Report of the Public Health Reform Expert Advisory Group

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Chair's foreword

Ireland owes a debt of gratitude to all of those involved in the public health response to the COVID-19 pandemic. Their extraordinary, sustained efforts helped ensure that Ireland lost fewer people to the COVID-19 pandemic, proportionately, than many comparable countries.

It is right that we should now seek to learn lessons from the public health components of the response to the COVID-19 pandemic to ensure that Ireland is well-prepared for future public health threats, including pandemics.

The COVID-19 pandemic provided a stark reminder of the importance of the health of the population – it is a valuable national asset. Our health is affected by almost every aspect of our lives and our environment and must, therefore, be at the heart of Government policy.

Ireland now faces a host of significant public health challenges. While there is ongoing, important reform of our public health system, now is the time to go further. The Public Health Reform Expert Advisory Group recommends a significant strengthening of Ireland's public health system to ensure a system that can best support the health and wellbeing of the people of Ireland.

The Expert Advisory Group is very grateful to all those who engaged with us, including through written submission, survey, workshop and focus group processes, helping, informing and shaping our recommendations. Thank you for taking the time to share your experiences, both positive and negative, and your expertise and ideas with the Group.

Thank you to both HIQA and the WHO for their invaluable inputs which informed the work of the Group and shaped this report.

I would like to thank the members of the Expert Advisory Group for giving so generously of their time, knowledge, and expertise.

Finally, sincere thanks to the secretariat in the Department of Health who so effectively and efficiently organised and supported the work of the Group.

Professor Hugh Brady
Chair of the Public Health Reform Expert Advisory Group

Executive summary

Everyone, regardless of where they live, who they are, and how much money they have, should be supported to live long, healthy lives, and be protected from disease, including infectious diseases.

Ensuring that they are supported to do so is an essential role of any Government.

> "All organised measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases."
>
> **World Health Organization (WHO) definition of public health**

The health of the nation is protected by its public health system, working alongside its social care and primary care systems. Backing it up are secondary and tertiary medical care, such as hospitals and specialist units, to deal with more serious illness when it occurs.

We have all seen the importance of public health and of our health protection system in the past couple of years as we have weathered the COVID-19 pandemic. It is important that we learn from COVID-19 to be prepared for future epidemics and pandemics. This is only one aspect of protecting our nation's health.

COVID-19 shone a spotlight on our abilities, as a nation, to deal with a public health crisis.[1] Everyone faced challenges during the pandemic, and many suffered loss. However, it also showed how the solidarity, flexibility and action of the Irish public, of health and social care workers and of community organisations and agencies across the country, can bring us together - united in our effort to protect each other. There was an unprecedented degree of collaboration across Government departments and political parties, effective dialogues between citizens and experts of all kinds, and evidence-based, responsible and nuanced media coverage. We lost fewer people to COVID-19, as a proportion of our population, than many other countries, and our vaccination rates are among the highest in Europe.

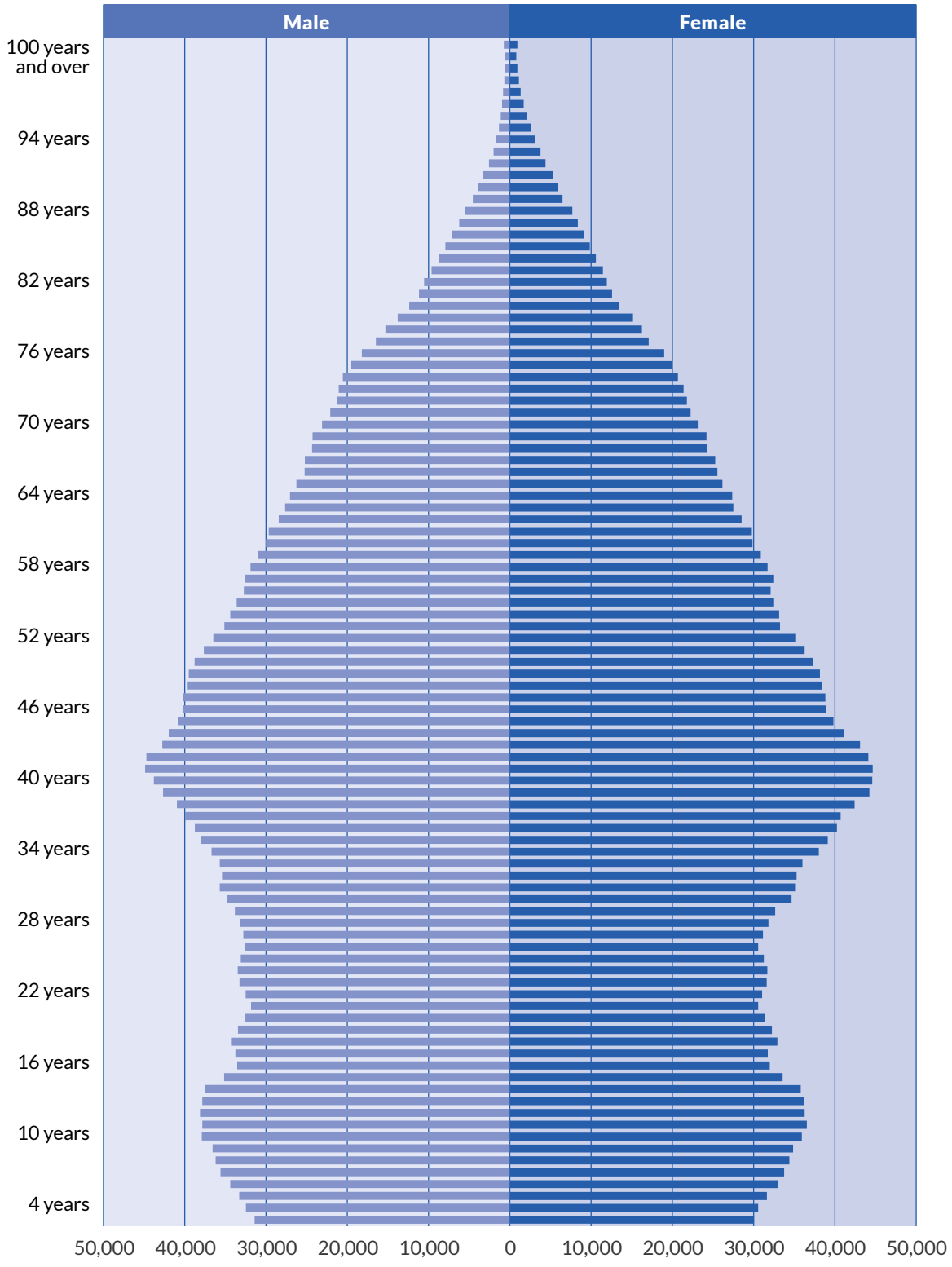
To the great credit of all involved, this was all achieved despite some weaknesses in our public health system in Ireland. The World Health Organization (WHO) has reviewed Ireland's delivery of the twelve Essential Public Health Functions and has identified ways in which we can now strengthen systems to ensure a comprehensive approach to public health.

As we have seen through the experience of COVID-19, public health extends beyond the boundaries of the healthcare system. Helping people stay healthy and well is part of the role of the education system, local authorities and housing, and affects policies in food, farming and business. Like many other developed countries, Ireland faces public health challenges such as obesity, poverty, inequality and an increasing older population. Although we are currently a relatively young country, we have a lot of 35–50-year-olds who need support to age healthily.[2]

[1] Burke, S., Thomas, S., Stach, M., Kavanagh, P., Magahy, L., Johnston, B., & Barry, S. (2020). Health system foundations for Sláintecare implementation in 2020 and beyond – co-producing a Sláintecare Living Implementation Framework with Evaluation: Learning from the Irish health system's response to COVID-19. A mixed-methods study protocol. *HRB Open Research, 3(70).* **https://doi.org/10.12688/hrbopenres.13150.1**

[2] Central Statistics Office (CSO). (2016). *Population and Labour Force Projections 2017–2051.* **https://www.cso.ie/en/releasesandpublications/ep/p-plfp/populationandlabourforceprojections2017-2051/populationprojectionsresults/**

Figure 1: Population by age and sex, 2020



Source: CSO

Cancer screening, prevention, maternal health, enabling more physical activity, supporting people to avoid or overcome addiction – these are some examples of the breadth of things that our public health system needs to do well. Climate change and disruption caused by conflicts around the world will affect supplies of food, medicines, and increase the number of migrants needing physical and mental health support. The public health systems that are in place to respond to a pandemic are also those that underpin addressing these wider public health challenges. Strengthening public health systems and ways of working together will help build adaptability to face future public health crises from pandemics to obesity.

Ireland's health and social care systems, including the public health system, are already in the process of reform, through the implementation of the Sláintecare programme, the recommendations of the Crowe Horwath Report on the Role, Training and Career Structures of Public Health Physicians in Ireland, and a range of existing public health policies and programmes. Sláintecare is transforming how healthcare is delivered in Ireland, building towards equal access to services for every citizen based on patient need and not their ability to pay. This reform programme has a focus on public health and prevention of illness as one of its fundamental principles. Now is a timely opportunity to build on these reforms to ensure that the broader public health system is designed to optimally support the nation's health and wellbeing.

The Public Health Reform Expert Advisory Group (EAG) was tasked, by the Minister for Health and the Government of Ireland, with helping Ireland to take advantage of this opportunity. What can we learn from what happened during the COVID-19 pandemic in Ireland, and from best practice in Europe and around the world? How can we best support the system to formalise and take forward the innovations that occurred during the pandemic? How can the public health system stay closely in contact with the communities it serves, to listen to their needs and ensure that no one is disadvantaged?

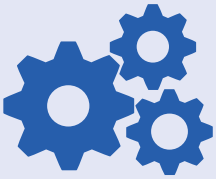
A lot of work went into helping the EAG come up with its recommendations. The World Health Organization's review of Ireland's public health system; an extensive consultation process with those working across a range of professions in public health; close work and interviews with people across Ireland in traditionally disadvantaged communities; an analysis by the Health Information Quality Authority (HIQA) of how different European countries fared during COVID-19; and a review of several different countries' public health systems – all fed into this report and are being published alongside this report.

At the end of their work, the EAG has identified core priorities as follows.

The term 'we' is used to highlight the collective work across the organisations engaged in public health that will be needed to progress these priorities.

We need **strengthen national preparedness** for future pandemics and other public health threats.

To achieve this, we will need dedicated capacity for planning, testing and research.



We need **a comprehensive public health strategy to guide coordinated delivery of the essential public health functions** in order to protect and promote long and healthy lives across Ireland.

To achieve this, we will need to listen to and reflect the health priorities and needs of the public, and serve them through strengthened management, legislation and governance.

We need **clearly defined and measured outcomes** that can tell us where we are doing well, and where we need to improve.

To achieve this, we will need improved data, health information systems, Information and Communications Technology (ICT) and research.

We need to **prioritise reducing and removing inequalities** when it comes to good health and wellbeing.

To achieve this, we will need to put the social determinants of health at the centre of public health policy and reforms.

We need **to put the nation's health at the heart of Government planning and policy**, because almost every aspect of our lives and our environment affects our health.

To achieve this, we will need greater cross-department and cross-sector coordination within Government as well as strengthened all-island and international collaboration.

We need to have **clear leadership in public health: nationally, regionally and locally** – people who can listen, communicate, and inspire

To achieve this, we need to ensure that there are clear structures for those working in public health, with clear lines of communication and responsibility, building on the work and recruitment already being done as part of the implementation of the Crowe Horwath recommendations.

We need to **have experts from many different backgrounds working towards public health**, embedded within different organisations, but all co-ordinated: **learning and working together**

To achieve this, we need to be aware of all the different skills needed to deliver public health, and make sure that people with the full range of necessary skillsets are supported to continually learn from the latest research and best practice elsewhere and to progress in their careers.

The recommendations of the Public Health Reform Expert Advisory Group on **how to achieve these priorities** are:

On strengthening preparedness for future pandemics and other public health threats.

- Pandemic preparedness and public health emergency preparedness needs to be a strong part of a strengthened health protection strategy, with formalised cross-Government, cross-sectoral and inter-agency links, making full use of national structures for emergency planning and management.
- Ireland should fully participate in international mechanisms and the implementation of international agreements and treaties arising from COVID-19. This activity should include the development of updated plans for known health threats and more general activities to build health system resilience and adaptability.
- Research into pandemic preparedness should be increased and supported through national and international mechanisms.

On achieving a comprehensive national public health strategy to guide coordinated delivery of the essential public health functions in order to protect and promote long and healthy lives across Ireland.

- A new national public health strategy, led by the Chief Medical Officer, should be developed by the Department of Health to provide a coherent approach to the full set of essential public health functions.
- The Department of Health should engage across Government and sectors to develop this strategy. It should also engage with the Health Service Executive (HSE), and other agencies engaged with public health activities. This should bring together, build on and further develop existing strategies across health intelligence; health service improvement; health protection and health and wellbeing.
- A programme of updated and strengthened public health legislation should be developed including full implementation of the International Health Regulations, legislation to underpin new public health roles and functions, and the independence of public health advice.

On achieving clearly defined and measured outcomes that can tell us where we are doing well, and where we need to improve.

- The new public health strategy should include an agreed public health outcomes framework building on and further developing existing public health outcomes frameworks in place for Healthy Ireland, the Sustainable Development Goals, the Government's Wellbeing Framework and the Health System Performance Assessment Framework.
- An annual progress report on the delivery of the public health strategy monitoring the agreed outcomes, to be published by the Department of Health and delivered to the Government.
- The proposed National Health Information Authority should be co-designed with those working in public health to support the monitoring of agreed public health outcomes, provide data to give insights on public health priorities, and work in close collaboration with bodies working towards improved public health outcomes.

On the need to prioritise removing inequalities when it comes to good health and wellbeing.

- Build on the dialogues formed during the pandemic with communities across Ireland to institute a continuous, formal process for listening to their priorities.
- Ensure that the public health strategy and all policies within it prioritise better supporting those with the worst public health outcomes.
- Develop a clear, integrated approach at local level to continuous engagement with and support of the public and vulnerable groups towards the improvement of their health outcomes and experiences, guided by their priorities.

