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Information
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An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Knowledge Sharing and Influence Measurement Framework

HTA Directorate Report 2020

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Introduction

Health technology assessments (HTAs) are designed to inform safe and effective health policies that are both patient-focussed and achieve best value. HTA is a multi-disciplinary activity and is resource-intensive. The work of the HTA directorate in 2020 was broadly classified into five main work streams:

- HTA
- Health Research Board – Collaboration in Ireland for Clinical Effectiveness Reviews (HRB-CICER)
- Evidence for Policy (EfP)
- National Screening Advisory Committee (NSAC) evidence synthesis
- COVID-19 evidence synthesis.

HTA typically informs investment and disinvestment decisions by the Minister for Health and the Health Service Executive (HSE). HRB-CICER conducts evidence synthesis to inform the development of National Clinical Guidelines and National Clinical Audit. The EfP Team was established within the HTA directorate in 2018 following a request from the National Patient Safety Office (NPSO) in the Department of Health. The EfP Team, part-funded by an extension of the HRB-CICER grant agreement, is responsible for implementing evidence synthesis programmes to deliver high-quality evidence to support the development of policy by the Department of Health. Since 2020, HIQA has provided evidence synthesis and evidence-informed advice to support the work of the NSAC, an independent advisory committee which advises the Minister and Department of Health on all new proposals for population-based screening programmes and revisions to existing programmes.

COVID-19 emerged in December 2019 as a new disease and the evidence about it continues to evolve since its emergence in December 2019. In March 2020, HIQA began to provide evidence synthesis to support the national public health response to the COVID-19 pandemic at the request of the Department of Health. A COVID-19 Evidence Synthesis Team was established in HIQA's HTA Directorate to provide evidence synthesis to support the work of the National Public Health Emergency Team (NPHET), NPHET sub-groups and other groups in the Department of Health and HSE working on the national public health response. Following the establishment of the COVID-19 Evidence Synthesis Team, ongoing work from the HTA, HRB-CICER, EfP and NSAC teams was temporarily suspended to prioritise efforts to support the national public health response. In September 2020, HIQA commenced providing evidence-based advice directly to NPHET on behalf of the Minister for Health.

The impact or influence of HTA Directorate activity should be evaluated to assess its value, and whether its contribution to decision making is proportionate to the

resources used to deliver it. Accordingly, this report follows the HTA knowledge sharing and influence measurement framework developed and approved by the Board in 2019. The framework outlined a broad set of metrics capturing different facets of knowledge sharing and influence across all HTA Directorate activity. This report documents the impact metrics for 2020.

Outputs

Outputs refer to knowledge generation which can include HIQA reports and publications, contributions to publications by other agencies, teaching and training, and other forms of dissemination such as conference presentations or peer-reviewed articles. The following lists outputs, categorised by deliverable type.

COVID-19 reports published

- Evidence summaries provided to the NPHET Expert Advisory Group (March to August 2020) on:
 - the potential for children to contribute to transmission of SARS-CoV-2 (updated three times)
 - the relative importance of droplet versus contact transmission to the spread of SARS-CoV-2
 - airborne transmission of SARS-CoV-2 via aerosols
 - accuracy of salivary samples in SARS-CoV-2 detection compared with nasopharyngeal, oropharyngeal or lower respiratory tract samples
 - the accuracy of molecular and antigen detection tests for the diagnosis of COVID-19 using alternate clinical specimens or sites
 - facemask use by healthy people in the community (updated once)
 - universal facemask use by healthcare workers in the context of COVID-19
 - the immune response following infection with SARS-CoV-2 or other human coronaviruses (updated three times)
 - non-contact thermal screening as an effective means of identifying cases of COVID-19
 - the risk of transmission of SARS-CoV-2 during aerosol generating procedures from patients without clinical symptoms
 - surgical outcomes in patients with COVID-19
 - SARS-CoV-2 viral load and infectivity over the course of an infection (updated twice)
 - placental transfer of antibodies
 - average length of stay in the intensive care unit for COVID-19
 - asymptomatic transmission of COVID-19
 - the natural history of COVID-19 in children
 - guidance for the resumption of hospital care in the context of COVID-19
 - the effectiveness of pathways to enable the resumption of hospital-based care in the context of COVID-19
 - public health guidance on identification and management of symptoms in young children and young people attending school in the context of COVID-19
- Two rapid HTAs:
 - alternatives to laboratory-based real-time RT-PCR to diagnose current infection with SARS-CoV-2
 - alternative diagnostic testing approaches for the detection of severe acute respiratory syndrome (SARS-CoV-2) provided to NPHET

