will contribute to this evidence synthesis, namely:

- an exploration of national level data on infection rates in Ireland

- a review of international public health guidance and policy
- input from HIQA's COVID-19 EAG.

Five distinct steps in the process have been identified. These are listed below and described in the following sections:

1. RQ1: Review of international public health guidance and policy
    1.1. Search relevant sources
    1.2. Screen sources
    1.3. Data extraction
2. RQ2: Exploration of Irish data on rates of infection and severe disease
    2.1. Identify groups to be included
    2.2. Identify data sources and access available data
    2.3. Data analysis
3. Summarise the collective findings of the data analysis and international review.
4. Present findings to HIQA's COVID-19 Expert Advisory Group for input.
5. Provide findings and advice to NPHET for consideration.

1. RQ1: Review of international public health guidance and policy

1.1 Search relevant sources

A search of public health agencies and governmental departments will be conducted to identify relevant policy documents and guidance examining vaccination and priority grouping for allocation.

The countries and organisations listed below will be searched and have been selected based on their applicability to the Irish context (in terms of geography, healthcare system similarity, guidance to date):

- Austria (https://www.sozialministerium.at/Informationen-zum-Coronavirus.html)
- Belgium (https://www.info-coronavirus.be/en/faq/)
- Czech Republic (https://www.vlada.cz/en/media-centrum/aktualne/measures-adopted-by-the-czech-government-against-coronavirus-180545/)
- Denmark (https://coronasmitte.dk/en)
- Finland (https://thl.fi/en/web/thlfi-en)
- France (https://www.gouvernement.fr/info-coronavirus)
- Germany (https://www.bundesregierung.de/breg-en)
- Greece (https://emvolio.gov.gr/proteraiopoiisi-emvoliasmoy-kata-tis-covid-19)
- Hungary (https://vakcinainfo.gov.hu/)

- Italy (http://www.salute.gov.it/portale/nuovocoronavirus)
- Malta (https://deputyprimeminister.gov.mt/en/health-promotion/covid-19/Pages/vaccines.aspx)
- Netherlands (https://www.government.nl/topics/coronavirus-covid-19)
- Norway (https://www.fhi.no/en/id/infectious-diseases/coronavirus/)
- Poland (https://www.gov.pl/web/szczepimysie/narodowy-program-szczepien-przeciw-covid-19)
- Portugal (https://covid19.min-saude.pt)
- Slovakia (https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2021/58/)
- Spain (https://www.mscbs.gob.es/)
- Sweden (https://www.government.se/government-policy/the-governments-work-in-response-to-the-virus-responsible-for-covid-19/)
- Switzerland (https://www.bag.admin.ch/bag/en/home/das-bag/aktuell/medienmitteilungen.html?dyn_startDate=01.01.2016UK)
- European Union (https://eur-lex.europa.eu/legal-content)
- England (https://www.gov.uk/coronavirus)
- Northern Ireland (https://www.nidirect.gov.uk/campaigns/coronavirus-covid-19)
- Scotland (https://www.nhsinform.scot/covid-19-vaccine)
- Wales (https://gov.wales/coronavirus)
- WHO (https://www.ecdc.europa.eu/en/publications-data/covid-19-vaccination-and-prioritisation-strategies-eueea)
- ECDC (https://www.who.int/emergencies/diseases/novel-coronavirus-2019)
- CDC (https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations.html)

1.2 Screen sources

The above sources will be screened for information relating to vaccine allocation groups, and specifically for groups living and or working in crowded conditions. No restriction will be placed on language and non-English documents will be translated via Google translate. However, this method will be noted as a limitation given potential inaccuracies in the interpretation of direct translation.

1.3 Data extraction

Where information is presented regarding vaccine allocation for groups living and or working in crowded conditions, the groups will be documented, alongside any rationale provided for the inclusion of these groups, and specific ordering relative to other groups of interest if relevant. Only groups relevant to the policy question will

be considered, prioritisation relative to other vaccine allocation groups will not be examined. Within each source examined, it will be documented if vaccine allocation is not presented or if it is not presented by groupings relevant to this policy question. The data extraction template for this element is provided in Appendix 1.

If additional groups are identified within the international sources that may be relevant to an Irish context, Irish-level data (as described in section 2) will be extracted if feasible.

2. RQ2: Exploration of Irish data on rates of infection and severe disease

2.1 Identify groups to be included

The groups to be included within the analysis will be those relevant to group nine of the provisional vaccine allocation group as outlined by the Department of Health and National Immunisation Advisory Committee within the COVID-19 Vaccine Allocation Strategy; that is, people aged 18-64 years living or working in crowded settings.[1] From the policy question outlined this will include members of the following groups specifically:

- Traveller community
- Roma community
- prisoners
- people who are homeless
- international protection applicants
- people who work in meat factories or food processing plants.