On putting the nation's health at the heart of all Government planning and policy, because almost every aspect of our lives and our environment affects our health.

- The Department of Health to lead cross-sectoral mechanisms to ensure preparedness for future public health emergencies, embed public health in policies across Government, address health inequalities, and enhance recognition of population health as a national asset.
- Public health impact to be considered as part of major new policy developments across Government. Public health should be embedded in all policies, similar to the way the climate crisis is being embedded across policy areas through the Climate Action Plan.

We need to have clear leadership in public health: nationally, regionally and locally – people who can listen, communicate, and inspire.

- Public health expertise and representation at national, regional and local levels should be strengthened and embedded in line with the implementation of the Crowe Horwath recommendations, Sláintecare and the implementation of the Regional Health Areas.
- This should include the appointment and alignment of key public health roles at national and regional levels building on recruitment that is already underway.
- Lines of management and communication must be clearly drawn as the Regional Health Areas are developed in order to allow the national leads to support those working regionally, and for those working regionally to learn from each other's challenges and successes through a formal learning and communication process.

We need to have experts from many different backgrounds working on public health, embedded within different organisations, but all co-ordinated: learning and working together.

- A strategic workforce plan should be developed to underpin the delivery of the 12 Essential Public Health Functions at national, regional and local levels. This should include planning for surge capacity, including the development of a Public Health Reserve Corps.
- We must recognise the impact the pandemic has had on the health workforce, and focus on enhancing their wellbeing and resilience, and on recruitment, training, development and retention.
- The Department of Health and agencies to fully engage with the EU, its agencies, and other international bodies including the WHO and the Organisation for Economic Co-operation and Development (OECD) to ensure access to international expertise, practical mechanisms and supports for dealing with cross-border health threats and learning opportunities for the public health workforce.

To support the achievement of these priorities, the following recommendations are made **to strengthen the way public health is delivered in Ireland:**

1. The creation of a new public health body, Public Health Ireland, which would sit under the aegis of the Department of Health.

This body would take on advisory and some operational functions relating to health protection, health promotion and health intelligence, with an initial focus on preparedness for future pandemics and other health threats. It would have a legislative mandate, and dedicated resourcing. The EAG recommends that the Department of Health appoint an Interim Board and CEO to establish the body and take forward its development.

2. Strengthen the focus on public health within the Department of Health, including policy coherence in relation to the 12 Essential Public Health Functions building on and leveraging the existing policy and reform context in particular Sláintecare and Healthy Ireland.

A prioritisation of public health should be evident in the organisation and resourcing of the organisation's functions in policy, legislation, expertise, oversight and other activities related to public health.

3. Strengthen and embed the focus, coherence and representation of public health in the HSE including through the continued implementation of the Crowe Horwath recommendations.

Nationally it will be important to have a clear public health lead, as well as public health representation on the HSE Executive Management Team and on the HSE Board.

The recently appointed (six) Area Directors of Public Health should sit on the senior management team in their respective Regional Health Areas.

4. The Chief Medical Officer as public health lead for the Department of Health, the public health lead in the HSE and the CEO of Public Health Ireland should work closely together.

There should be strengthening of the recognition of and collaboration between professionals working in the main organisations working on public health and across the full range of public health services.

Ireland is implementing an ambitious programme of health and social care reform, Sláintecare, which has public health and prevention of illness at its core. The experience of the pandemic has now presented a further opportunity to build on existing policy, reform and delivery to strengthen our approach to public health.

We need to listen to communities across the country and bring together national and international expertise and opportunities to improve public health, population health outcomes and ensure that the health of the people of Ireland is at the heart of Government policies.

Introduction

In July 2021, the Minister for Health and Government agreed to establish a Public Health Reform Expert Advisory Group.

The Group was tasked with identifying learnings from the public health components of the response to the COVID-19 pandemic in Ireland with a view towards strengthening health protection generally and future public health pandemic preparedness specifically.

The Group was also asked to identify lessons from international best practice regarding the reform and strengthening of other core public health functions, including the promotion of health and wellbeing, population health research and health intelligence and health service improvement.

In January 2022, the Government approved the Group's membership and mandate, and the Group then commenced its work. The Group met from January to July 2022.

Terms of Reference

The Group will in the first instance,

a. Identify key learnings from the public health response to the COVID-19 pandemic in Ireland with a view towards strengthening health protection generally and future pandemic preparedness specifically.

b. Identify lessons from international best practice regarding reform and strengthening of public health functions.

The Group will then,

c. examine the key components of the existing delivery model(s) for public health in Ireland;

d. recommend an appropriate operating model to develop and oversee the delivery of public health in Ireland such that future corporate, clinical and information governance (including data science and innovation), legislative, human resource, public health communications, whole-of-Government and cross-agency arrangements are such as to ensure the optimum:

- **i.** prevention and control of infectious diseases and other health threats;
- **ii.** alignment of core public health functions, including the promotion of health and wellbeing, population health research and health intelligence, and health service improvement;
- **iii.** alignment across local and national Government and across public and third sectors such that every individual and sector of society can play their part in achieving a healthy Ireland;
- **iv.** participation of Ireland in the future development and strengthening of a European Health Union;

The Group will report to the Minister for Health by mid-2022 setting out a transition plan to deliver these future functional arrangements.

Scope of the Expert Advisory Group's work

The Group's scope is as laid out in the terms of reference. This Group does not seek to examine the full societal response to the COVID-19 pandemic but rather the public health response as it relates to the terms of reference. Public health is understood to be defined according to the WHO's 12 Essential Public Health Functions. This report sits in the context of other ongoing work to capture lessons learned from the pandemic and does not seek to capture all of this work, but rather to provide a clear contribution in line with the Group's mandate.

Expert Advisory Group Members

Name	Title/Role
Chair: Prof Hugh Brady	President, Imperial College London
Dr Helen Bevan	Chief Transformation Officer, NHS Horizons
Prof Hannah McGee	Deputy Vice Chancellor for Academic Affairs, RCSI University of Medicine and Health Sciences
Prof Jaap T. Van Dissel	Director of the RIVM Centre for Infectious Disease Control, Netherlands
Prof Johan Giesecke	Professor Emeritus at the Karolinska Institute Medical University in Stockholm. Vice Chair of the Strategic and Technical Advisory Group for Infectious Hazards (WHO)
Prof Peter Piot	Handa Professor of Global Health, former Director of the London School of Hygiene & Tropical Medicine & EU Chief Scientific Advisor on Epidemics
Prof Yvonne Doyle	Medical Director for Public Health (NHS), NHS England and NHS Improvement (NHSE&I)
Dr Tracey Cooper	Chief Executive Officer, Public Health Wales and former head of the Health Information and Quality Authority (HIQA)
Dr Alexandra Freeman	Executive Director, Winton Centre for Risk & Evidence Communication, University of Cambridge
Prof Cecily Kelleher	College Principal, UCD College of Health and Agricultural Sciences
Prof Patricia Fitzpatrick	Full Professor of Epidemiology & Biomedical Statistics, and Head of Subject for Public Health at University College Dublin
Dr Sinéad Hanafin	Visiting Research Fellow, School of Nursing and Midwifery, Trinity College Dublin
Dr Tadhg Crowley	General Practitioner and Associate Clinical Professor, University College Dublin

How the Group did its work

The Group met monthly between January and July 2022 with:

- six online meetings
- one in-person one-and-a-half day meeting in Dublin
- a number of sub-group meetings; and
- discussions in between these core meetings

The Group benefitted from a number of significant inputs to support its work including:

- a consultation and engagement process with organisations and individuals working in public health in Ireland
- a WHO Report on Ireland's delivery of the public health functions
- HIQA work including a descriptive analysis of COVID-19 epidemiological indicators and associated contextual factors in European countries and a high-level review of the configuration and reform of public health systems in selected countries.

The Group has considered this range of inputs and has agreed on the content and recommendations laid out in this report (see Appendix D for additional detail on how the Group did its work).

In accordance with the Group's Terms of Reference, this report lays out:

- a case for change to the current delivery of public health;
- an overview of ongoing policy and reform;
- key lessons from the public health response to the COVID-19 pandemic; and
- lessons from international best practice regarding reform and strengthening of public health functions.

The Group's recommendations are laid out in terms of priorities for public health and recommendations for the delivery model, as well as next steps towards implementation.

Several of the inputs to the Group's work are being published alongside this report.

A case for change

What is the problem?

Although Ireland lost fewer people to the COVID-19 pandemic, proportionately, than many comparable countries, it came at a great cost to society, as well as the economy, and made clear some weaknesses in our public health and wider systems.

Successes were won through unprecedented collaboration, investment and the enormous efforts of individuals across the system innovating and providing impressive leadership. This was a once-off effort which provides an opportunity to learn and systematise that learning to prepare for other future shocks.

Health emergencies are only a small part of protecting the nation's overall health. There is an opportunity to recognise the importance of our population's health and to put our health at the centre of decision-making: to ensure a strong connection to the values and needs of communities across the country, strengthen strategy, leadership, cross-Government thinking, underpinned by integrated data collection and analysis. The challenges within the public health system need to be addressed, and there is now a small window of opportunity to do that and to secure improvements in the people of Ireland's health and wellbeing into the future.

As we all know, COVID-19 affected people's scheduled health care[3] and programmes designed to help prevent disease such as the pausing of cancer screening programmes during the first wave. People were able to see their GPs less often, and many elective procedures were cancelled or delayed. On top of that, many people are still suffering from the direct effects of COVID-19, including Long Covid, and the physical and mental effects of cocooning. We are seeing the consequences of the indirect effects of the pandemic as well. The Healthy Ireland survey in 2021 reported that people were less able to look after their health during the pandemic, with 51% of people in Ireland reporting drinking more alcohol, smoking more, gaining weight or deterioration in their mental health.[4] It will take time for us to realise how widespread and how deep the effects of the pandemic are on our health[5] with the economic and societal costs expected to emerge over the next decade. Increasing inequity and poverty have been recognised as social impacts of the pandemic, and the global economic cost has been estimated in the trillions, with the estimated spend in Ireland in excess of €25 billion. This all makes the next few years crucial in terms of the nation's health.

The pandemic has reinforced the previously identified need for a radically reformed delivery of the public health functions in Ireland, particularly in relation to public health capacity and workforce; governance and alignment with other delivery structures; leadership, responsibility, and accountability; ICT system and data integration; community engagement and partnership; and performance measurement to facilitate timely operational decision-making. This experience has highlighted and reinforced the critical need for robust and resilient public health systems which can readily respond to and mitigate emergencies and threats. Building of such resilience will require intentional design, dedicated planning and resourcing to ensure return on investment and it should include the implementation of lessons learned from COVID-19.

Adding to this, inequality is a serious issue in Ireland. We know that someone's education, employment status, cultural and physical environment all affect their health,[6] and, in Ireland, those with lower incomes, and those from certain ethnic groups, have lower life expectancy and are less likely to say that they are in good health, even outside of the pandemic. This should not be the case. In order to help the more vulnerable and marginalised in our communities, we need to listen to them, understand how to better support them and learn how and why their needs are not being met. Ireland has been identified as having the second highest rate of reported unmet health care needs in the European

[3] Department of the Taoiseach. (2021, August 31). Post Cabinet Statement - *COVID-19: Reframing the Challenge, Continuing our Recovery and Reconnecting* [Press release]. **https://www.gov.ie/en/press-release/f5291-post-cabinet-statement-covid-19-reframing-the-challenge-continuing-our-recovery-and-reconnecting/**

[4] Department of Health and Ipsos MRBI. (2021). *Health Ireland Survey 2021: Summary Report. Department of Health.* **https://assets.gov.ie/206555/260f3b84-bf78-41a2-91d7-f14c7c03d99f.pdf**

[5] The British Academy. (2021). The COVID decade: *Understanding the long-term societal impacts of COVID-19*. **https://www.thebritishacademy.ac.uk/documents/3238/COVID-decade-understanding-long-term-societal-impacts-COVID-19.pdf**

[6] World Health Organization. (n.d.). *Social Determinants of Health.* **https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1**

Union, with those of low socio-economic status most affected.[7] Addressing such health inequities, which have been exacerbated by COVID-19, will take a rethink of public health leadership and coordination across a range of Government policy, legislative and regulatory actions. These health inequities have been exacerbated by COVID-19 and addressing them will help mitigate against the impact of future pandemics, while also improving population health.

Although the people of Ireland enjoy good health, with the highest life expectancy in the EU27[8] and the highest self-perceived health status in the EU[9], Ireland is a relatively young country at the moment. Our young population profile supported Ireland's relatively strong performance during the pandemic, but this is changing and cannot be relied on when facing future health threats. The number of people aged 85 and over is expected to triple between 2021 and 2041.[10] In order to ensure that we age healthily, we need to ensure that our Government focusses on listening, engaging, acting locally, promoting behavioural change, and flexing its priorities based on the needs of the people it serves, with a particular focus on the wider determinants of health. If we don't, the costs to us as a society, and economically will be huge. For example, 1 in 5 primary school students are obese or overweight. 60% of adults in Ireland and 4 in 5 of those over 50 years of age are obese or overweight. The estimated cost of this public health challenge to the economy of the island of Ireland was reported to be €1.6 billion per year in direct and indirect costs in 2012.[11] Investing in public health has demonstrable economic benefits. For example, investing in targeted interventions and universal childcare and paid parental leave could result in significant savings in relation to the cost of social problems such as crime, poor mental health, family breakdown, drug abuse and obesity. Wales, which has a population of 3.1 million, estimated these savings at £72bn.[12]

On top of all of these slowly growing public health issues, we need to make sure that we are preparing for future possible emergencies impacting on health. Currently, we have two national risk assessment processes which identify a range of health specific risks such as future pandemics, antimicrobial resistance (AMR), zoonotic infection (diseases passed from animals to humans), and food safety, but also other broader threats to population health such as cyberattacks, climate change, and wars and conflicts, as well as chemical, biological, radiological and nuclear threats.