- International reviews of public health measures and strategies including:
 - public health guidance on universal face mask use by healthcare workers in the context of COVID-19
 - public health guidance on physical distancing in the context of COVID-19
 - public health guidance for residential care facilities in the context of COVID-19 (updated 10 times)
 - public health guidance on protective measures for vulnerable groups in the context of COVID-19 (updated 14 times)
 - international public policy responses to easing restrictions introduced to limit the spread of COVID-19 (updated twice)
- Epidemiological analysis of excess mortality
- Evidence syntheses to the National Ambulance Service including a:
 - review of the operation of emergency medical dispatch centres and guidance for pre-hospital emergency services and patient transport services
 - database of guidance for pre-hospital emergency services and patient transport services in the context of COVID-19
- Evidence summaries and advice to NPHET (September to December 2020) on:
 - factors influencing, and measures to improve, vaccination uptake
 - face mask use by healthy people in the community to reduce SARS-CoV-2 transmission
 - the categorisation of 'extremely medically vulnerable' groups who may be at risk of severe illness from COVID-19
 - activities or settings associated with a higher risk of SARS-CoV-2 transmission
 - reinfection and the duration of antibody responses following SARSCoV-2 infection
 - the incubation period of COVID-19, or time to first positive test, in individuals exposed to SARS-CoV-2
 - recommendations from international guidance on the duration of restriction of movements (updated twice)
 - the duration of infectiousness in those that test positive for SARS-CoV-2 RNA.
- Modelling exercises on the potential impact of different testing scenarios in close contacts and the minimum duration of quarantine for people entering Ireland from non-designated countries
- An international review of public health measures and strategies to limit the spread of COVID-19 (updated twice)
- International reviews of public health measures provided to the Department of Health and to the HPSC, including reviews of public health guidance:
 - for residential care facilities in the context of COVID-19
 - on protective measures for vulnerable groups in the context of COVID-19
- A scoping HTA provided to the Department of Health on convalescent plasma for the treatment of COVID-19
- Database of international public health measures provided to the Department of Health and the HPSC daily up to September; three times per week from September

Other evidence syntheses published

- A scoping HTA on universal influenza vaccination in children provided to the Department of Health
- Analysis of spatial patterns of respiratory mortality in the HSE Mid-West region

Guideline/guidance documents published

- Guidelines for the Economic Evaluation of Health Technologies in Ireland 2020

Work commissioned by the European Centre for Disease Prevention and Control (ECDC)

- Systematic review of the efficacy, effectiveness and safety of newer and enhanced seasonal influenza vaccines

Contributions of sections to reports published by the National Clinical Effectiveness Committee (NCEC)

- National Clinical Guideline on the Irish National Early Warning System (INEWS)
 - Annex 1: Clinical and cost effectiveness review
 - Annex 2: Budget impact analysis
- National Clinical Guideline on stratification of clinical risk in pregnancy
 - Annex A : Systematic review of clinical guidelines
 - Annex B: A modified Delphi study
 - Annex C: Systematic review of economic literature
 - Annex D: Budget impact analysis
- National Clinical Guideline on nutrition screening and oral nutrition support for adults
 - Annex 1: Systematic review of Nutrition Screening Tools
 - Annex 2: Clinical and cost-effectiveness of Oral Nutrition Support

Training delivered

- HSE librarian collaboration

Teaching delivered

- MSc Health Economics, NUI Galway
- MSc Pharmaceutical Medicine, Trinity College Dublin

Conference presentations given

- Walsh KA, Hawkshaw S, Plunkett T, O'Brien KK, Harrington P, Teljeur C, Smith SM, Ryan M. The safety and effectiveness of a pharmacoinvasive strategy compared with primary percutaneous coronary interventions (PPCI) for adults diagnosed with ST-Elevation myocardial infarction (STEMI): A systematic review and meta-analysis. 2020 SPHeRE Network 6th Annual Conference, Dublin.
- Sculpher M, Soares M, Teljeur C, Watson I. Workshop: Methodological and normative issues arising in recently updated national guidelines for economic evaluation. ISPOR Europe 2020 (virtual conference).

Conference posters presented

- Larkin, J, Clyne, B, O'Neill, M, Walsh, KA, Smith, SM. Updating systematic review searches prior to clinical guideline publication: analysis of current recommendations and development of guidance. SPHeRE (Structured Population and Health Services research education) 25th February, Dublin.
- Walsh KA, Fawsitt CG, Marshall L, Plunkett T, O'Brien KK, Harrington P, Smith SM, Ryan M. A Scoping Review of International Models of Adult Specialist Cardiac Networks. 2020 SPHeRE Network 6th Annual Conference, Dublin. SPHeRE (Structured Population and Health Services research education) 25th February, Dublin.
- O'Brien KK, Plunkett T, Jordan K, Walsh KA, Harrington P, Smith SM, Ryan M. A Systematic Review of Organisational and Service Specification Recommendations for centres providing percutaneous coronary interventions for adults diagnosed with ST-Elevation myocardial infarction (STEMI). 2020 SPHeRE Network 6th Annual Conference, Dublin
- Walsh KA, O'Brien KK, Plunkett T, Harrington P, Teljeur C, Smith SM, Ryan M. The relationship between procedural volume and postoperative mortality for percutaneous coronary interventions (PCI): A systematic review and meta-analysis. 2020 SPHeRE Network 6th Annual Conference, Dublin.

Peer-reviewed publications

- Byrne AW, McEvoy D, Collins AB, Hunt K, Casey M, Barber A, Butler F, Griffin J, Lane EA, McAloon C, O'Brien K, Wall P, Walsh KA, More SJ. Inferred duration of infectious period of SARS-CoV-2: rapid scoping review and analysis of available evidence for asymptomatic and symptomatic COVID-19 cases. *BMJ Open*. 2020 Aug 5;10(8):e039856. doi: 10.1136/bmjopen-2020-039856.
- Cardwell, K., Jordan, K., Byrne, P., Smith, S. M., Harrington, P., Ryan, M., & O'Neill, M. (2020). The effectiveness of non-contact thermal screening as a means of identifying cases of Covid-19: a rapid review of the evidence. *Reviews in Medical Virology*, e2192.
- Cardwell K, Smith SM, Clyne B, McCullagh L, Wallace E, Kirke C, Fahey T, Moriarty F; General Practice Pharmacist (GPP) Study Group. Evaluation of the General Practice

Pharmacist (GPP) intervention to optimise prescribing in Irish primary care: a non-randomised pilot study. *BMJ Open*. 2020 Jun 28;10(6):e035087. doi: 10.1136/bmjopen-2019-035087.

