

Catalogue of institutions undertaking COVID-19 horizon scanning

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About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is an independent statutory authority established to promote safety and quality in the provision of health and social care services for the benefit of the health and welfare of the public.

HIQA's mandate to date extends across a wide range of public, private and voluntary sector services. Reporting to the Minister for Health and engaging with the Minister for Children, Equality, Disability, Integration and Youth, HIQA has responsibility for the following:

- Setting standards for health and social care services Developing person-centred standards and guidance, based on evidence and international best practice, for health and social care services in Ireland.
- Regulating social care services The Chief Inspector within HIQA is responsible for registering and inspecting residential services for older people and people with a disability, and children's special care units.
- Regulating health services Regulating medical exposure to ionising radiation.
- Monitoring services Monitoring the safety and quality of health services and children's social services, and investigating as necessary serious concerns about the health and welfare of people who use these services.
- Health technology assessment Evaluating the clinical and costeffectiveness of health programmes, policies, medicines, medical equipment, diagnostic and surgical techniques, health promotion and protection activities, and providing advice to enable the best use of resources and the best outcomes for people who use our health service.
- Health information Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information on the delivery and performance of Ireland's health and social care services.
- National Care Experience Programme Carrying out national serviceuser experience surveys across a range of health services, in conjunction with the Department of Health and the HSE.

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Not all members of the Evidence Synthesis Team are involved in the response to each research question.

Conflicts of interest

None declared.

1 Introduction

At the request of the Department of Health, the Health Information and Quality Authority (HIQA) undertook a targeted review to identify and catalogue relevant national and international institutions and organisations that conduct horizon scanning for evidence of emerging COVID-19 health technologies, practices and interventions. These health technologies include COVID-19 diagnostics, therapeutics, vaccines and other health technologies. This report will inform the work of the COVID-19 Advisory Group.

Horizon scanning is a systematic process for identifying plausible opportunities from future developments.⁽¹⁾ Horizon scanning generally targets the early lifecycle of technologies (that is, in an early phase of adoption before their introduction onto the market).⁽²⁾ It can provide useful information for policymaking by identifying potential opportunities and solutions that require further attention and deliberation.

2 Methods

The methods used to inform the catalogue of institutions undertaking COVID-19 horizon scanning are described in detail in the <u>protocol</u>. Briefly, a search was undertaken of websites of national and international organisations and institutions; the search list was informed by sources previously compiled as part of HIQA's database of public health guidance on COVID-19⁽³⁾ and supplemented by targeted searching. The full list of websites consulted is presented in Appendix 1 of the protocol. Relevant data were extracted, including the scope of the horizon scanning activity and how the information is disseminated. Horizon scanning activities which had not been updated since 1 January 2022 were excluded.

3 Results

A total of 12 relevant horizon scanning sources were identified (see Table 1). The sources included regulatory agencies, health technology assessment (HTA) agencies, nationally funded research organisations, databases and reports generated on the basis of horizon scanning activities. These are summarised briefly below.

Sources included the regulatory agencies responsible for granting market authorisation in the EU (European Medicines Agency) and the US (Food and Drug Administration). Updates to these are triggered by applications for marketing authorisation or decisions with respect to same.

Two health technology assessment (HTA) agencies (that is, the Austria Institute for Health Technology Assessment and Canadian Agency for Drugs and Technologies in

Health) which publish horizon scanning reports linked to national decision-making were identified. While reports providing updates to drugs and vaccines are published monthly by the Austrian agency, the brief of the Canadian agency is broader, although there is no defined frequency for publication of updates.

The National Institute for Health and Care Research (NIHR) Innovation Observatory in the UK provides weekly horizon updates via an interactive dashboard to inform decision-making by two key stakeholders:

- 1. National Institute for Health and Care Excellence (NICE)
- 2. National Health Service (NHS) Accelerated Access Collaborative (AAC) in the UK.

The <u>AAC</u> supports all types of innovations including medicines, diagnostics, devices, digital products, pathway changes and new workforce models.

Two horizon scanning databases were identified:

- 1. International Horizon Scanning Initiative (IHSI)
- 2. Patient-Centered Outcomes Research Institute (PCORI).

The IHSI is an independent legal entity, with an international member-driven organisation of government and publicly-funded bodies. Irish partners include the Department of Health (DoH), the Health Service Executive (HSE) and the National Centre for Pharmacoeconomics (NCPE). The IHSI database identifies and tracks new pharmaceuticals expected to enter the international market within the next 2.5 years. The information produced by the IHSI is not publicly accessible, but is available to partner organisations.