Strengths and innovations emerged during the pandemic, which helped efficiency and effectiveness, and lessons have been identified from the experience of the pandemic which have highlighted areas for improvement which should now be addressed. We relied on the commitment and dedication of our healthcare workforce, and the resilience and stamina of the whole nation. However, this approach is unsustainable. We need to design a better system and also better support the people working within it. Measures must be taken now to avoid a potential repetition of such sustained pressure again. The recruitment and retention of a skilled public health workforce is essential and must recognise the diverse range of staff involved in delivering public health in Ireland.

[7] OECD/European Observatory on Health Systems and Policies. (2021). *Ireland: Country Health Profile 2021, State of Health in the EU. OECD Publishing.* **https://doi.org/10.1787/4f7fb3b8-en**

[8] Eurostat. (2022). *Life expectancy by age and sex* [data set]. European Commission. **https://ec.europa.eu/eurostat/databrowser/view/demo_mlexpec/default/table?lang=en**

[9] Department of Health. (2021, 24 November). Health in Ireland: Key Trends 2021. **https://www.gov.ie/en/publication/350b7-health-in-ireland-key-trends-2021/**

[10] Department of Health. (2021, 7 December). *Healthy Ireland Survey 2021.* **https://www.gov.ie/en/publication/9ef45-the-healthy-ireland-survey-2021/**

[11] Safefood. (2012). *The cost of overweight and obesity on the Island of Ireland.* **https://www.safefood.net/getmedia/c22044e1-04ea-4a14-a4c2-77707e54c1a2/Final-Exec-Summary-The-Economic-Cost-of-Obesity.aspx?ext=.pdf**

[12] Dyakova, K., Knight, T., Price, S. (2016). *Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales.* Public Health Wales NHS Trust. **https://www.wales.nhs.uk/sitesplus/documents/888/PHW%20Making%20a%20difference%20ES%28Web_2%29.pdf**

A substantial healthcare reform process is already underway in the form of Sláintecare, a cross-Government plan for the Irish Healthcare system published in 2017.[13] Additional reform is underway through the implementation of recommendations emanating from the Crowe Horwath report on the Role, Training, and Career Structures of Public Health Physicians in Ireland, and the Scally report on the CervicalCheck Screening Programme.[14] These recognised the inadequacy of the existing public health resourcing and career structures and the lack of integration of public health into key areas of the system, such as screening. Sláintecare in particular emphasises the need for radical change in the way we approach health, including a shift from a system focused on acute and episodic care and predominantly centred around ill-health to one that puts population health at the centre.

However, despite significant investment there is broad agreement among stakeholders that while current reform processes should continue, further measures are required beyond this to build health system resilience, strengthen pandemic preparedness and mitigate further demographic and disease profile challenges. To date public health has failed to function as a coherent whole at national level, with increasing tension between the demands of health protection and the other domains of public health, in a constrained resource environment.

The World Health Organization (WHO) has developed a list of 12 Essential Public Health Functions (EPHFs) to support an integrated and cost-effective approach to sustainable health systems strengthening.[15] These EPHFs are the key activities required to ensure an effective public health system and optimise population health. There is now a significant opportunity to address deficiencies in the current delivery of these activities and ensure consistency in the regional delivery of public health, as well as strong national support, particularly with respect to health and wellbeing.

Change takes time but we should collectively seize this opportunity

We now face a uniquely challenging time for the health of the population. This is therefore a leadership moment to tackle and mitigate these challenges – and the yet unknown emerging threats, and to exploit the very real opportunities for innovation and transformation that exist.

This will require specialist, evidence-based public heath expertise, system leadership and galvanising action to drive forward and make improvements in the most challenging population health environment Ireland has seen in generations.

Any reform must be grounded in legislation, have top-table Government support, and a clear implementation plan to provide the best chance at success in achieving improved health for the people of Ireland. In some areas of public health, return on investment may be seen quickly. However, multi-annual planning and funding is essential to support longer term outcomes, as well as sustaining other improvements, particularly those associated with health promotion and improvement. This presents a challenge in terms of measurement and evaluation, maintaining support for the delivery of longer-term programmes, while recognising that new programmes may be required to ensure sustained public engagement. Similarly, health inequity is deep-rooted, and can only be addressed through a committed and relentless public health effort.

Now is the time to act so as to position Ireland in the best possible way to address these challenges.

[13] House of the Oireachtas. (2017). Committee on the Future of Healthcare: Sláintecare Report. **https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/committee_on_the_future_of_healthcare/reports/2017/2017-05-30_slaintecare-report_en.pdf**

[14] Scally, G. (2018). Scoping Inquiry into the CervicalCheck Screening Programme: Final Report. Department of Health. **http://scallyreview.ie/wp-content/uploads/2018/09/Scoping-Inquiry-into-CervicalCheck-Final-Report.pdf**

[15] World Health Organization. (2021). 21st century health challenges: can the essential public health functions make a difference? **https://apps.who.int/iris/bitstream/handle/10665/351510/9789240038929-eng.pdf?sequence=1&isAllowed=y**

Public health
The current status of policy and reform

A range of policies and health reforms are already being implemented to address some of the challenges identified above including the Healthy Ireland programme, reforms underway to strengthen health protection and preparedness for health threats and the development of the Health Information Bill, which includes the creation of a National Health Information Authority.

The restructuring of acute and community services into six Regional Health Areas (RHAs) under the HSE as part of Sláintecare has been agreed and provides a compelling structure for the further reorganisation of public health reform.

Sláintecare

The Sláintecare 10-year transformation programme is currently being implemented to achieve the vision of one universal health service for all, which provides the right care, in the right place, at the right time, by the right team.

The aims of Sláintecare include:

- promoting the health of our population to prevent illness;
- bringing the majority of care into the community; and
- creating an integrated system of care with healthcare professionals working closely together and delivering a health service that has the capacity and ability to plan for, and manage, changing needs.

As part of this reform, six Regional Health Areas (RHAs) are being implemented to improve clinical governance, to streamline corporate governance and accountability, to enable a population-based approach to service planning and to facilitate integration of care with geo-aligned community and acute services.

Crowe Horwath Report on the Role, Training and Career Structures of Public Health Physicians in Ireland

A key finding of the 2018 Crowe Horwath Report was that 'fundamental strategic and structural change is needed to move the public health function forward' and that 'a new national strategy for public health is required'.

The report also highlighted

- the importance of a significantly different operational model for the delivery of public health services;
- a new national operational plan for the development of the public health function;
- the development of leadership and leadership roles among public health physicians;
- consideration of consultant status for public health physicians; and
- multidisciplinary public health teams.

HSE Public Health Reform Programme

Following the Crowe Horwath report, the Department of Health and the HSE agreed on the need for a public health transformation programme which has seen the mobilisation of the HSE Public Health Reform Programme and the introduction of the Consultant grade in Public Health Medicine.

In March 2020, the Reform Programme necessarily re-focused its efforts to meet the demands of COVID-19 pandemic response before re-mobilising the Reform Programme in autumn 2021. Reform within the HSE has seen the development of a 'hub and spoke' model with a strong national function at the centre of the HSE and with regional public health professionals focused on local issues as well as a focus on strong public health leadership both nationally and regionally, with the establishment of Consultant-led multi-disciplinary teams.

There has been significant progress to date on this reform programme with the recruitment of 32 Consultants in Public Health Medicine (CPHM) and with 52 more posts to be filled over 2022 and 2023. The initial phase was predominantly focused on health protection consultant roles, and key leadership roles.

The 32 Consultants in Public Health Medicine (CPHMs) recruited to date (October 2022) break down as follows:

- 6 Area Directors of Public Health
- Director of National Health Protection
- CPHM – National Health Protection Immunisations
- CPHM – National Health Protection Threat Programmes & Preparedness
- CPHM – National Health Protection Acute Operations Response
- 18 CPHMs – Health Protection
- CPHM – Child Health
- CPHM – Cancer Service Improvement
- CPHM – Screening Services
- CPHM – Chronic Conditions

230 allied health posts have also been filled as part of public health reinforcement and in anticipation of the move to the RHAs, six new Public Health Areas have been established replacing eight Public Health Departments. These are being led by six recently appointed Area Directors of Public Health.

Healthy Ireland

Launched in 2013, the Healthy Ireland Framework contains four central goals for improved health and wellbeing:

- increase the proportion of people who are healthy at all stages of life;
- reduce health inequalities;
- protect the public from threats to health and wellbeing; and
- create an environment where every individual and sector of society can play their part in achieving a healthy Ireland.

The current Healthy Ireland Strategic Action Plan (2021–2025) outlines a roadmap of how we can continue to work together to bring about good health. The Healthy Ireland Fund was established to support innovative, cross-sectoral, evidence-based projects that support the implementation of national policies including in areas such as obesity, smoking, alcohol, physical activity, and sexual health. The annual Healthy Ireland survey is an important source of data to enhance the monitoring of the Framework.

A range of settings-based approaches are in place under Healthy Ireland including Healthy Communities, Healthy Cities and Counties, Healthy Schools and Pupils, Healthy Campus and Healthy Workplaces. A number of posts have been filled (information up to date as of July 2022) to support this work including the recruitment of 18 Sláintecare Healthy Communities Local Development Officers together with a National Development Officer. 10 Healthy Cities and Counties Coordinators have been recruited to date and it is hoped to have the additional 21 Coordinators in place by late October 2022. A Healthy Campus Coordinator has also been recruited and will be hosted in the Higher Education Authority.

A range of targeted plans and strategies are in place including the National Physical Activity Plan, Ireland's National Obesity Policy and Action Plan and the *Tobacco Free Ireland* Strategy. Healthy Ireland is also linked with the Department of the Taoiseach's *Wellbeing Framework for Ireland*,[16] Work is ongoing on the Public Health (Tobacco and Nicotine Inhaling Products) Bill while the Public Health (Alcohol) Act was enacted in 2018.

Scoping Inquiry into the CervicalCheck screening programme

Dr Gabriel Scally's '*Scoping Inquiry into the CervicalCheck Screening Programme*' recommended that the skills of public health physicians be deployed across the domains of Public Health Medicine and the health service in general.

[16] Department of the Taoiseach. (2021). *A Well-being framework for Ireland*. **https://www.gov.ie/en/campaigns/1fb9b-a-well-being-framework-for-ireland-join-the-conversation/**

Significant progress has been made in implementing the recommendations of the report. As a part of this, the Department of Health, the HSE and the National Cancer Registry of Ireland have been working closely with stakeholders and progress has included the appointment of a Director of Public Health to the National Screening Service.

One Health

Ireland's second One Health National Action Plan on Antimicrobial Resistance 2021-2025 (iNAP2) builds on the work undertaken in iNAP1 and was developed following the WHO Global Action Plan on AMR. The plan contains a range of strategic interventions and activities across the human health, animal health and environmental sectors and demonstrates what can be achieved through a collaborative and productive relationship across a range of sectors.

Additional public health strategies

There is significant additional work ongoing across a range of specific public health issues. This includes *The National Cancer Strategy: 2017–2026* which focuses on preventing cancer, early diagnosis, optimal care and maximising quality of life and on building on the significant progress made under the previous strategy.

Reducing Harm, Supporting Recovery 2017–2025, the foundation of which is the Healthy Ireland Framework, aims to promote healthier lifestyles within society and encourage the population to make healthier choices around drug and alcohol use. A Rapid Expert Review of the strategy has resulted in a focus on key priorities to provide greater coherence and to facilitate cross-Government coordination.

National Health Information Bill

Work is progressing on a Health Information Bill, the purpose of which is to support a modern integrated health system that will enhance patient care and safety and allow for the effective secondary use of health data in areas including public health, research and innovation, clinical audit, registry establishment, compilation of statistics, regulatory activities, and health service management, planning and policy making.

To make that happen, the Bill will provide a legislative framework for the mandated collection of specified health data and the secure processing, matching, linking and reuse, of such data. The legislative framework will be consistent with best practice in information governance and data protection principles. The Bill will also provide for the creation of a 'National Health Information Authority' as a new statutory body to oversee and facilitate the collection and processing of health data under the Bill's legislative framework.

Health Systems Performance Assessment

Work is also underway to finalise and implement a Health Systems Performance Assessment (HSPA) Framework which is intended to assist in the measurement and tracking of health outcomes as well as metrics relating to the performance of the health system. The HSPA incorporates outcomes which focus on prevention and early intervention.