- Carty PG, McCarthy M, O'Neill S et al. Laboratory-based dried blood spot testing for hepatitis C: A protocol for systematic review and meta-analysis of diagnostic accuracy. *HRB Open Res* 2020, 3:78 (<https://doi.org/10.12688/hrbopenres.13166.1>)
- Comber L, Walsh KA, Jordan K, O'Brien KK, Clyne B, Teljeur C, Drummond L, Carty PG, De Gascun CF, Smith SM, Harrington P, Ryan M, O'Neill M. Alternative clinical specimens for the detection of SARS-CoV-2: A rapid review. *Rev Med Virol*. 2020 Oct 22. doi: 10.1002/rmv.2185.
- Comber L, O Murchu E, Drummond L, Carty PG, Walsh KA, De Gascun CF, Connolly MA, Smith SM, O'Neill M, Ryan M, Harrington P. Airborne transmission of SARS-CoV-2 via aerosols. *Rev Med Virol*. 2020 Oct 26:e2184. doi: 10.1002/rmv.2184
- Hollingworth W, Fawsitt CG, Dixon P, Duffy L, Araya R, Peters TJ, Thom H, Welton NJ, Wiles N, Lewis G; PANDA Team. Cost-Effectiveness of Sertraline in Primary Care According to Initial Severity and Duration of Depressive Symptoms: Findings from the PANDA RCT. *Pharmacoecon Open*. 2020 Sep;4(3):427-438. doi: 10.1007/s41669-019-00188-5.
- Larkin J, Foley L, Smith SM, Harrington P, Clyne B. The experience of financial burden for patients with multimorbidity: A protocol for a systematic review of qualitative research. *HRB Open Res*. 2020 Mar 26;2:16. doi: 10.12688/hrbopenres.12915.2. eCollection 2019.
- O'Connor R, O'Driscoll R, O'Doherty J, Hannigan A, O'Neill A, Teljeur C, O'Regan A. The effect of 'paying for performance' on the management of type 2 diabetes mellitus: a cross-sectional observational study. *BJGP Open* 2020; 4 (2): bjgpopen20X101021. DOI: 10.3399/bjgpopen20X101021
- O'Murchu E, Byrne P, Walsh KA, Carty PG, Connolly M, De Gascun C, Jordan K, Keoghan M, O'Brien KK, O'Neill M, Smith SM, Teljeur C, Ryan M, Harrington P. Immune response following infection with SARS-CoV-2 and other coronaviruses: A rapid review. *Rev Med Virol*. 2020 Sep 23:e2162. doi: 10.1002/rmv.2162.
- Rohde D, Ahern S, Clyne B et al. Effectiveness of face masks worn in community settings at reducing the transmission of SARS-CoV-2: A rapid review. *HRB Open Res* 2020, 3:76 (<https://doi.org/10.12688/hrbopenres.13161.1>)
- Teljeur C, Ryan M. Early Health Economic Modelling - Optimizing development for medical device developers? Comment on "Problems and promises of health technologies: The role of early health economic modeling". *Int J Health Policy Manag*. 2020 Sep 1;9(9):403-405. doi: 10.15171/ijhpm.2019.136. *BJGP Open*. 2020 Jun 23;4(2):bjgpopen20X101021. doi: 10.3399/bjgpopen20X101021.
- Teljeur C, Ryan M. Supporting the public health response to COVID-19 in Ireland: the role of HIQA. *Irish Geography*. 2020; 53(2): 145-149
- Walsh KA, Jordan K, Clyne B, Rohde D, Drummond L, Byrne P, Ahern S, Carty PG, O'Brien KK, O'Murchu E, O'Neill M, Smith SM, Ryan M, Harrington P. SARS-CoV-2 detection, viral load and infectivity over the course of an infection. *J Infect*. 2020 Sep;81(3):357-371. doi: 10.1016/j.jinf.2020.06.067

- Walsh KA, Spillane S, Comber L, Cardwell K, Harrington P, Connell J, Teljeur C, Broderick N, de Gascun CF, Smith SM, Ryan M, O'Neill M. The duration of infectiousness of individuals infected with SARS-CoV-2. *J Infect.* 2020 Dec;81(6):847-856. doi: 10.1016/j.jinf.2020.10.009

Invited presentations given

- Comber L, Walsh K. Evidence Synthesis Ireland webinar: Evidence to Policy: the HIQA experience of evidence synthesis during the COVID-19 pandemic. December 2020.
- Comber L, O'Murchu, E. World Health Organisation (WHO) SAGE group for immunisation (December 2020)- Efficacy and effectiveness of Influenza vaccinations for adults
- Comber L, O'Murchu, E. European Centres for Disease Prevention and Control (ECDC) (August 2020)- Efficacy and effectiveness of Influenza vaccinations for adults
- O'Neill M. Evidence Synthesis Ireland webinar: Using systematic reviews in National Clinical Guidelines and Health Technology Assessment in Ireland. April 2020.
- O'Neill M. Guidelines International Network (G-I-N) and the International Network of Agencies for Health Technology Assessment (INAHTA). HTA & Guidelines: What can we learn from each other (Case example: Smoking Cessation/Screening of Hepatitis C). June 2020.