Additional groups outlined by the Drugs Policy and Social Inclusion unit of the Department of Health in their work examining prioritisation of socially excluded groups for vaccination will be examined for relevance. These groups may include staff of international protection accommodation services, staff in homeless shelters or hostels, addiction service users, undocumented migrants, and sex workers.[2]

Any additional groups identified as relevant to Ireland from the international review of public health guidance and policy outlined below will also be included within the analysis. Groups identified in the review which are already represented or captured by an existing priority group due to be allocated vaccine earlier, according to the Irish allocation order, will be excluded (for example, those aged 18-64 years who are residents of long-term care facilities are considered under group nine).[1]

2.2 Identify data sources and access available data

The scope for this quantitative analysis is limited to using readily available data on cases and or outbreaks amongst the listed groups of interest and the general population. The Health Protection and Surveillance Centre (HPSC) Computerised Infectious Disease Reporting (CIDR) database will be used as the source of data on COVID-19 cases, hospitalisations, ICU admissions and deaths. Data on cases and or outbreaks will be categorised at source by the above groups of interest to this analysis, for example by ethnicity. It is likely that for a number of groups listed, the data will be linked to case counts from outbreak codes within the setting relevant to these groups. In these instances, the HPSC will be asked to provide aggregate counts of the cumulative number of cases, hospitalisations, ICU admissions and deaths associated with outbreaks in each of the identified groups. This method will exclude cases which were not linked to outbreaks (that is, two or more cases) and hence may underestimate the total risk within a group.

Relevant data sources that may provide information on the size of the respective populations for each group in Ireland will be identified and assessed. It is anticipated that such sources will include the Central Statistics Office, the Department of Health, other governmental departments, or representative organisations for each group of interest where required.

It is acknowledged that Irish-level data may not be available for some groups (for example, the categorisation of sex workers in case data and or accurate estimation of the population size in Ireland). Such instances will be documented. The accuracy of estimates will depend on the extent to which cases can be allocated to at-risk groups. Due to differences in access to testing or testing practice (for example use of serial testing in some settings), there is potential for ascertainment bias.

2.3 Data analysis

The form of analysis undertaken will be guided by the data available for each of the groups of interest. Crude estimates of risk of infection and risk of severe disease (that is, hospitalisation, ICU admission and mortality) will be provided alongside a comparison between observed and expected data. Observed data will relate to the cases within each of the groups separately, compared to the expected data, which related to the general population and excludes these groups.

For context, data will be provided for all ages; however, given the policy question relates only to those aged 18-64 years, the analysis will be restricted to this age range where possible. Should sufficient coverage be presented within the available data, in terms of case demographics and underlying population distributions, standardisation may be performed for age and or gender.

It is noted that there may be an overlap within certain groups identified, for example those working in meat or food processing may be members of other groups. However, it is not anticipated that the case data presented will enable such interactions to be explored and the data will relate to one categorisation only.

3. Summarise collective findings

A descriptive report of the findings from each element of this evidence synthesis will be prepared and a collective interpretation provided.

4. Present collective findings to COVID-19 Expert Advisory Group for input

The collective findings of this evidence synthesis will be presented to the HIQA COVID-19 Expert Advisory Group for consideration, clinical interpretation and input.

5. Provide findings to NPHET for consideration

A document outlining the key findings of the evidence synthesis, expert input from the EAG and the resultant advice will be provided to NPHET for consideration.

6. Timelines

This evidence synthesis will be conducted in line with the processes and timelines outlined for Phase 2 of HIQA's COVID-19 response. Work commenced on 23 February 2021 and it is anticipated that a final draft will be circulated to HIQA's COVID-19 EAG for review and input on the 11 March 2021, with a view to finalising the report by 18 March 2021. However, this timeframe is contingent on protocol agreement and the availability of necessary data in a format that facilitates analysis. Should delays be encountered in terms of accessing data, or considerable data extraction, cleaning or validation be required, then this timeline will be amended.

References

1. Department of Health. 2020. 'Provisional Vaccine Allocation Groups'. Available from: https://www.gov.ie/en/publication/39038-provisional-vaccine-allocation-groups/
2. Drug Policy and Social Inclusion unit. 2021. 'Covid-19 vaccination allocation sequencing for socially excluded groups'.

Appendix 1. Data extraction template

Source	Relevant groups prioritised in vaccine allocation (when provided, number indicates order of priority)	Rationale provied for inclusion
Organisation Guidance title URL Date published/updated	Group descriptors	Document any rationale provided for the inclusion of groups