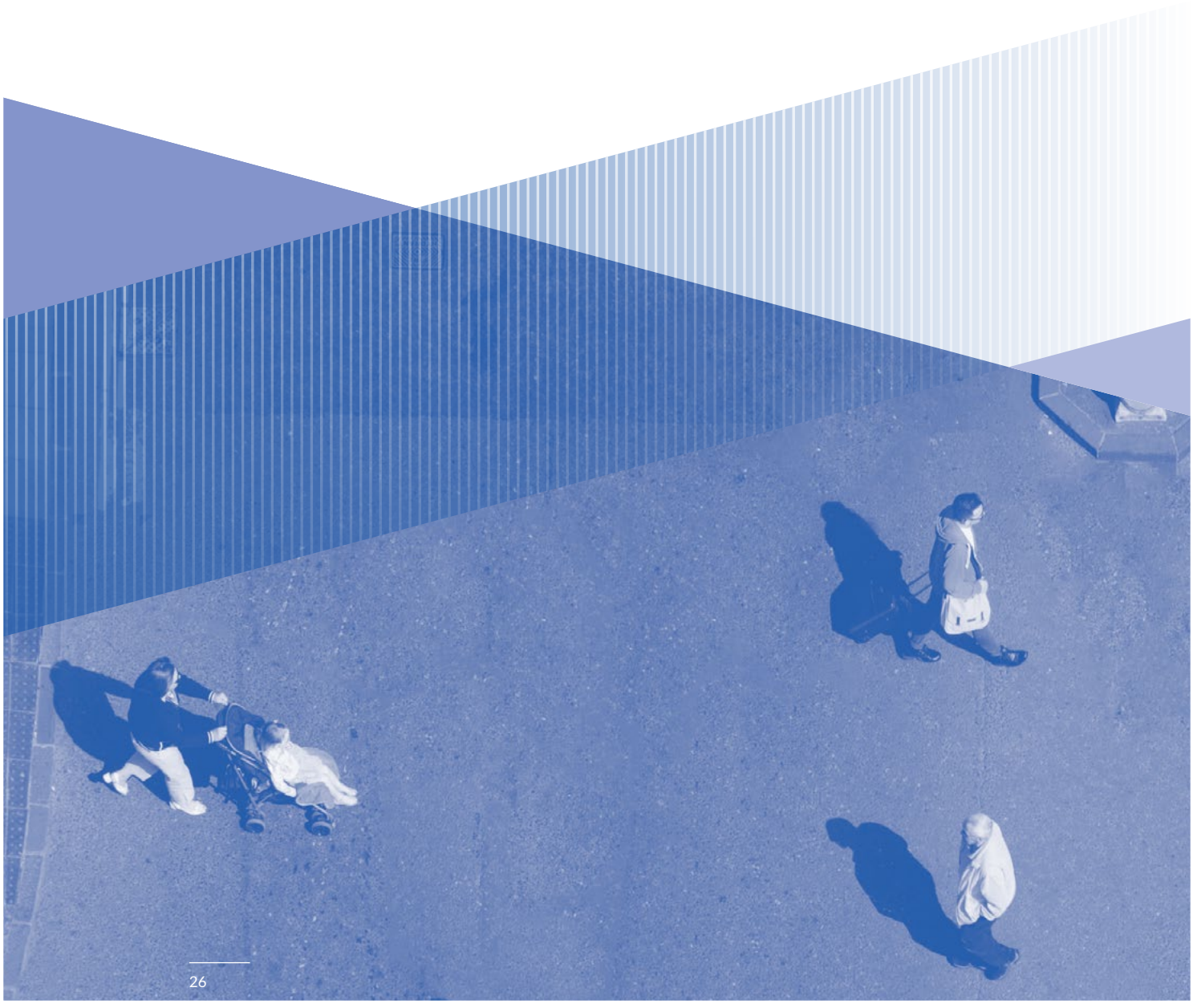
Cross-sectoral work on public health

There are a wide range of successful initiatives underway across Government and society both directly and indirectly related to the promotion of public health including:

- the Special Cabinet Committee on COVID-19,
- the One Health Committee for Antimicrobial Resistance,
- the Office of Emergency Planning, the committee supporting the National Strategy for Women and Girls, the Wellbeing Framework for Ireland cross-Government initiative,
- the National Strategy on Domestic, Sexual and Gender-Based Violence,
- the Sustainable Development Goals National Implementation Plan, *Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People 2014-2020*, Healthy Ireland, and Sláintecare Healthy Communities.

This work and ongoing reform provides a solid base which must now be built upon and further developed.

Key lessons from the public health response to the COVID-19 pandemic in Ireland



The Group was tasked with identifying key learnings from the public health response to the COVID-19 pandemic in Ireland with a view towards strengthening health protection generally and future pandemic preparedness specifically.

The Group is mindful of the significant volume of work which has been and is being done in the Irish context to learn lessons from the pandemic including the work by the Nursing Homes Expert Panel, the HSE's *Intra-Action Review of the HSE Health Protection response to the COVID-19 pandemic during 2021* and *The impact of the COVID-19 pandemic and the societal restrictions on the health and wellbeing of the population, on our staff and on health service capacity and delivery: A plan for healthcare and population health recovery;* significant work undertaken by the community and voluntary sector capturing lessons[17] and the National Economic & Social Council's *The Covid-19 Pandemic: Lessons for Irish Public Policy*.

This report seeks to add to rather than duplicate this work by summarising the main lessons arising from the Group's inputs including the WHO review and consultation. While acknowledging the enormous efforts across Government, sectors and society, the Group's focus is on the public health response and what can be learned to strengthen public health systems.

As has been outlined above, the COVID-19 pandemic has presented an unprecedented challenge to public health systems and led to a significant loss of life globally. The pandemic has exposed numerous vulnerabilities in health systems globally and nationally. As a new and unknown entity, SARS-CoV-2 represented a classic 'wicked problem,'[18] requiring rapid, evolving and innovative responses to the emerging and changing challenge, as well as the unprecedented generation of evidence to inform those responses. Although COVID-19 was unprecedented and future health threats may take on a different form, both specific and general lessons can be learned with regard to how the global community is equipped to respond to public health emergencies.

Lessons must be drawn from Ireland's pandemic response, including what worked well, and what we can learn to strengthen Ireland's response to future public health threats in order to limit the negative impacts that may arise from future pandemics or other threats.

[17] For example, Disability Federation of Ireland. (2020). *Impact of COVID-19 on people with disabilities and the disability sector.* **https://www.disability-federation.ie/assets/files/pdf/dfi_submission_impact_of_covid-19_on_people_with_disabilities_and_the_disability_sector_290620_1.pdf**

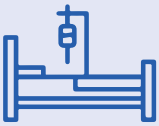
[18] In planning and policy, a wicked problem is a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognise.

What worked well?

Ireland has performed relatively well in response to COVID-19 to date. While the cumulative case rate in Ireland was in line with the EU27 average, surges in hospitalisations were of a lower and shorter duration than those experienced by many European countries, with excess mortality amongst the lowest in Europe,[19] and globally.[20]

Some contextual factors that influenced this performance include:

Ireland's relatively young population, with 13.9% of the population aged 65 years or older, compared to the EU27 average of 18.7%; lower population density



Healthcare capacity, with hospital and ICU bed capacity potentially influencing admission and discharge policies

Rollout and uptake of vaccines which was a particular strength

The extent of public health restrictions, noting that Ireland had one of the highest stringency index values across different periods in 2020 and 2021.

[19] Health Information and Quality Authority. (2022). *Descriptive analysis of COVID-19 epidemiological indicators and associated contextual factors in European countries.* **https://www.hiqa.ie/sites/default/files/2022-05/COVID-19-Epidemiological-analysis.pdf**

[20] COVID-19 Excess Mortality Collaborators. (2022). *Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis of COVID-19-related mortality, 2020–21.* The Lancet, 399(10334), 1513-1536. **https://doi.org/10.1016/S0140-6736(21)02796-3**

There are many success stories and innovations from the pandemic which we can learn from and build on.

During the Group's consultation, those involved in delivering the pandemic response have shared the achievements they are proud of including:

1. The remarkable solidarity and resilience of people, communities and organisations across Ireland, united around a shared purpose. Community engagement in the response and public support of and adherence to public health measures was high and played a big role in Ireland's relative success in response to the pandemic.
2. The increased visibility of public health and recognition that everyone has a role to play in protecting public health.
3. Ireland's response to COVID-19 was a cross-sectoral, cross-Government response, coordinated centrally at the highest political level, informed by evidence-based public health expertise via the National Public Health Emergency Team (NPHET). Collaboration across organisational boundaries towards a shared purpose was a key strength of the response.
4. The operational public health response led by the HSE had many strengths. The HSE ensured the successful roll out of the contact tracing and vaccination programmes while the Departments of Public Health delivered outbreak management in the community and ensured sustained contact tracing. The Health Protection Surveillance Centre (HPSC) provided invaluable surveillance to inform the response, as the National Focal Point for the International Health Regulations, linking with the ECDC and WHO, and collating and presenting accurate data.
5. The hard work and dedication of the public health and wider healthcare and frontline workforce was highlighted as a strength. The flexibility and agility of the public health and wider healthcare workforce, and their willingness to 'change gear' as was needed to support the response was central to Ireland's success. This included those normally and directly engaged with public health and primary care including public health nurses, health and social care professionals, GPs and pharmacists and well as those in community and voluntary organisations and others called upon to support an unprecedented public health effort.
6. Partnerships and collaboration between those working in public health and across society including for example the partnership between academia, officials and Government represented by the Irish Epidemiological Modelling Advisory Group. Expertise from organisations such as HIQA and the Behavioural Research Unit at the Economic and Social Research Institute (ESRI) were leveraged to support the work of the NPHET. New partnerships were formed throughout the health service and with other sectors and were frequently highlighted as a strength that should be continued and fostered into the future.
7. The Vaccination Programme, including the participation in EU procurement agreements, and the very high national uptake. The vaccine programme was stood up in a very timely manner, achieved very high national uptake and was a key success in Ireland's response. Again, the wider public health workforce was key to enabling this success, including GPs and pharmacists.

8. During the pandemic there were significant and rapid innovations in health intelligence, including the creation of a COVID-19 data hub in the Central Statistics Office, within the GeoHive data visualisation platform, to inform management of the pandemic, and the development of the COVID-19 Tracker app. A National Research Ethics Committee was activated for COVID work with almost 100 protocols fast-tracked, facilitating a rapid start to research including becoming partners in major international studies. In addition, there were innovations in IT infrastructure, to ensure continuity of care which have resulted in new and more efficient practices including e-prescribing and telehealth.

9. There was clear, transparent, open, and trusted national public health risk communication, informed by behavioural research exploring attitudes and behavioural responses to COVID-19 restrictions and disease prevention measures. Perhaps the biggest indicator of success in a country's response to the pandemic has been whether Governments gained public trust, and Ireland performed well in this regard.

10. The leadership of public health experts including through the Chief Medical Officer and the National Public Health Emergency Team. Public health experts were prominent figures in the pandemic response in Ireland, which was not the case in all countries. This supported high levels of acceptance of public health measures, high levels of vaccine uptake and high levels of public trust.

11. Rapid legislation and regulation activity under significant time pressure was undertaken to support the public health response.

There is no doubt about the exceptional contribution, performance and rapid response of people working across the public health system, in the broadest sense, and the Group's recommendations now seek to build on this exceptional response.

What can we learn?

As well as celebrating these successes, it is important to reflect on those areas that presented challenges both internationally and nationally, and that are in need of attention in Ireland to protect against significant future health threats, including pandemics.

Emergency Preparedness

Despite numerous warnings in relation to future pandemic threats, the world was inadequately prepared to respond to the COVID-19 pandemic.[21]

This lack of preparedness was felt globally, and acutely in Europe, where response systems had not been tested by the epidemics and outbreaks seen in other parts of the world in recent decades.[22] The WHO analysis of essential public health functions in Ireland noted that countries who incorporated lessons learned from previous public health events to support health systems appeared more resilient to COVID-19 and that while lessons were captured through systematic mechanisms following the H1N1 experience in 2009 in Ireland, there was insufficient implementation of these lessons.

Similarly, those countries that recognised the threat from COVID-19 early and reacted quickly, comprehensively and in a precautionary manner fared much better than countries who chose to wait.[23] A coherent, whole-of-Government response, in which the decisions and actions were guided by public health evidence, was key to an effective and timely response to COVID-19. This was the case in Ireland where independent public health advice has been at the core of the response throughout. The National Public Health Emergency Team structure in particular had been used on a number of occasions previously and was used effectively during the COVID-19 response. Ireland has structures and processes in place at national level to deal with major emergencies, including those established and managed by the Government Taskforce on Emergency Planning. Still, the scale of the cross-Government effort required to address the impacts of this public health emergency were unprecedented.

The WHO emphasised the importance of accelerating and prioritising preparedness efforts in responding to the ongoing pandemic and preparing for future health emergencies[24] and the consultation pointed to a need for additional preparedness plans and activities and the need to invest in leadership to support Public Health Emergency Management and Threats Preparedness in particular.

Lessons learned

- Public health emergency preparedness plans must be in place, strengthened and tested
- Public health emergency preparedness and response requires a whole-of-Government, whole-of-society approach, supported by national and regional public health capacities

[21] The Independent Panel for Pandemic Preparedness and Response (2021). *COVID-19: Make it the Last Pandemic.* **https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf**

[22] European Commission (2021). *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Drawing the early lessons from the COVID-19 pandemic.* COM (2021) **https://ec.europa.eu/info/sites/default/files/communication150621.pdf**

[23] The Independent Panel for Pandemic Preparedness and Response (2021). *COVID-19: Make it the Last Pandemic.* **https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf**

[24] World Health Organization (2020). *The COVID-19 pandemic: lessons learned for the WHO European Region: a living document* (Version 1.0). **https://apps.who.int/iris/bitstream/handle/10665/334385/WHO-EURO-2020-1121-40867-55292-eng.pdf?sequence=1&isAllowed=y**

Leadership and governance

Globally, national responses were most successful where decision-making authority was clear and efforts were coordinated across sectors, with formal advisory structures providing timely scientific advice to decision makers.

The Irish response to COVID-19 was coordinated centrally at the highest political level by the Department of the Taoiseach in collaboration with the Department of Health and the HSE. The NPHET provided public health advice to Government as well as working with the HSE's National Crisis Management Team. Strong collaborations between public health leaders in Europe and globally, and Ireland's participation in EU fora, aided a more coherent approach to our COVID-19 response and international cooperation enabled the rapid sharing of information and data.

The NPHET provided a clear governance structure and mechanism for bringing together representatives of the relevant health bodies during the pandemic, facilitating a coherent national response. The consultation process noted that: "NPHET, with its very wide representation from across the health system, addressed, albeit in an ad-hoc manner, many of the weaknesses in governance and organisational structure within the system". There was a view that governance of public health was not clear or coherent prior to the pandemic: "the public health system was poorly served by weak governance structures which were not well aligned with the wider governance structures of the health services". "The discipline of public and population health was not as influential as it should be in health policy and the organisation and delivery of health services". It was also noted that public health representation in strategic decision-making processes was weak with: "a lack of recognition of the public health voice and approach within the system, with a lack of representation at the highest level including the HSE Board or Executive team and a lack of representation within the implementation of Sláintecare".

Lessons learned

> Strong leadership, political will and clear governance structures for public health are needed to deal with public health emergencies including representation of public health and support at the highest levels

Legislation and Regulation

Effective regulation and legislation are fundamental to the optimal delivery of public health. The WHO review and the consultation noted that while legislation concerning infectious disease threats is in place in Ireland, this legislation has not been substantially updated for some time, lacks clarity in terms of mandates, roles and responsibilities and contains critical gaps.