Blogs

- Structured Population and Health-services Research Education. Rapid evidence synthesis during a pandemic, by Dr Barbara Clyne. Available from: <https://www.sphereprogramme.ie/rapid-evidence-synthesis-during-a-pandemic/>

Vignette 1

A qualitative evaluation was undertaken of the COVID-19 support provided by HIQA between March 2020 and August 2020. The evaluation involved semi-structured interviews with six service users (that is, decision makers from NPHE, the Department of Health's NPHE EAG and the HPSC). The feedback from service users was extremely positive, commenting on the value of the evidence synthesis service to decision-making:

- "extremely, extremely helpful in terms of decision-making and you know, they would clearly highlight I suppose the gaps or the weaknesses in the evidence and that would allow the Expert Advisory Group then to determine ok, so we don't have the evidence on this particular aspect, so that's now our role"
- "it's been a very beneficial relationship certainly for us because it's allowed us to make decisions based on evidence rather than simply based on expert opinion or based on just adopting guidance from elsewhere"

Service users commented on the high standards and confidence in the evidence synthesis work undertaken:

- “to have access to a service that can do that for us and not only I suppose just to have somebody to do it, but to have an organisation that can do it to a certain standard so that we can have confidence in the results and confidence in the interpretation has been fantastic. I would have nothing but good things to say about the service.”
- “We didn’t have to second-guess it. [We] Knew the quality was good. [We] Knew we could use it. And that like was the critical piece.”

Service users also referred to the evidence synthesis service provided as indispensable, again highlighting its importance to decision-making:

- “So I generally found them like a kind of indispensable part of the pandemic response. It definitely led to improved evidence-based decision-making and then like it was clear where we were lacking evidence and where you needed the expert consensus to come in and answer those questions. So yeah, I mean pretty indispensable.”
- “So we were just so happy to have access to teams who are used to this. Like they know how to do things systematically, correctly and critically analyse things, so it was just such an amazing resource to have, a really indispensable part of the response and I think it should be embedded in any future plans.”

Vignette 2

In September 2020, HIQA commenced providing evidence-based advice directly to NPHE on behalf of the Minister for Health. To inform the development of the advice to NPHE, a COVID-19 Expert Advisory Group (EAG) comprising nominated representatives from the relevant clinical and public health stakeholder groups, patient representation and methodological expertise was established.

In December 2020, a process evaluation was undertaken to elicit feedback from the EAG membership. The feedback was predominantly positive with participants reporting:

- “The process allows each of us in the EAG get idea of what other members think about topics which is always interesting given the multidisciplinary nature of the group.”
- “I am grateful for and value the opportunity to bring a clinical voice to the [EAG] debate and discussion.”
- “The standard of work is excellent and feedback is incorporated.”

The feedback provided indicates that there is a high degree of satisfaction with the work of the HIQA COVID-19 Evidence Synthesis Team, and this is frequently stated by members of the COVID-19 Expert Advisory Group.

Vignette 3

As noted, in March 2020 HIQA began to provide evidence synthesis to support the national public health response to the COVID-19 pandemic at the request of the Department of Health. From September 2020, the HTA team provided evidence-based advice directly to NPHE on behalf of the Minister for Health.

The following quote from NPHE illustrates the direct influence of the COVID-19 evidence synthesis work to policy in Ireland:

- “The HTA outputs have been a central component of the public health management of COVID-19 in Ireland and helped shape recommendations to the Minister and Government, while also informing the development of public health advice for individuals. In what has been an extremely dynamic environment, both in terms of policy making and with regard to emerging evidence, the outputs consistently provided balanced, informed and robust assessments at the required points in time.”

Reach

The concept of reach is intended to capture elements of public engagement: specifically the extent to which stakeholders or the general public may have been exposed to output or work by the HIQA HTA Directorate.

Downloads provide a measure of people actively seeking HIQA HTA outputs. Downloads are measured as the total number of downloads for a document in the period 1 January 2020 to 31 December 2020.

As many of the COVID-19 reports published were updated (often repeatedly and sometimes with amended titles), these reports were grouped according to theme and the cumulative downloads across each report iteration published in 2020 is presented. Due to the unprecedented volume of outputs from the HTA directorate in 2020, only those that featured in the top 250 most downloaded reports across all of HIQA are presented; downloads of study protocols are not presented.

To take into account that some of the documents were published towards the end of 2020, we also present the average number of downloads per month over the period the document was available on the HIQA website. It should be noted that HRB-CICER reports are hosted on the website of the National Clinical Effectiveness Committee (NCEC) as opposed to the HIQA website. As reports are shared directly by email with the targeted stakeholders (i.e. NPHET, the HSE, COVID-19 EAG, etc.), such downloads are not tracked by the presented website metrics.