PCORI is an independent, non-profit research organisation that seeks to empower patients and others with actionable information about their health and healthcare choices. PCORI, established and funded by US Congress, primarily funds comparative clinical effectiveness research, which compares two or more medical treatments, services, or health practices to help patients and other stakeholders make better-informed decisions. The PCORI database has a broader scope than IHSI, relating to a wide range of COVID-19 health technologies and innovations, but focuses on technologies with high potential to impact patient outcomes in the US within the next three years.

Other sources identified included a COVID-19 vaccine research bulletin compiled by the Research Services & Policy Unit in the Department of Health, a database collated by the European Commission of COVID-19 diagnostics identified by manufacturers as being CE-marked, a series of online resources published by the Infectious Diseases Society of America, horizon scans of emerging issues by McMaster University in Canada, and a series of reports by the World Health Organization (WHO) Collaborating Centre on Investment for Health and Well-being at Public Health Wales used to inform the national public health response to COVID-19 in Wales.

The majority of the horizon scanning sources identified in this report are publicly-funded and developed for the specific purpose of informing strategic planning and or as a source of public information. The scope of the horizon scanning activities is very broadly defined by the category of intervention ('vaccines', 'diagnostics', 'therapeutics') by the majority of sources. Four of the included sources have a specified frequency at which updates are provided (ranging from weekly to quarterly), while updates for the regulatory agencies (EMA and FDA) are triggered by market applications or authorisation decisions; the frequency with which horizon scanning activities conducted by the other sources is unclear with no specific reporting intervals identified. In general, data were not readily available on how policy-makers use the information generated by the horizon scanning activities.

In addition to the sources presented in Table 1, two reports by the WHO published in 2021 and 2022 were identified, which provide horizon scanning on emerging trends and technologies in the context of public health.^(1, 4) Although these reports are not specific to COVID-19, they include several topics relevant to COVID-19, such as pandemic preparedness and prevention, vaccine distribution and the use of novel technologies (for example, digital health technologies and machine learning).

Table 1. Institutions conducting COVID-19 horizon scanning

Organisation (hyperlink)	Horizon scanning details	Dissemination
Austria Institute for Health	Scope: vaccines and drugs	Output: living document provided to Austrian Ministry
Technology Assessment	Purpose: inform health policy makers at an	of Health and published on AIHTA website
(AIHTA) (URL)	early stage which interventions are undergoing	Frequency: monthly
	clinical trials and monitor these trials to support	Last update: June/July 2022
	evidence-based purchasing, if necessary	
Canadian Agency for Drugs and	Scope: management and prevention	Output: policy brief published on CADTH website
Technologies in Health	Purpose: unclear	Frequency: unclear
(CADTH) (URL)		Last update: January 25 2022
European Commission (URL)	Scope: diagnostics	Output: database of CE-marked diagnostics
	Purpose:	Frequency: unclear (in continuous development –
	collate publicly available information, mostly	layout and structure are subject to change)
	provided by manufacturers, on the performance	Last update: unclear
	of IVD medical devices identified by the	
	manufacturer as being CE-marked as well as	
	scientific literature related to these devices* and	
	collate publicly-available information and	
	scientific literature related to laboratory-	
	developed devices and related test methods for	
	COVID-19	
European Medicines Agency	Scope: vaccines and drugs	Output: news bulletin, evidence summaries and press
(EMA) (<u>URL</u>)	Purpose: provide information on medicines	briefings
	authorised in the EU to treat or prevent COVID-	Frequency: triggered by submission of marketing
	19, and details on the other potential treatments	authorisation application
	and vaccines that the EMA is evaluating or has	Last update:
		Vaccines: 10 August 2022 (Comirnaty, BioNTech