Specific legislation to support emergency responses and underpin International Health Regulations 2005 (IHR) monitoring is lacking in Ireland: "we have not fully implemented the International Health Regulations, leaving some gaps and risks in terms of national level operations needed to support some of the emergency public health functions". There was a need for a significant amount of primary legislation in response to COVID-19, requiring a large amount of work to be done under significant time pressure to facilitate a timely response. The pandemic highlighted the importance of having comprehensive legislation in place, to support the delivery of the full set of public health functions.

Lessons learned

> Comprehensive legislation is needed to facilitate a timely response to public health events and emergencies, including to underpin the International Health Regulations (IHRs)

Information and Communications Technology, Data Collection and Research

Deficiencies in ICT infrastructure act as a significant impediment to fast and effective public health responses to outbreaks.[25]

Disease monitoring and surveillance are core functions of public health and an important part of response planning is the timely sharing of information and data and communication.[26] The Irish experience in this regard was not out of step with the global community. A lack of complete and comparable data across countries meant critical time was lost in detecting the true scale, severity, and speed of the epidemic and lead to delays in decision making. Although countries including Ireland have taken steps to strengthen and improve disease monitoring and surveillance, gaps have been exposed.[27]

While acknowledging the significant innovations and collaboration achieved in developing data, knowledge and application solutions as part of the response, both the WHO review, and the consultation process identified a lack of ICT infrastructure, insufficient data collection and availability as factors limiting public health decision-making and actions. The evidence also pointed to the siloed nature of available data, and the inability to integrate data across systems due to the lack of a unique or individual health identifier, as significant obstacles to understanding population health needs and optimal delivery of the essential public health functions.

Similarly, the existing public health research capacity was fragmented and insufficient, with the consultation highlighting the need to: "strengthen Ireland's public health research capacity to ensure that we respond to the current and future pandemics and other crises including those linked to climate change." Limited modelling capacity was available within the system and the Irish Epidemiological Modelling Advisory Group to NPHET (IEMAG) was established in response to the pandemic, and evidence synthesis skills were leveraged through HIQA. Although these ad-hoc solutions entities functioned extremely well in supporting the work of the NPHET, the reactive efforts required highlighted the deficiencies of these skills and capacity for this work within the public health system.

Lessons learned

- ICT infrastructure, data collection, data integration and data availability are fundamental to an effective response to public health threats
- Data analysis and modelling skills are important components of an effective public health system
- A strategic approach to applied and responsive public health research supports health policy and serves the needs of the population

[25] Sagan, A., Webb E., Azzopardi-Muscat, N., de la Mata, I., McKee, M., & Figueras, J. (2021). *Health systems resilience during COVID-19: lessons for building back better.* Health Policy Series, 56. **https://apps.who.int/iris/rest/bitstreams/1390564/retrieve**

[26] World Health Organization. (2020). *The COVID-19 pandemic: lessons learned for the WHO European Region: a living document* (Version 1.0). **https://apps.who.int/iris/bitstream/handle/10665/334385/WHO-EURO-2020-1121-40867-55292-eng.pdf?sequence=1&isAllowed=y**

[27] Sagan, A., Webb E., Azzopardi-Muscat, N., de la Mata, I., McKee, M., & Figueras, J. (2021). *Health systems resilience during COVID-19: lessons for building back better.* Health Policy Series, 56. **https://apps.who.int/iris/rest/bitstreams/1390564/retrieve**

Health Service Delivery and Resilience

The COVID-19 pandemic has significantly impacted most health systems globally, even the strongest systems with exemplary access to universal healthcare reported sustained disruptions to health services.

The COVID-19 pandemic has further exposed well documented needs in Ireland in relation to health system capacity and staff.[28] Innovative public-private partnerships were leveraged to reduce disruption to services in Ireland. Private sector purchasing agreements were used to rapidly increase hospital capacity in the first wave. International laboratory capacity was procured due to insufficient national testing and laboratory capacity. New national public health services were ultimately developed in record time including a mass testing and tracing service, a very successful mass vaccination programme, and a mandatory hotel quarantine service in collaboration with several Government Departments and agencies. Many of these efforts were reactive out of necessity and succeeded due to the enormous efforts of those involved.

It should be recognised that the scale of the impact of the COVID-19 pandemic is unprecedented. No health system, no matter how well developed or resourced, was prepared, or able to absorb its impact without consequence. In addition to lessons to be drawn about tackling pandemics and other known potential health threats, a wider lesson is that health systems should build their resilience overall to respond to unanticipated threats. This will involve broad investment as well as building in adaptability and the capacity to respond to public health threats and wider emergencies that impact on the health of the population.

Lessons learned

- The wider health system must be resilient with adequate funding to ensure continuity of care and minimise health service disruption in the face of public health challenges
- Adaptability and surge capacity should be built in to respond to unanticipated challenges

The Healthcare Workforce

Ireland's strong performance in response to COVID-19 is in large part due to the tremendous skill and commitment of the staff of the public health workforce, across the HSE and the voluntary sector, along with other healthcare and frontline staff.

There was evidence from the consultation with the public health workforce that some staff are feeling depleted, and morale may be low following the efforts and uncertainties of the pandemic. Some of those involved in the delivery of public health are motivated by the recognition of the importance of their work due to the pandemic, and the many innovative ways of working and strengthened relationships which have been developed should now be retained and built on.

A resilient health system requires an adequate, trained, and willing workforce. Staff shortages have been frequently highlighted as an issue in the pandemic response, and this has been noted as a long-standing issue by the public health workforce: "even before the pandemic commenced, the medical discipline of public health as well as the wider health service was facing shortages of human resources resulting in reduced service availability". The consultation identified recruitment and retention issues, which predated the pandemic.

[28] For example, Department of Health. (2018). *Health Service Capacity Review 2018: Review of Health Demand and Capacity Requirements in Ireland to 2031*. **https://www.gov.ie/en/publication/26df2d-health-service-capacity-review-2018/**

High performing countries expanded their workforce through reallocation and recruitment. Ireland employed numerous strategies to increase the workforce including recruiting retired, student or volunteer healthcare workers, and in addition employed non-healthcare professionals in contact tracing roles, with clinical oversight from the medical workforce, which facilitated the maintenance of contact tracing even during periods of time where case numbers were exceptionally high. The resilience and agility of the public health workforce has been highlighted as a strength. Staff were willing and able to: "change gear quickly to respond to pressures brought on by the pandemic and its evolving epidemiology (being) of crucial importance to ensure the best response to emerging priorities."

As was the case globally, healthcare workers in Ireland were disproportionately affected by the pandemic, with early and wide-spread transmission of COVID-19 among healthcare workers,[29] placing additional pressures on the system. The health and wellbeing of staff must be protected as the pandemic has left: "many staff burnt out from long hours over a long period of time".

Lessons learned

- The breadth of staff involved in delivery the public health response to COVID-19 is clear. Staff across a range of skillsets adapted to new roles and were empowered to deliver new functions
- Staff health and well-being are at risk from health threats and must be protected

Communication

One of the biggest indicators of success in responding to the pandemic has been whether Governments were seen as worthy of the public's trust in the public health and wider response.

Public distrust of health agencies and lack of population adherence to risk mitigation measures proved significant impediments to the pandemic response in some countries, and has led to social and political division over the utility of masks and vaccinations internationally.[30] Effective communication, informed by behavioural insight analysis, proved essential in supporting public engagement with mitigation measures.[31]

Ireland performed very well in this regard, with a strong whole of society response, strong national communication and significant levels of community engagement. A clear, coherent and strategic communications approach built trust and supported high levels of acceptance of public health measures and excellent vaccine uptake rates in Ireland. The communications approach included (initially daily) briefings from the NPHET, focused on independent public health advice, operating in cohesion with Government communications coordinated by the central Government Information Service, operational reports from the HSE, as well as clear, open and consistent public and media engagement. The strategy was evidence informed integrating public feedback through regular public research. While national communication was seen as a strength of the Irish response, the need to formally embed this capacity and also to strengthen local and regional communication channels was highlighted by the WHO.

[29] Haldane, V., De Foo, C., Abdalla, S., Jung, AS., Tan, M., Wu, S., Chua, A., Verma, M., Shrestha, P., Singh, S., Perez, T., Tan, SM., Bartos, M., Mabuchi, S., Bonk, M., McNab, C., Werner, GK., Panjabi, R., Nordström, A., & Legido-Quigley, H. (2021). *Health systems resilience in managing the COVID-19 pandemic: lessons from 28 countries.* Nature Medicine, 27(6), 964-980. **https://doi.org/10.1038/s41591-021-01381-y**

[30] Nuzzo, JB., & Gostin, LO. (2022). *The First Two Years of COVID-19: Lessons to Improve Preparedness for the Next Pandemic.* Journal of the American Medical Association, 327(3), 217-218. **https://doi.org/10.1001/jama.2021.24394**

[31] Hassan, N., Mukaigawara, M., King, L., Fernandes, G., & Sridhar, D. (2021). *Hindsight is 2020? Lessons in global health governance one year into the pandemic.* Nature Medicine, 27(3), 396-400. **https://doi.org/10.1038/s41591-021-01272-2**

In terms of inter- and intra-organisational communication, the consultation with the public health workforce revealed some challenges in communication within and between organisations involved in the delivery of public health particularly in the speed of communications between national and regional bodies. Although some of this was likely an inevitable aspect in the early days of the pandemic response when the pace of new information was frenetic, nonetheless, a need for strong lines of communication was highlighted: "people working on the ground in Departments often finding out changes in relation to isolation/contact management/location specific changes on (the)6 o'clock news". The creation of new communication channels and collaborations were highlighted as a strength of the pandemic response to be retained and built on into the future.

Lessons learned

- Communication is critical to build trust with the public
- Effective communication within and between organisations is essential to a public health response and should be built up during 'peacetime'

Focus on Equity

The COVID-19 pandemic highlighted division and inequality both between and within countries and exacerbated long-standing healthcare inequalities.[32]

The need to address inequalities in healthcare in Ireland is well documented and requires sufficient and skilled public health staff with appropriate resources to do so. Despite significant efforts to protect them, the people most affected by COVID-19 were older individuals, those with existing health conditions, and those from disadvantaged and vulnerable populations.

The pandemic magnified the inequalities experienced by many vulnerable and disadvantaged communities such as older people, the Irish Traveller community, the Roma community, migrants, people who are homeless, people living in Direct Provision and people struggling with addiction. The impact of the pandemic was gendered with women reporting a greater decline in wellbeing than men, with younger women particularly affected. There was an increase in domestic violence, with women more strongly affected. The impact of overlapping inequalities was also highlighted.

Older people were also significantly impacted by the pandemic, with higher risk of severe disease and death as a result of frailty and the presence of underlying health conditions and negative impacts from social isolation resulting from 'cocooning' in the early stages of the pandemic impacting on their health and wellbeing. This was particularly evident amongst older people living in long term residential care.

The Irish experience was in line with what was experienced internationally, with a large proportion of deaths experienced in the long-term residential care sector. In most OECD countries, including Ireland, pandemic preparedness plans did not sufficiently focus on or prioritise the long-term residential care sector.[33]

A Nursing Homes Expert Panel examination of the first wave of COVID-19 found that nursing homes accounted for 56% of deaths in Ireland at the time of the publication of the report and incident rates were 10% higher for nursing home residents.[34] The review highlighted the need for robust, accountable clinical oversight in this sector and proposed a series of recommendations.[35] The Department of Health established a high-level implementation oversight group and a reference group in September 2020 which set about concertedly and rapidly implementing the recommendations of the original report and in June 2022, a fourth and final progress report was published

[32] The Independent Panel for Pandemic Preparedness and Response. (2021). *COVID-19: Make it the Last Pandemic.* **https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf**

[33] Gostin, LO. (2020). *The Great Coronavirus Pandemic of 2020 —7 Critical Lessons.* Journal of the American Medical Association, 324(18), 1816-1817. **https://doi.org/10.1001/jama.2020.18347**

[34] OECD (2021). *Rising from the COVID 19 crisis: Policy responses in the long-term care sector.* **https://doi.org/10.1787/34d9e049-en**

[35] Frazer, K., Mitchell, L., Stokes, D., Crowley, E., & Kelleher, C. (2020). *COVID-19 Nursing Homes Expert Panel: Examination of Measures to 2021.* Department of Health. **https://assets.gov.ie/84889/b636c7a7-a553-47c0-88a5-235750b7625e.pdf**

outlining the status of each recommendation. This very significant response by the Department of Health, HSE, HIQA and stakeholder partners, and an effective review and implementation process, should have a lasting public policy impact for older people.

One of the subgroups of the NPHET focused on vulnerable groups and a further subgroup focused on ensuring an ethical approach to the response. There were significant initiatives within the communications strategy including communications around vaccine uptake to use peer networks and engagement with community leaders to ensure accessible information for groups particularly at risk of the impacts of COVID-19. Key data was stratified according to various identifiers relating to vulnerability including gender, age, and some ethnic or group membership identifiers, which assisted in tracking differential outcomes. The COVID-19 experience has brought to the fore clear dynamics between vulnerability and worse public health outcomes and acts as a stark reminder of the need to address disadvantage and promote equity as a fundamental bedrock to improving public health outcomes.

Lessons learned

- The most vulnerable in society were most impacted by the COVID-19 pandemic and response
- The early and rapid review and implementation of recommendations relating to nursing homes mitigated against the further impact of COVID-19 and was leveraged as an opportunity to introduce a wide-ranging, programme of improvement and reform for older persons' care
- Addressing inequalities in health outcomes and the wider determinants of health is central to public health. This work must be resourced adequately to improve outcomes and limit the impact on vulnerable groups of future public health emergencies
- The needs of the most vulnerable should be central to public health policy and services. Those most vulnerable to harms must be part of decision-making processes.

The importance of an adaptive response

As part of its work, the NPHET engaged in reflective processes throughout its work leading the public health response to the pandemic.