Report downloads

- Spread of COVID-19 by children (5,780 total; 642/month)
- Excess all-cause mortality in Ireland during the COVID-19 epidemic (2,833 total; 472/month)
- Activities or settings associated with a higher risk of SARS-CoV-2 transmission (845 total, 423/month)
- Viral load over course of SARS-CoV-2 infection (3,101 total; 345/month)
- Average length of stay in intensive care unit for COVID-19 (2,614 total; 290/month)
- Immune response following SARS-CoV-2 infection (2,075 total; 259/month)
- Residential care facilities; COVID-19 public health guidance (1,555 total; 222/month)
- Protective measures for groups vulnerable to COVID-19 (1,290 total; 184/month)
- Asymptomatic transmission of SARS-CoV-2 (1,568 total; 174/month)
- Duration of restricted movements following exposure to SARS-CoV-2, and the potential impact of testing (310 total; 155/month)
- Alternative diagnostic testing for SARS-CoV-2; rapid HTA (1,394 total; 155/month)
- Extremely medically vulnerable groups with respect to COVID-19 (147 total; 147/month)
- Restrictive public policy measures to limit COVID-19 (1,149 total 128/month)

- Alternative tests to detect current infection with SARS-CoV-2: rapid HTA (362 total; 121/month)
- Natural history of COVID-19 in children (926 total; 103/month)
- Public health measures and strategies to limit the spread of COVID-19 (81 total; 81/month)
- Duration of infectiousness of SARS-CoV-2 (314 total; 79/month)
- Face mask use by health care workers (348 total, 70/month)
- Factors that influence and measures to increase vaccination uptake (68 total; 68/month)
- Duration of immunity and reinfection following SARS-CoV-2 infection (134 total; 67/month)
- Clinical Samples for diagnosis of COVID-19 (507 total; 56/month)
- Airborne transmission of SARS-CoV-2 via aerosols (243 total; 49/month)
- Pathways for the resumption of hospital care after COVID-19 (338 total; 48/month)
- Management of COVID-19 symptoms in schools (193 total; 48/month)
- Guidelines for the Economic Evaluation of Health Technologies in Ireland 2020 (151 total; 38/month)
- Non-contact thermal screening for COVID-19 (175 total, 35/month)
- Alternative clinical specimens or sites for molecular and antigen tests for SARS-CoV-2 (170 total; 34/month)
- Salivary detection of SARS-CoV-2 (159 total; 23/month)
- Aerosol-generating procedures and risk of SARS-CoV-2 (137 total; 20/month)
- Placental transfer of antibodies to SARS-CoV-2 (149 total; 19/month)
- Physical distancing; public health guidance (129 total; 18/month)
- Universal influenza vaccination in children in the context of COVID-19 (119 total; 17/month)
- Convalescent plasma for the treatment of COVID-19 (32 total; 16/month)
- Surgical outcomes in patients with COVID-19 (101 total; 14/month)
- National Clinical Guideline on the Irish National Early Warning System (INEWS). Annex 2: Budget impact analysis (88 total; 22/month)

Media coverage reflects the extent to which people may be passively exposed to or made aware of activity of the HIQA Directorate. As part of the Health Research Board Emerging Investigator Award (EIA) led by Dr Barbara Clyne, the extent of traditional media coverage between April and July 2020 on nine COVID-19 evidence outputs and associated press releases was collated. These evidence outputs included:

- Evidence summary for COVID-19 viral load over course of infection
- Evidence summary for natural history of COVID-19 in children
- Evidence summary for average length of stay in the intensive care unit for COVID-19
- Evidence summary for spread of COVID-19 by children
- Rapid HTA of alternative diagnostic testing for coronavirus 2 (SARS-CoV-2)
- Evidence summary for placental transfer of antibodies

- Evidence summary of the immune response following infection with SARS-CoV-2 or other human coronaviruses
- Evidence summary for the infectiousness of individuals reinfected with COVID-19
- Analysis of excess all-cause mortality in Ireland during the COVID-19 epidemic.

Media coverage between April 1st and July 31st 2020 on nine COVID-19 evidence outputs

- National print - 33
- Regional print - 16
- Online - 191
- Magazine - 4
- Broadcast - 244

While complete data were not available on the number of times HTA team members were interviewed on radio or television, HTA team members were featured on 10 stations/channels in 2020.

Radio stations that interviewed HTA team members in 2020

- RTE News Bulletin
- RTE Drivetime
- RTE Radio na Gaeltachta
- RTE Six One News
- Kildare FM
- KCLR FM
- Shannonside FM
- Tipp FM
- Galway Bay FM
- South East Radio.

A further sample of HTA media coverage in 2020 was also recorded based on three HTA reports. Data from a monthly evidence bulletin developed by the Communications Team are expected to be available for the full year of 2021.

Sample of HTA media coverage in 2020, using three case studies

- Respiratory mortality in the HSE Mid-West region (published December 2020)
 - News stories: 4
 - Twitter engagement: 7
 - Twitter Impressions: 807
- Systematic review of the efficacy, effectiveness and safety of newer and enhanced seasonal influenza vaccines (published October 2020)
 - News stories: 0
 - Twitter Engagement: 322
 - Twitter Impressions: 10,648
 - Instagram: 12 likes
- Excess all-cause mortality in Ireland during the COVID-19 epidemic (published July 2020)
 - News stories: 81 (In July, month of release)
 - Twitter engagement: 6,941
 - Twitter impressions: 78,779
 - Instagram: 8 Likes
 - Facebook impressions: 819
 - Facebook engagement: 37

Citations of peer-reviewed articles by members of the HIQA HTA Directorate demonstrate the extent to which work within the Directorate influences academic research activity internationally. Notably, one of these articles was cited 73 times in 2020 international publications, and has been cited over 300 times in total.