Organisation (hyperlink)	Horizon scanning details	Dissemination
	provided support to during research and	Manufacturing GmbH)
	development	Treatment: 12 August 2022 (Veklury, Gilead Sciences
		Ireland UC)
Infectious Disease Society of	Scope: diagnostics, vaccines and treatments	Output: webpage summary
America (URLs: diagnostics,		Frequency: unclear
vaccines, treatments)	Purpose: provide latest data on vaccines,	Last update: 4 August 2022
	diagnostics and agents studied for the	
	prevention and treatment of COVID-19	
International Horizon Scanning	Scope: drugs	Output: access to Horizon Scanning Database and
Initiative (<u>URL</u>)	Purpose: identify and track new	High Impact Reports is provided to partner
	pharmaceuticals expected to enter the	organisations such as the Department of Health in
	international market within the next 2.5 years	Ireland, but is not publicly accessible
	until market entry has been achieved	Frequency: unclear
		Last update: July 2022
McMaster University, Canada	Scope: not specified	Output: briefing note and panel summary document,
(<u>URL</u>)	Purpose : identify areas for further research to	newsletter
	inform decision-making	Frequency: unclear
		Last update: 28 July 2021 (COVID-END Canadian
		horizon-scanning panel met on 22 June 2022, but no
		summary documents were published following the
		meeting)
National Institute for Health and	Scope: diagnostics, treatment and vaccines	Output: interactive dashboard – key intelligence
Care Research (NIHR) Innovation	Purpose: Compile all SARS-CoV-2 diagnostic	provided weekly to national stakeholders and
Observatory, UK (<u>URL</u>)	tests (commercialised/in development), and	oversight groups (mode not specified)
	data on medicinal products (including vaccines)	Frequency: weekly
	in clinical trials for treatment and/or prevention	Last update: 16 August2022
	of COVID-19 to inform decision-making by NICE	

Organisation (hyperlink)	Horizon scanning details	Dissemination
	and the NHS Accelerated Access Collaborative	
	(AAC)	
Patient-Centred Outcomes	Scope: technologies and innovations in health	Output: interactive dashboard and short (3-4 page)
Research Institute (PCORI), US	care relating to COVID-19, including	publication
(<u>URL</u>)	pharmaceuticals, medical devices, diagnostic	Frequency: biweekly
	tests and procedures, therapeutic interventions,	Last update: 12 August 2022
	rehabilitative interventions, mental and	
	behavioural health, interventions, health care	
	delivery innovations, and public health and	
	health promotion activities	
	Purpose: identify, monitor, and report on	
	emerging and available COVID-19-related	
	treatments, diagnostics, preventive measures,	
	management strategies, and systems changes	
	with high potential to impact patient outcomes	
	in the US within the next 3 years	
Research Services & Policy Unit,	Scope: vaccines	Output: Vaccine research bulletin
Department of Health	Purpose: provide information on research	Frequency: Quarterly
	publications relevant to the COVID-19 vaccine	Last update: 12 August 2022
	rollout from international sources such as the	
	WHO and European Medicines Agency, research	
	databases, and a selection of national sources	
US Food and Drug Administration	Scope: diagnostics, treatments and vaccines	Output: press release and summary
(FDA) (<u>URL</u>)	Purpose: provide information on medical	Frequency: as approved or rejected for market entry
	products with emergency use authorisation or	Last update: 12 August 2022
	that have been fully approved for use in the US	

Organisation (hyperlink)	Horizon scanning details	Dissemination
World Health Organization (WHO)	Scope: varies depending on the evolving	Output: report disseminated to wider network of
Collaborating Centre on	COVID-19 situation and public health/policy	(public) health professionals and partners nationally
Investment for Health and Well-	needs at that time; previous topics include the	and internationally
being at Public Health Wales	impact of COVID-19 on mental health, vaccine	Frequency: unclear
(URL)	equity and excess mortality	Last update: 14 June 2022
	Purpose: initiated as part of the COVID-19	
	public health response, to support dynamic	
	response and recovery measures and planning	
	in Wales. Reports provide high-level summaries	
	of emerging international evidence from country	
	experience and epidemiology; research papers;	
	and key organisations' guidance and reports,	
	including other sources of published information	
	to allow further exploration.	

Key: AAC – Accelerated Access Collaborative; AIHTA – Austria Institute for Health Technology Assessment; CADTH – Canadian Agency for Drugs and Technologies in Health; COVID-END – COVID-19 Evidence Network to Support Decision-making; EMA – European Medicines Agency; IVD – in vitro diagnostic; NICE – National Institute for Health and Care Excellence.

^{*} The European Commission database includes only performance measures and information that the manufacturer has chosen to make publicly available. Furthermore, the conformity of the devices with applicable EU law has not been in any way assessed by the European Commission or Member State national authorities for the purposes of inclusion in the database.

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