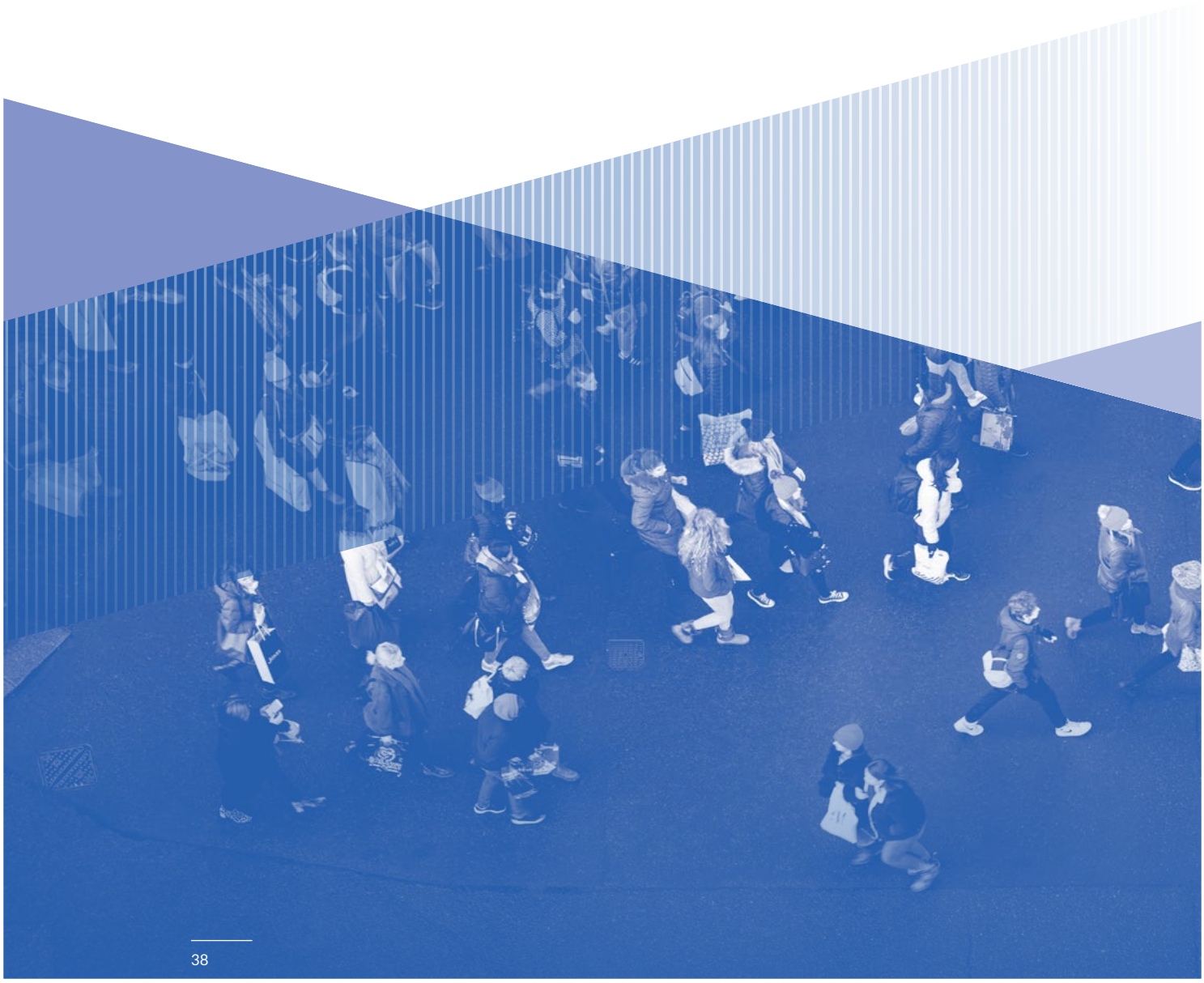
Following a review in November 2021, the NPHET captured the following principles to inform the development of a reformed and optimised model of health protection, premised on empowering local, bottom-up public health decision-making and action in real-time:

- A streamlined national governance and organisational model, with vertical and horizontal integration and a focus on a robust regionalised response
- A public health-led response with appropriately devolved leadership, responsibility and accountability, and resourced as such
- Integrated IT systems and data, with a focus on ensuring access to data and resources to facilitate analysis and intelligence-led action at local level
- Community engagement and partnership, with promotion and empowerment of voices to actively inform and engage at local level
- Performance measurement to facilitate assessment within and between regions, with indicators which reflect the continuum of the public health response

Lessons learned

- Public health emergency response must be adaptive and dynamic. There should be delineated processes and points of learning and reflection built in.
- The importance of developing a learning system to support public health.

Key lessons from international best practice regarding reform and strengthening of public health function



The Group was tasked with identifying lessons from international best practice regarding reform and the strengthening of public health functions. It is clear that a strong public health system is needed to underpin a strong public health response to future public health threats.

In order to identify areas for improvement and elements of public health reform which would best align with international practice, a number of key inputs were provided to the Public Health Reform Expert Advisory Group.

These included:

- an independent, expert review by the WHO of the delivery of essential public health functions in Ireland (*Essential public health functions in Ireland*);
- a report by HIQA examining the public health functions in 12 countries (*High level review of configuration and reform of Public Health systems in selected countries*); and
- a consultation process in which key stakeholders working to deliver the essential public health functions in Ireland were engaged.

The outputs of these processes are published by the WHO and HIQA alongside the Group's report.

WHO's 12 Essential Public Health Functions (EPHFs)

The World Health Organization (WHO) has developed a list of twelve Essential Public Health Functions (EPHFs) to support an integrated approach to sustainable health systems strengthening and as a key strategy in building health systems resilience.[36]

These functions are:

1. Monitoring and evaluating populations health status, health service utilisation and surveillance of risk factors and threats to health
2. Public health emergency management
3. Assuring effective public health governance, regulation, and legislation
4. Supporting efficient and effective health systems and multisectoral planning, financing, and management for population health
5. Protecting populations against health threats, including environment and occupational hazards, food safety, chemical and radiation hazards
6. Promoting prevention and early detection of diseases including non-communicable and communicable diseases
7. Promoting health and wellbeing and actions to address the wider determinants of health and inequity
8. Ensuring community engagement, participation and social mobilization for health and wellbeing
9. Ensuring adequate quantity and quality of public health workforce
10. Assuring quality of and access to health services
11. Advancing public health research
12. Ensuring equitable access to and rational use of essential medicines and other health technologies

[36] World Health Organization. (2021). *21st century health challenges: can the essential public health functions make a difference?* **https://apps.who.int/iris/bitstream/handle/10665/351510/9789240038929-eng.pdf?sequence=1&isAllowed=y**

WHO review of EPHFs in Ireland

An independent, expert review by the WHO was conducted to review the delivery of EPHFs in Ireland and advise on areas for improvement. These findings were presented to the Group as part of their work.

Summary of key high-level findings with respect to delivery of EPHFs

1. There is a strong focus on acute health care services and service development with limited evidence of a proportionate focus and investment in strengthening population health services.

This is in part attributable to a lack of updated legislative and institutional arrangements for the delivery of public health functions and services at national and subnational levels.

2. The evidence indicates a siloed approach to the delivery of the EPHFs in terms of strategy, planning, financing, implementation, and monitoring and evaluation mechanisms.

The focus is on vertical delivery structures with limited consideration given to wider or cross-cutting health system strengthening or identifying opportunities for synergies across programmes and inputs, such as health infrastructure, workforce and information systems.

3. No overarching strategy, policy or governance structure exists that coordinates the planning and delivery of the EPHFs across the system to support alignment of resources, workforce, initiatives, activities and accountability mechanisms.

This situation can contribute to the diffusion of the EPHFs across the system and lead to duplication, gaps, inefficient use of resources and limited visibility and positioning of public health within and outside the health sector.

4. Strong, emergency-focused, intersectoral mechanisms exist at the highest level of Government as do mechanisms that support intersectoral and international collaboration and information-sharing, in terms of monitoring and surveillance, and public health emergency management.

However, at the operational level a lead agency mandated and resourced to steer emergency preparedness and response and coordinate maintenance of essential health services is lacking.

5. A legislative basis is in place for many of the threats defined within health protection, and quality and access. However, evidence of proportionate and public health-focused legislation to support the delivery and strengthening of the EPHFs is limited.

What legislation is in place applies to the control of infectious diseases and is not specific to all-hazards emergency response; lacks clarity on mandates, roles and responsibilities; contains critical gaps; and has not been updated for some time despite recognition of significant inadequacies. Evidence of legislation supporting other EPHFs in relation to important public health challenges and stressors is limited.

6. The need for whole-of-society, whole-of-Government approaches and health in all policies is recognised and referred to and evidence shows the intent to integrate and align different aspects of the EPHFs.

However, implementation of whole-of-system approaches appears limited, and the adoption of an intersectoral approach to public health and the EPHFs is ad hoc. Improvements have been noted with the COVID-19 response.

7. Evidence exists of senior public health medical input at most administrative or operational levels within the health sector although input at the most senior levels is absent, i.e., the lack of recognition of public health leadership at the highest levels of the HSE including the HSE Board and the executive management team.

8. The scope of public health activities, as defined within national strategies and plans, is not supported by legislation, governance, infrastructure or resources beyond those for health protection.

Regional input on health service improvement and health improvement is ad hoc and varies by region. In addition, regional departments are not included within the Healthy Ireland delivery structures and the National Service Plan (NSP) outlines resources primarily for health protection functions only.

9. The health information system and its infrastructure have significant operational limitations, including the absence of a case management system and lack of interoperability of health and health service data across sites and settings, and between the health and animal sectors, the environmental and agricultural sectors and other sectors, despite a considerable amount of data generation and analysis within individual areas.

10. Population health needs assessment do not appear to be routinely conducted or used to drive public health planning and prioritization at the national level.

Some regional population health needs assessments appear to have been done with non-standardised approaches that are often not aligned with national priorities.

While all 12 EPHFs are being delivered to varying degrees within the Irish setting, the WHO reported a lack of cohesion and wide diffusion of delivery throughout the system.

The WHO analysis also highlighted the risks to the Irish health system from ongoing and potential public health challenges. These include:

Changing demographic and socioeconomic conditions with an ageing population and increasing socioeconomic inequity;

The changing population disease profile in Ireland with increasing multimorbidity, obesity and mental health issues as well as the longer-term impact of COVID-19; and

Existing health systems and infrastructural limitations such as health workforce shortages, capacity issues and deficiencies in health information systems, and issues with population-based health services including the emergency and reactive focus of public health services and limited multisectoral linkages.

The WHO advised the following actions in order to strengthen health system resilience, and optimise the delivery of EPHFs:

1. Enhance integration and coordination of the EPHFs within the Irish health and allied sectors (e.g., education, finance, transport and business) for strategy, planning, financing, implementation, and monitoring and evaluation to reduce fragmentation and promote efficiency and effectiveness.

2. Increase the visibility and profile of the public health agenda within Ireland by strengthening national governance, legislative and institutional arrangements.

3. Sustain and utilise existing mechanisms in support of a whole-of-Government and whole-of-society approach to health, including emergency preparedness and response.

4. Further define, recognise and develop the public health workforce to ensure its agility and capability to adapt to ongoing and evolving public health challenges.

5. Address critical issues in the health information system to ensure the availability of appropriate and timely public health data to inform policy- and decision-making.

The report also highlighted key enablers supporting the operationalisation of the EPHFs including political commitment at the highest level; institutional structures to lead and coordinate the EPHFs; a strong public health workforce; population health needs assessment and risk profiling; monitoring and evaluating provision of the EPHFs; and multisectoral responsibility and accountability for the EPHFs. The WHO report is being published alongside this report and can be consulted for further detail.

Review of the configuration and reform of public health systems in selected countries

HIQA carried out a high-level review examining the delivery of public health functions in 12 countries with a focus on whether functions were delivered at national, regional or local level or a combination.

The review found that some specific public health functions have a stronger national presence than others including surveillance; governance and regulation; adequate workforce; quality and access; research; and medicines access.

All public health functions were described at either a regional or local level by at least one country of the twelve reviewed. Emergency management; planning and financing; health threats; disease prevention; health promotion; and engagement all had a well-defined presence at regional and or local levels.

While governed at a national level, the implementation of these functions is typically the remit of regional and local authorities and while planning and financing decisions are made at a national level these are informed by data from regional and local levels emphasising the importance of interconnections between the levels of administration and governance.

A review of the lessons learned with regard to the establishment of, or transition to, current public health systems and/or structures of 12 selected countries indicated that all 12 essential public health functions were configured to some degree at national and regional level for all countries. For some functions, the sole adoption of a national configuration was more common.

HIQA reviewed the evolution of public health structures during COVID in these countries. Numerous new structures were implemented during the pandemic, and all countries moved to a more rapid decision-making model with expert advisory groups or scientific committees established to provide respective Governments with evidence-based advice. Countries that had existing structures in place, such as IT infrastructure and well-resourced public health systems, transitioned to COVID-19 disease monitoring systems more smoothly when it emerged.

One of the main differences between countries is the degree of centralisation and decentralisation within their delivery systems. During COVID-19, while decentralised systems had the advantage of good communication with the local population, the main disadvantage was the lack of a unified response. More generally, decentralised systems can become complex due to the number of organisations and functions across national, regional and local levels, leading to duplication and inefficiencies. Public health structures should be strengthened during a period of stability, with capacity for rapid decision making and public health response to threats, including non-health protection threats.