An 'Altmetric' is a web-based metric which incorporates a wider range of online factors that can be used to measure researcher's attention, influence and impact. An Altmetric takes into account non-traditional forms of online interaction such as public policy documents, research blogs, mainstream media coverage and social network mentions. It is important to appreciate that the Altmetric is intended to supplement rather than replace existing forms of research evaluation (that is, citation-based metrics). There is no clear guidance on what represents a good Altmetric score, but a higher score indicates greater impact. The highest Altmetric score ever recorded is 11,980.

Citations and Altmetrics of HTA publications

Reports

- Analysis of spatial patterns of respiratory mortality in the HSE Mid-West region (1 citation)
- Evidence summary for accuracy of salivary samples in SARS-CoV-2 detection compared with nasopharyngeal, oropharyngeal or lower respiratory tract samples (1 citation)

- Evidence summary for asymptomatic transmission of COVID-19 (8 citations)
- Evidence summary for average length of stay in the intensive care unit for COVID-19 (1 citation)
- Evidence Summary for COVID-19 Clinical Samples (1 citation)
- Evidence summary for natural history of COVID-19 in children (1 citation)
- Evidence summary for SARS-CoV-2 viral load and infectivity over the course of an infection (1 citation)
- Evidence summary of potential for children to contribute to transmission of SARS-CoV-2 (1 citation)
- Evidence summary of the immune response following infection with SARSCoV-2 or other human coronaviruses (3 citations)
- Evidence summary of the immune response following infection with SARSCoV-2 or other human coronaviruses (3 citations)
- Evidence summary for the duration of infectiousness in those that test positive for SARS-CoV-2 RNA (4 citations)
- Rapid health technology assessment of alternative diagnostic testing approaches for the detection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (4 citations)
- Universal influenza vaccination in children (4 citations)

Peer-reviewed publications

- Cardwell, K., Jordan, K., Byrne, P., Smith, S. M., Harrington, P., Ryan, M., & O'Neill, M. (2020). The effectiveness of non-contact thermal screening as a means of identifying cases of Covid-19: a rapid review of the evidence. *Reviews in Medical Virology*, e2192. (0 citations, Altmetric 10)
- Comber L, Walsh KA, Jordan K, O'Brien KK, Clyne B, Teljeur C, Drummond L, Carty PG, De Gascun CF, Smith SM, Harrington P, Ryan M, O'Neill M. Alternative clinical specimens for the detection of SARS-CoV-2: A rapid review. *Rev Med Virol*. 2020 Oct 22. doi: 10.1002/rmv.2185. (2 citations; Altmetric 10)
- Comber L, O Murchu E, Drummond L, Carty PG, Walsh KA, De Gascun CF, Connolly MA, Smith SM, O'Neill M, Ryan M, Harrington P. Airborne transmission of SARS-CoV-2 via aerosols. *Rev Med Virol*. 2020 Oct 26:e2184. doi: 10.1002/rmv.2184 (2 citations; Altmetric 14)
- O Murchu E, Byrne P, Walsh KA, Carty PG, Connolly M, De Gascun C, Jordan K, Keogh M, O'Brien KK, O'Neill M, Smith SM, Teljeur C, Ryan M, Harrington P. Immune response following infection with SARS-CoV-2 and other coronaviruses: A rapid review. *Rev Med Virol*. 2020 Sep 23:e2162. doi: 10.1002/rmv.2162. (2 citations; Altmetric 67)
- Rohde D, Ahern S, Clyne B et al. Effectiveness of face masks worn in community settings at reducing the transmission of SARS-CoV-2: A rapid review. *HRB Open Res* 2020, 3:76 (<https://doi.org/10.12688/hrbopenres.13161.1>) (1 citation; Altmetric 50)
- Walsh KA, Jordan K, Clyne B, Rohde D, Drummond L, Byrne P, Ahern S, Carty PG, O'Brien KK, O'Murchu E, O'Neill M, Smith SM, Ryan M, Harrington P. SARS-CoV-2 detection, viral load and infectivity over the course of an infection. *J Infect*. 2020 Sep;81(3):357-371. doi: 10.1016/j.jinf.2020.06.067 (73 citations; Altmetric 1,118)

- Walsh KA, Spillane S, Comber L, Cardwell K, Harrington P, Connell J, Teljeur C, Broderick N, de Gascun CF, Smith SM, Ryan M, O'Neill M. The duration of infectiousness of individuals infected with SARS-CoV-2. *J Infect.* 2020 Dec;81(6):847-856. doi: 10.1016/j.jinf.2020.10.009 (9 citations; Altmetric 349)

Vignette 3

During 2020, HIQA's HTA directorate produced a large number of evidence synthesis outputs to support the National Public Health Response to the COVID-19 pandemic. Two such outputs that attracted international attention included:

- Rapid health technology assessment of alternative diagnostic testing approaches for the detection of SARS-CoV-2 (May 2020)
- Evidence summary for the duration of infectiousness in those that test positive for SARS-CoV-2 RNA (September 2020)

The rapid HTA was cited in guidance documents by the World Health Organization and the European Network for Health Technology Assessment (EUnetHTA). The duration of infectiousness evidence summary was cited by the European Centre for Disease Prevention and Control (ECDC), the Communicable Diseases Network Australia (a joint initiative of the National Health and Medical Research Council and Australian Health Ministers' Advisory Council), Sciensano Belgium (the national public health institute of Belgium) and Western Cape Government (South Africa).

The far-reaching implications of these reports demonstrate that evidence synthesis outputs from HIQA not only contribute to national policy in Ireland, but have the potential to inform international policy.

Engagement

Distinct from reach, engagement captures direct interaction with stakeholders or the general public. The HIQA HTA Directorate interacts with stakeholders through their participation in HIQA projects, in which case the stakeholders have the opportunity to directly influence HIQA outputs.

Advisory groups

- Scientific Advisory Group (for HIQA HTA guideline development)
- Expert Advisory Group for HTA of birth cohort testing for hepatitis C
- ECDC Working Group for systematic review of newer and enhanced influenza vaccines
- Medical Ionising Radiation Expert Advisory Group
- HRB-CICER Executive Committee
- COVID-19 Evidence Synthesis Expert Advisory Group
- NPHET Subgroup on Guidance and Evidence Synthesis
- Economic burden of antimicrobial resistance Expert Advisory Group

Through participation of members of the HIQA HTA Directorate in external projects, committees and groups, we influence the outputs of other organisations and agencies.

External appraisal of evidence to support National Clinical Guidelines and National Clinical Audits

- National Perinatal Epidemiology Centre (NPEC) perinatal mortality, National Clinical Audit
- Sepsis management for adults (including maternity), National Clinical Guideline
- Diagnosis, staging and treatment of patients with rectal cancer, National Clinical Guideline
- Diagnosis, staging and treatment of patients with colon cancer, National Clinical Guideline
- Management of Chronic Obstructive Pulmonary Disease (COPD) in adults, National Clinical Guideline

Supporting the use of evidence to inform decision making/guideline development/health policy

- ECDC national immunisation technical advisory groups working group
- National Screening Advisory Committee (NSAC)

National Clinical Guideline Development Groups supported

- Irish National Early Warning System (INEWS)
- Management of chronic obstructive pulmonary disease in adults
- Healthcare-associated infection
- Intraoperative massive haemorrhage
- National Early Warning System (NEWS)
- Stratification of clinical risk in pregnancy
- Sepsis
- Tobacco addiction
- Nutrition screening and use of oral nutrition support for adults in the acute care setting.

Contribution to external working groups and committees

- HSE National Cancer Control Programme, Technology Review Group
- HSE Rare Diseases Programme, Technology Review Group
- HSE HTA Expert Group
- HSE Rapid Antigen Diagnostic Testing working group
- HSE Community Health Schemes (Medicines) Open Data Project Governance Committee
- National Public Health Emergency Team
- Department of Health's Health System Performance Assessment Stakeholder Group
- NPHET's Irish Expert Modelling Advisory Group (IEMAG)
- National Clinical Effectiveness Committee
- SPHeRE Steering Group
- Collaborative Doctoral Award (CDA) Steering Group
- Evidence Synthesis Ireland International Steering Group
- EUnetHTA Executive Board
- EUnetHTA Heads of Agencies Group
- Working Group of the Council of Ministers reviewing the proposed European Commission HTA Regulation
- ISPOR HTA Roundtable

Public consultations conducted

- None

Collaborations

- EUnetHTA rapid assessment: A rapid assessment of the 24-hour blood pressure measurement device Mobil-O-Graph® with the built-in algorithm ARCSolver® to measure arterial stiffness for the optimisation of hypertension treatment and assessment of cardiovascular disease risk, as dedicated reviewer
- EUnetHTA rapid assessment: a rapid collaborative review on the current role of antibody tests for novel coronavirus SARS-CoV-2 in the management of the pandemic, as dedicated reviewer
- EUnetHTA rapid assessment: a rapid collaborative review on the diagnostic accuracy of molecular methods that detect the presence of SARS-CoV-2 virus in people with suspected COVID-19, as dedicated reviewer
- EUnetHTA relative effectiveness assessment (REA): Bariatric surgery (Comparative effectiveness of surgical methods for treating people with morbid obesity), as co-author
- Memorandum of Understanding with Health Improvement Scotland and Health Technology Wales.

Vignette 4

In 2019, the HTA directorate in HIQA were successful in a tender process for a contract with the European Centre for Disease Prevention and Control (ECDC) to undertake a systematic review on influenza vaccines. The review aimed to assess the efficacy, effectiveness and safety of newer and enhanced influenza vaccines for adults and was completed in collaboration with a defined working group of the EU/EEA National Immunisation Technical Advisory Group (NITAG).

Work on the review commenced in September 2019 with the final report published in the ECDC website in October 2020. The overall review findings highlighted that:

- while it is probable that newer and enhanced influenza vaccines provide greater protection than no vaccination, the evidence base regarding the comparability of these vaccines with traditional seasonal influenza vaccines is uncertain and limited
- a large body of evidence was identified for the safety of these influenza vaccines, with the safety profiles found to be largely in keeping with that expected
- reporting within individual studies limited the data coverage of the review
- recommendations were provided to enhance research conduct and reporting regarding these newer and enhanced influenza vaccines.
- a considerable number of potentially relevant ongoing studies were identified which may further inform this research question in future updates.

The review process involved a close working relationship and regular engagement with members of the ECDC and NITAG. The review, and processes used, were well received and commended by the stakeholders with the formal review findings presented to the NITAG, and subsequent invited presentations to wider audiences with interest in policy-making for immunisation at the ECDC and the World Health Organization (WHO). The

review findings have been used to inform national level influenza vaccine policies and were acknowledged to have ongoing relevance to future influenza seasons. A number of manuscripts for peer-reviewed publication are under development in collaboration with colleagues at the ECDC. This work programme facilitated subsequent knowledge sharing activities and a working relationship with colleagues in the ECDC, particularly in the context of COVID-19 work.