Figure 2: Summary of the delivery of the essential public health functions at national, regional and local levels within each country (Source: HIQA)[37]

	Australia	Canada	Denmark	Finland	Nether-lands	New Zealand	Norway	Sweden	England*	Northern Ireland*	Scotland*	Wales*
Surveillance	N	N	N	N, R	N, R, L	N	N	N	N	N	N	N
Emergency Management	N, R	N	N, R, L	N, R	N, R, L	N, R	N, L	N	N, L	N	N, L	N
Governance & Regulation	N	N	N	N, R	N	N	N	N	N	N	N	N
Planning & Financing	N	N, R, L	N, R	N, R, L	N, R	N, R	N	N, R, L	N	N, L	N	N, L
Health Threats	N, R, L	N	N, R, L	N, R, L	N	N	N	N, R, L	N, L	N	N	N, L
Disease Prevention	N, R, L	N	N, R, L	N, R, L	N, R, L	N, R, L	N, L	N	N, R, L	N	N	N
Health Promotion	N, L	N	N	N, R, L	N	N	N	N	N, R, L	N	N	N, L
Engagement	N	N	N, R, L	N, L	N, R	N	N	N	N, L	N	N, L	N
Adequate Workforce	N	N	N	N, R, L	N	N	N	N	N	N	N	N
Quality & Access	N	N, R	N	N, L	N	N	N	N, R, L	N	N	N	N
Research	N	N	N	N	N	N	N, R	N	N	N	N	N
Medicines Access	N	N	N	N	N, R	N	N	N	N	N	N, L	N

Key: **L** Local; **N** National; **R** Regional. *Some EPHFs are delivered at a UK-wide level

[37] Health Information and Quality Authority. (2022). *High level review of configuration and reform of Public Health systems in selected countries.* **www.hiqa.ie/sites/default/files/2022-06/Report-High-level-review-of-configuration-and-reform-of-Public-Health-systems-in-selected-countries.pdf**

Key lessons learned from stakeholders in public health in Ireland

Insights from the consultation with the organisations and the workforce currently delivering public health functions in Ireland

There are a wide range of organisations and individuals currently involved in the delivery of the Essential Public Health Functions in Ireland, including:

- the Minister and Ministers of State for Health,
- the Department of Health,
- the Health Service Executive,
- other aegis bodies of the Department of Health,
- other cross-Government mechanisms and non-health agencies and bodies, and
- numerous community and voluntary sector organisations.

A consultation was undertaken to support the work of the Public Health Reform Expert Advisory Group. Organisations that currently play a role in the delivery of public health functions in Ireland were invited to submit responses to questions in relation to the delivery of EPHFs in Ireland before the pandemic, how this changed during the pandemic, what needs to change in the future and what barriers are likely to be faced. 29 organisations responded (see Appendix B for a list). In a further survey of those working in public health in Ireland, respondents were asked about their views on the pre-pandemic delivery of EPHFs that they deliver as part of their current role. 91 individuals responded.

The written submissions and survey responses were analysed by HIQA and the findings of the analysis will be published alongside this Report. For 7 of the 12 EPHFs, "average" was the most frequently identified answer. Ensuring adequate quantity and quality of public health workforce (EPHF9) had the most negative views regarding its delivery, with 55% of respondents selecting "poor" and 25% of respondents selecting "very poor". Participants were asked whether their views had changed in light of the pandemic. For 11 out of 12 of the EPHFs, "stayed the same" was the most frequently identified answer, however for EPHF9 50% of respondents answered, "somewhat better".

The consultation process echoed many of the findings of the WHO review. Respondents frequently noted system fragmentation and a lack of sectoral and inter-sectoral collaboration between central and regional public health departments and agencies. This fragmentation leads to duplication, reduced effectiveness and limited influence on broader policies affecting health. In addition, they noted that while there is strong collaboration between the HPSC and regional Departments of Public Health, there is limited interaction between public health and other clinical specialities, leading to a lack of awareness of the role of public health. Most of the interaction between public health and other specialities that does occur was noted to be in relation to health protection.

Weak governance structures were also highlighted, as well as a lack of strategic direction of public health. In addition, the lack of an intersectoral approach to public health functions was noted. Inadequate IT infrastructure, including a lack of a unique or individual health identifier and data integration across systems, was highlighted as a key obstacle in the delivery of the EPHFs and the pandemic response in particular.

Insights from the consultation with vulnerable groups

The Group commissioned insights and research into vulnerable people, using one-to-one interviews with people in vulnerable populations and those working directly with vulnerable people.

During the process, we spoke to:

- people who use drugs,
- people who are in prison,
- people living in direct provision,
- people who are undocumented,
- people who experience homelessness,
- people who experience social deprivation and
- members of the Traveller and Roma communities.

Some of the main outcomes of the research included the need for an increased focus on 'inclusion health' for vulnerable people. Public health policy needs to focus on persistent, insistent, proactive engagement of people who resist and distrust healthcare.

Another finding was that as healthcare is delivered by people to people, those accessing healthcare, particularly vulnerable people, are often in tension with the health system. They are dependent on individual healthcare professionals who listen and engage with them as an individual or a champion rather than receiving rounded support from the system. Vulnerable groups need a flexible healthcare system that works for them and their needs. Services which are holistic, walk-in (no threshold), and welcoming of the whole person make it easier to engage.

Another main outcome reflected how access to healthcare is gendered – women need a tailored response from the healthcare system. Finally, there is a need to stretch mainstream healthcare and offer vulnerable groups a return to community care as soon as possible. The full report provided to the Group will be published alongside this report and can be consulted for further details.

Priorities and recommendations for public health in Ireland

Having reviewed the full range of inputs and the lessons learned from the COVID-19 response outlined above, the Group has identified the following seven priority areas for improvement and recommendations.

1. Strengthen national preparedness for future pandemics and other public health threats.

To achieve this we will need dedicated capacity for planning, testing and research.

Vision

Ireland is well prepared for future pandemics and wider public health emergencies.

Rationale

Ireland performed well during the pandemic and there is now an opportunity to retain and build on the expertise that has been developed.

This should involve consolidating expertise in public health and ensuring integration with and full use of wider national structures for emergency planning and management, including the Strategic Emergency Management National Structures and Framework and other cross-Governmental mechanisms. International participation and expertise were fundamental to Ireland's success and there should be full participation in international organisations, mechanisms and the implementation of international agreements and treaties arising from COVID-19. This should include participation in and support for the development of the European Health Union package of measures to strengthen health emergency preparedness, including the Health Emergency Preparedness and Response Authority (HERA).

The importance of surveillance, modelling and evidence synthesis was clear during the COVID-19 pandemic response. Ireland should consolidate the innovations that were driven forward and build on this. This will involve integrating, embedding and further developing national surveillance, modelling, evidence synthesis and horizon scanning capacities and ensure that the fruits of these functions are available both at national level and also at regional and local levels. This should include development of an integrated infectious disease case management system which fully integrates outbreak, case and incident management with national indicator and molecular based surveillance, for European Centre for Disease Prevention and Control standard surveillance and control of communicable diseases. Nationally and internationally, health research to support the response to the pandemic was prioritised, with additional funding made available.

Ireland has an active, world class research ecosystem, and opportunities to further leverage national and international engagement, including strengthening the links between research, policy and practice in service of improved public health outcomes. The collaborations between academia and policymakers seen in the context of COVID-19 provide a model to be built upon.

Recommendations

- Development and testing of updated plans for known health threats, including those identified in the National Risk Assessments, as part of a strengthened health protection strategy
- Enhanced research funding at national level for pandemic preparedness and supports to access international research funding
- Consolidate and build on expertise in pandemic preparedness and preparedness for other public health emergencies, and wider public health threats
- Invest in activities to build health system resilience and adaptability in preparation for future health threats
- Full participation in international activity and initiatives towards health threat preparedness. To include strengthening connections and collaboration with international laboratories, including increased training and capacity building with international laboratories

2. A comprehensive public health strategy to guide coordinated delivery of the essential public health functions in order to protect and promote long and healthy lives across Ireland.

To achieve this, we will need to listen to and reflect the health priorities and needs of the public, and serve them through strengthened management, legislation and governance.

Vision

Clearly defined roles and responsibilities, within an integrated public health system, to deliver a shared vision and path as laid out in a new national public health strategy, underpinned by legislation.

Rationale

Despite significant policy, reform and operational activity, the WHO review has highlighted a fragmented and siloed approach to delivery of the EPHFs in Ireland.

A renewed and holistic focus on public health is needed, ensuring the full set of functions is delivered and that there is an integrated approach by the range of organisations working in the area. The operational scope of public health should be defined and a systematic approach to service delivery and enablers undertaken. The full scope of public health is currently not comprehensively supported by the structures and enablers including legislation, governance, infrastructure or resources including workforce planning.

In addition to legislation underpinning health protection, the WHO review noted that legislation supporting other public health functions, in particular relating to key public health challenges and stressors such as cancer, other non-communicable diseases, lifestyle and health and wellbeing improvement, is limited, and advised that Ireland needs to review the broader legislation: "to embrace a more modern approach to population health service delivery aligned with contemporary, ongoing and future public health challenges".

The strategy should be led by the Department of Health and should build on the collaboration and shared purpose of the pandemic to provide a clear shared vision for public health with clear roles and responsibilities for the full range of organisations involved.

Recommendations

- A national public health strategy, led by the Chief Medical Officer, to be developed by the Department of Health, to include a comprehensive mapping of current public health activity across the twelve Essential Public Health Functions building on the work of this Group
- The Department of Health should engage across Government and across sectors to develop this strategy to ensure collaboration and communication in the development of a shared agenda and clear and formalised roles and responsibilities across organisations
- This should bring together and further develop existing strategies across health intelligence; health service improvement; health protection and health and wellbeing. It should interact with areas of strategy, policy and reform programmes that have a significant impact on public health outcomes
- A programme of updated and strengthened public health legislation should be developed including full implementation of the International Health Regulations, and legislation to underpin new public health roles and functions, and the independence of public health advice

3. On achieving clearly defined and measured outcomes that can tell us where we are doing well, and where we need to improve.

To achieve this, we will need improved data, health information systems, ICT and research.

Vision

Clear shared public health outcomes defined, communicated and monitored as part of a new national public health strategy. Those working towards improved public health outcomes should be well supported by comprehensive and high-quality data, a well-developed health information system, sufficient ICT infrastructure, and supports for national and international research.

Rationale

Clarity is needed on what public health outcomes are being measured and on how they are being measured and progress tracked through the availability of a core public health data set.

A structured approach towards progressing measurable public health outcomes should be adopted across organisations building on the Health Systems Performance Assessment Framework, the Healthy Ireland Outcomes Framework and the Department of the Taoiseach-led *Wellbeing Framework for Ireland*. Gaps in, and a lack of integration of, Irish health data are well documented, and this is an area that has been identified as a universal priority through the Group's evidence inputs and consultation.

It is not just public health data that is lacking, and notable efforts are underway to improve Ireland's Health Information System, including through a Health Information Bill, which is in progress, with plans to establish a National Health Information Authority to centralise health data, however this will likely take some time to yield results.

Immediate work needs to be done in key areas to support public health activities including infectious disease case management, increased capacity for surveillance and modelling and the integration of datasets relevant to health and wellbeing. A core objective should be the development of an integrated population surveillance system which captures data on infectious diseases, non-communicable diseases, healthy behaviours and data related to the wider determinants of health. Such a system should be interrogable at regional and national levels of data, depicting the health of the nation to help inform policy, public health interventions and better planning and decision-making nationally, regionally and locally. The approach should exploit the most recent technology and be underpinned by open access principles. Existing and new ICT systems should be linked to provide connected data on a full range of relevant datasets including notifiable infectious diseases; hospital admissions and outcomes; primary care and vaccination status and others to ensure the wider integration of epidemiological and health services data including datasets outside of public health. A Public Health Research Strategy should be developed, as part of the National Public Health Strategy with national and regional research priorities, to inform evidence-based solutions to defined public health challenges.

This strategy should link to the HSE's research strategy and should engage with the work of the HRB and other research partners. It should build on the excellent ongoing clinical research, connect organisations engaged in clinical research and seek better alignment of clinical research in Ireland to address agreed public health priorities. There should be sufficient supports in place to support public health research priorities and partnerships between academia, policy and practice including at national and regional level, for example through joint academic and clinical posts and adjunct positions.

Recommendations

- The new public health strategy should include an agreed public health outcomes framework building on and further developing existing public health outcomes frameworks in place for Healthy Ireland, the Sustainable Development Goals, the Government's Wellbeing Framework and the Health System Performance Assessment Framework.
- An annual progress report on the delivery of the public health strategy, monitoring the agreed outcomes, to be published by the Department of Health and delivered to the Government
- The proposed National Health Information Authority should be co-designed with those working in public health to support the monitoring of agreed public health outcomes, provide data to give insights on public health priorities, and enable collaboration between bodies working towards improved public health outcomes, including Public Health Ireland once established
- Immediate work in key areas to support the delivery of the EPHFs including infectious disease case management, surveillance and modelling, integration of health and wellbeing datasets, implementation of a unique health identifier and the integration of existing ICT systems
- A Public Health Research Strategy including increased research funding for public health, formalised mechanisms for research partnerships between organisations engaged in public health and joint academic and clinical posts

4. We need to prioritise reducing and removing inequalities when it comes to good health and wellbeing.

To achieve this, we will need to put the social determinants of health at the centre of public health policy and reforms.

Vision

Protect and prioritise vulnerable and marginalised groups and those with the worst public health outcomes with clear targets and monitoring to improve outcomes over defined time periods.

Rationale

It is well recognised that health outcomes are differentiated, with worse outcomes experienced by groups living with disadvantage and marginalisation in our society.[38]

This is unacceptable and must be addressed as part of any public health reform. Tackling inequalities and promoting inclusion is part of the wider work of Government and society, reinforcing the need for collective work towards a clear shared purpose of improving health outcomes for these groups. A greater recognition of the risks and costs of inaction is required. Research carried out on behalf of this Group with vulnerable people most at risk from health inequalities yielded some useful insights. This work highlighted the need for an inclusive health system, one where 'red tape' is not a barrier to care for vulnerable groups.

The groups that were engaged highlighted their desire and need for care that supports the whole person, and not just treatment for a single issue like addiction. They stated that they find the health system inaccessible and that they are dependent on individual healthcare workers who "champion" them rather than receiving the rounded, holistic care they require.

This work highlighted that an inclusion health approach should be adopted which puts the person and their relationships (family, history, community) at the centre of healthcare[39] and which also helps bring people into mainstream services over time. These findings are in line with wider work on social inclusion, and they emphasise the importance of a cross-Government and cross-sectoral approach to addressing the needs of vulnerable and marginalised groups as a foundation to improving public health outcomes.