Vignette 5

HRB-CICER supported the development of the updated Irish National Early Warning System (INEWS) national clinical guideline. The work undertaken included systematic reviews of clinical- and cost-effectiveness and a budget impact analysis. The Chair of the guideline development group lauded the support provided by HRB-CICER:

- “Whenever we had a query we were able to discuss it with the HRB-CICER team... Having Sinead and Shelley available to us to attend GDG and Consultant Advisory Group meetings was invaluable. The support we received was fantastic. The working relationship that developed between the HRB CICER team and the DPIIP team was an absolute pleasure. It was also a very positive experience to see regular publications on INEWS being produced by the HRB CICER team.”

The feedback highlights the close working relationships with healthcare stakeholders that have been fostered during the course of our work, and the clear appreciation of those stakeholders for the expert methodological input provided by HRB-CICER.

Change

Change is intended to measure the informing of decision-making and health system benefits.

Medium-term

Report advice followed

- evidence summaries provided to the NPHET Expert Advisory Group:
 - the potential for children to contribute to transmission of SARS-CoV-2
 - the relative importance of droplet versus contact transmission to the spread of SARS-CoV-2
 - airborne transmission of SARS-CoV-2 via aerosols
 - accuracy of salivary samples in SARS-CoV-2 detection compared with nasopharyngeal, oropharyngeal or lower respiratory tract samples
 - the accuracy of molecular and antigen detection tests for the diagnosis of COVID-19 using alternate clinical specimens or sites
 - facemask use by healthy people in the community
 - universal facemask use by healthcare workers in the context of COVID-19
 - the immune response following infection with SARS-CoV-2 or other human coronaviruses
 - non-contact thermal screening as an effective means of identifying cases of COVID-19
 - the risk of transmission of SARS-CoV-2 during aerosol generating procedures from patients without clinical symptoms
 - surgical outcomes in patients with COVID-19
 - SARS-CoV-2 viral load and infectivity over the course of an infection (updated twice)
 - placental transfer of antibodies
 - average length of stay in the intensive care unit for COVID-19
 - asymptomatic transmission of COVID-19
 - the natural history of COVID-19 in children
 - guidance for the resumption of hospital care in the context of COVID-19
 - the effectiveness of pathways to enable the resumption of hospital-based care in the context of COVID-19
 - public health guidance on identification and management of symptoms in young children and young people attending school in the context of COVID-19
- alternative diagnostic testing approaches for the detection of SARS-CoV-2
- universal influenza vaccination in children
- evidence syntheses to the National Ambulance Service:
 - operation of emergency medical dispatch centres, guidance for pre-hospital emergency services and patient transport services
 - guidance for pre-hospital emergency services and patient transport services in the context of COVID-19
- evidence summaries to inform advice to NPHET:

- factors influencing, and measures to improve, vaccination uptake
- face mask use by healthy people in the community to reduce SARS-CoV-2 transmission
- the categorisation of 'extremely medically vulnerable' groups who may be at risk of severe illness from COVID-19
- activities or settings associated with a higher risk of SARS-CoV-2 transmission
- reinfection and the duration of antibody responses following SARSCoV-2 infection
- the incubation period of COVID-19, or time to first positive test, in individuals exposed to SARS-CoV-2
- recommendations from international guidance on the duration of restriction of movements
- the duration of infectiousness in those that test positive for SARS-CoV-2 RNA.
- the potential impact of different testing scenarios in close contacts and the minimum length of quarantine for those entering Ireland from non-designated countries
- strategies to limit the spread of COVID-19
- public health measures:
 - for residential care facilities in the context of COVID-19
 - on protective measures for vulnerable groups in the context of COVID-19
 - convalescent plasma for the treatment of COVID-19.

Skills gained through course or training attendance

- R for cost-effectiveness analysis short course, Queen's University Belfast (one attendee)
- SPHeRE structured PhD programme (four staff members)
- MSc Data Analytics, Athlone Institute of Technology (one staff member)
- Excel Functions (Including Pivot Tables and Lookups) short course (two attendees)
- 2020 SPHeRE Annual Conference, Royal College of Surgeons in Ireland (six attendees).

Vignette 6

From Spring 2020, several pieces of work were undertaken on behalf of the Acute Hospitals Preparedness Subgroup of NPHET to:

- examine international pathways for resumption of scheduled hospital-based care in the context of COVID-19
- provide assistance to the National Ambulance Service in developing their approach to delivering safe and effective care post-COVID-19.

Following delivery of the reports, the stakeholders reported:

- "I just wanted to say once again a big thank you for all the excellent and timely work you, and your team, did on the evidence reviews for us. It was a significant piece of work for you all I know."
- "After reading this, it is apparent to me that focusing on Emergency Control was the right thing to do. This is the first link in the chain and all other EMS actions are almost invariably determined by the interaction with control, so the perfect topic choice. It's really interesting how guidance relating to emergency control also reveals information about transport, on scene treatment and destination facilities. Acknowledging the caveat about the quality of the included publications, this document is a great resource about how other EMS services have managed during the emergency phase of the pandemic."

These quotes demonstrate the perceived value and usefulness of the information provided by the team's evidence synthesis outputs.