Recommendations

- Build on the dialogues formed during the pandemic, particularly the vaccine programme, with communities across Ireland to institute a continuous, formal process for listening to their priorities and determining how the system can best meet their needs
- Ensure that a new public health strategy, and related policies, prioritises services and programmes targeting those with the worst public health outcomes
- Develop a clear, integrated and flexible approach at local level, to support continuous engagement with the public and vulnerable groups towards the improvement of their health outcomes and experiences, guided by their priorities. Engagement should be both bottom up and top down and should draw on community resources and solidarity. This approach should be set nationally while leaving space for tailored approaches at regional and local level
- Ensure a particular focus on vulnerable groups as part of population health needs assessments in the context of the move to Regional Health Areas
- Strengthen supports for social inclusion work in the HSE and other health agencies.
- Leverage and build on the resources and cross Government framework that has been enabled by the Sláintecare Healthy Communities Programme
- Use existing data on vulnerable groups to improve policy and service delivery and ensure stratification of data to build on this, noting that vulnerability is complex and context-specific and that people may transition in and out of vulnerability and the data needs to be able to capture these complexities

[38] Marmot, M., Goldblatt, C., Allen, J., Bell, R., Bloomer, E., Donkin, A., Geddes, I., & Grady, M. (2014). *Review of social determinants and the health divide in the WHO European Region: final report.* World Health Organization. **https://www.euro.who.int/__data/assets/pdf_file/0004/251878/Review-of-social-determinants-and-the-health-divide-in-the-WHO-European-Region-FINAL-REPORT.pdf**

[39] Orchard. (2022). *Vulnerable Populations and Healthcare. Qualitative research to inform the work of the Public Health Reform Expert Advisory Group.*

5. We need to put the nation's health at the heart of Government planning and policy, because almost every aspect of our lives and our environment affects our health.

To achieve this, we will need greater cross-department and cross-sector coordination within Government as well as strengthened all-island and international collaboration.

Vision

The creation of a high performing, effective public health system that emphasises learning and innovation and aligns levers and drivers across the areas of policy and operations that affect public health.

Rationale

A healthy nation should be considered an asset and an investment for economic and fiscal stability.

It is well understood that public health outcomes are influenced by many social, environmental, commercial and, increasingly, digital determinants and factors outside of the direct health policy remit, therefore strong leadership and cross-sectoral work is required to improve health outcomes. There is a need for health-in-all-policies and all-policies-in-health to drive the type of policy, planning, performance, legislation and decision-making required to create a resilient society and to transform the health and wellbeing of future generations.

Effective cross-Government work was one of the strengths of the Irish response to tackle the COVID-19 pandemic and there is now an opportunity to build on the relationships, structures, mechanisms and processes that were developed to enable this work. Public health should be 'at the table' for all relevant discussions about education, housing, transport and other areas that influence public health outcomes.

Considerations of public health should be strengthened in Government planning and more must be done to make clear to Government departments and sectors the risks and great costs of inaction on a range of public health issues. As outlined above, this is particularly important for addressing the social determinants of health, unequal outcomes and issues disproportionately impacting vulnerable groups. In addition to cross-Government working, enhanced cross-sectoral working will be critical in achieving improved outcomes and transforming health.

Ireland should be around the global table to strengthen pandemic preparedness as outlined above but also to strengthen wider activity on public health, collaborating with partners in the UK, particularly in Northern Ireland, National Public Health Agencies, the World Health Organization and other global partners and playing a strong role within the European Union and in the range of initiatives underway to strengthen public health and public health emergency preparedness in response to COVID-19. There should be a learning system for public health which draws on all of the relevant capacities nationally and internationally and embraces innovation and learning at all levels to improve national public health outcomes.

Recommendations

- The Department of Health to lead cross-sectoral mechanisms to ensure preparedness for future public health emergencies, embed public health in policies across Government, address health inequalities, and enhance recognition of population health as a national asset. This could include a public health challenge-based approach to convene and mobilise across sectors, organisations and the public to address selected public health challenges – similar to COVID-19, plastic bags or the smoking ban and building on the successes of Healthy Ireland
- Public health impact to be considered as part of major new policy developments across Government. Public health should be embedded in all policies, similar to the way the climate crisis is being embedded in the Climate Action Plan[40]
- Build on existing cross-Government and cross-sectoral work and bring together and leverage existing resources at national, regional and local levels, for example the full-time Healthy Cities and Counties Coordinators in each Local Authority, who are feeding into each Local Authority's 5-year Local Economic and Community Plan
- The Department of Health and agencies to fully engage with the EU and international agencies including WHO, OECD, and European bodies including HERA, EMA and ECDC to ensure access to international expertise, practical mechanisms and supports for dealing with cross-border health threats and learning opportunities for the public health workforce

[40] Department of the Environment, Climate and Communications. (2021). *Climate Action Plan 2021*. **https://assets.gov.ie/224574/be2fecb2-2fb7-450e-9f5f-24204c9c9fbf.pdf**

6. We need to have clear leadership in public health: nationally, regionally and locally – people who can listen, communicate, and inspire.

To achieve this, we need to ensure that there are clear structures for those working in public health, with clear lines of communication and responsibility, building on the work and recruitment already being done as part of the implementation of the Crowe Horwath recommendations, Sláintecare and the Regional Health Areas.

Vision

Clear leadership and visibility for public health throughout the system, including clear leads at national, regional and local levels to mobilise, influence and work together to achieve improved public health outcomes based on independent advice and evidence-based messaging. Clear leadership for both crisis and peacetime.

Rationale

Prior to the pandemic, public health had a relatively low profile and a low-level of understanding among the general public.

The benefit of strong leadership for public health during the pandemic was evident, for example from the Office of the Chief Medical Officer and other members of the National Public Health Emergency Team (NPHET).

There is widespread recognition of the central role that public health figures played in the response to the control of the pandemic at national, regional and local level. There was also high visibility and focus on the public health response across society and among politicians. Strong leadership, communication, and public engagement, underpinned by up-to-date research and insights, ultimately assisted in achieving public support for health protection measures and mitigating the impacts of COVID-19.

The model of engagement and communications undertaken to support Ireland's COVID-19 Vaccination Programme, particularly among vulnerable groups, should act as a model for further public health communications and engagement activity. This relative success creates an opportunity to build on this experience to promote improved public health outcomes.

Recommendations

- Public health expertise and representation at national, regional and local levels should be strengthened and embedded in line with the implementation of Sláintecare and the implementation of the Regional Health Areas
- This should include the appointment and alignment of key public health roles at national and regional levels building on recruitment underway. Key national roles should include a clear dedicated public health lead in the HSE who sits on the HSE Executive Management Team, and public health representation on the HSE Board
- The recently appointed Area Directors of Public Health should sit also on the senior management team in their respective Regional Health Area. Lines of management and communication must be clearly drawn as the RHAs are developed in order to allow the national leads to support those working regionally and ensure a level of national consistency in public health practice. It will be important for those working regionally to feel empowered to provide comprehensive public health for their region's population
- Regional public health professionals should be supported in learning from each other's challenges and successes through formal learning, networking and communication processes
- Independent public health advice should be underpinned by and protected in legislation

7. We need to have experts from many different backgrounds working on public health, embedded within different organisations, but all co-ordinated: learning and working together.

To achieve this, we need to be aware of all the different skills needed to deliver public health, and make sure that people with the full range of skillsets have the room to continually learn from the latest research and best practice elsewhere and to progress in their careers.

Vision

A holistic approach to the full workforce engaged in delivering the Essential Public Health Functions, where all skills are utilised and staff are recruited, supported, developed and retained to ensure the appropriate skill mix.

Rationale

As outlined above, there has been significant recent investment in the reform and development of the public health workforce, including through the implementation of the Crowe Horwath report, the expansion of Healthy Ireland and expansion of the workforce in response to COVID-19.

Much of the expansion has been focused on health protection, which is welcome, however, a systematic approach should also be taken to ensure the appropriate workforce is in place to support the delivery of the full set of public health functions. There should be a clear recognition, value and respect for all those involved in the delivery of public health activities and a cohesive identity developed for this workforce, working with colleagues across the health system to a shared vision guided by a clear strategy and set of outcomes. It is unclear what the current quantum of the 'public health workforce' is at present beyond the number of those working in some specific roles e.g., public health physicians.

In addition to the quantity of staff, an adaptable and responsive public health workforce with the right mix of skills, organised into multi-disciplinary teams, is needed to effectively deliver all public health functions. A lack of appropriate career structures across some relevant disciplines was highlighted in the consultation as a potential barrier to the recruitment and retention of a multi-disciplinary workforce to deliver public health activities. Following the enormous contribution made by the public health workforce during the pandemic, and the significant impacts of the pandemic and response on the workforce, it is essential that there is a renewed focus on supporting and developing staff in the short term.

A simultaneous focus is required to develop clear career pathways for those who want to work in this area for the medium to long-term, including core public health training, leadership development, ethical reasoning and analytical reasoning skills. Evolving public health expertise must be embedded for a modern-day specialist public health system including data science, research, communications, behavioural science, (social) return on investment and economic modelling to ensure these skillsets are embedded and become a core element of public health activity. There should be recognition of the role of behavioural insights analysis and communications in promoting public health policy, alleviating misinformation and improving health and vaccine literacy.

Recommendations

- A comprehensive mapping of the current public health workforce should be carried out at national, regional and local levels
- The HSE should continue the implementation of the Crowe Horwath recommendations regarding public health physicians, and the full set of recommendations should be supported
- A strategic, integrated, workforce plan should be developed to underpin the delivery of the 12 Essential Public Health Functions at national, regional and local levels. This should involve recruitment for specific specialist skills sets such as data science, management, behavioural science, (social) return on investment and economic modelling and should outline clear ways of working between staff working directly and broadly to deliver public health functions
- Regional workforce planning for the public health workforce should be carried out as part of the Strategic Workforce Plan and the implementation of the Regional Health Areas
- The workforce plan should include planning for surge capacity, including the development of a Public Health Reserve Corps, comprised of former and retired health professionals who are willing to be trained and be available for call up in emergency situations
- Ensure career opportunities for the broad range of professionals engaged with public health delivery in addition to physicians to enable all of the public health workforce to make the best use of their skills
- Recognise the impact the pandemic has had on the health workforce, and focus on enhancing their wellbeing and resilience, and on recruitment, training, development and retention. This should include establishing additional formalised training programmes through collaboration with the higher-education sector
- The Department of Health and agencies to fully engage with the EU and international bodies including the WHO and the OECD to ensure access to international expertise, practical mechanisms and supports for dealing with cross-border health threats and learning opportunities for the public health workforce

Recommendations to strengthen the delivery model for public health in Ireland

Under its Terms of Reference, the Group was asked to examine the key components of the existing delivery model(s) for public health in Ireland and recommend an appropriate operating model to develop and oversee the delivery of public health in Ireland.

The delivery model refers to the organisations involved in the delivery of public health functions and the interactions between them that make up the system that works to improve public health outcomes in Ireland. The Group's recommendations for the further development of Ireland's public health delivery model are informed by the key inputs described above including HIQA's Report examining the public health functions in 12 countries (*High level review of configuration and reform of Public Health systems in selected countries*); the WHO Report (*Essential public health functions in Ireland*); and the Group's consultation and engagement process including with national and international experts.

The group recommends a two-pronged approach to strengthening the delivery model for public health in Ireland:

- The creation of a new independent public health body, Public Health Ireland, which sits under the aegis of the Department of Health, with a legislative mandate
- A significant strengthening of the existing public health delivery model

The creation of a new public health body

It is recommended that the Department of Health mandate a new aegis body to carry out specific public health functions, including:

- Advisory and some operational activities relating to national health protection, with an initial focus on planning and preparedness for future pandemics and other public health threats
- Advisory and some operational activities relating to national health promotion
- Advisory and some operational activities relating to national health intelligence, including research on pandemic and health threat preparedness

This body will work closely with the HSE and other operational health agencies carrying out public health functions.[41] It will collaborate across operational agencies with public health functions,[42] civil society and through regional and local engagement. Phased implementation of functions is recommended starting with pandemic and public health emergency preparedness, and other public health advisory functions.

It is envisaged that this body will be governed by a newly appointed CEO reporting to a new Board, accountable to the Minister for Health, and to the Secretary General as Accounting Officer. It requires a dedicated budget and legislative underpinning, and strong formal mechanisms to work with other health and non-health agencies engaged in the operational delivery of public health functions.

[41] Including the Food Safety Authority of Ireland, HIQA, HPRA, HRB, National Cancer Registry Ireland, Safefood, the Institute of Public Health

[42] A range of public health functions are carried out by agencies not under the aegis of the Department of Health e.g., EPA, & others.

Strengthening of the existing public health delivery model

The Department of Health

The Department of Health is responsible for public health policy and strategy development, leadership, legislation, performance and governance oversight, international representation and other functions as laid out in its mandate. The Department leads on cross-Government work on public health and is the lead during public health emergencies through the office of the Chief Medical Officer. The Department has a successful programme of work underway relating to public health including the development and oversight of implementation regarding a range of public health policies and strategy as laid out in this report. It is intended that the creation of the new aegis body will support and enable the Department of Health in carrying out its functions.

The Group has the following recommendations to strengthen the role of the Department of Health as the lead organisation within the public health delivery model:

- Development of a national public health strategy and defined outcomes to bring coherence to, and build on, existing public health strategies and policies. This should be in alignment with Sláintecare's focus on public health, and support the delivery of the full set of 12 EPHFs
- An enhanced focus and prioritisation of public health should be reflected in the Department's internal resourcing, expertise, and structure
- Development and delivery of an updated programme of public health legislation
- Strengthen international representation, participation and engagement for public health through full participation in the European Health Union, the WHO and other international fora
- Take a strong leadership role across Government including engagement with national and cross-sectoral mechanisms to ensure preparedness for future pandemics and other public health emergencies, embed public health in policies across Government, address health inequalities, and enhance recognition of population health as a national asset

The Health Service Executive

The HSE is currently responsible for health and social care service delivery including a range of public health services. A programme of reform is underway with regard to establishing Regional Health Areas, which will be empowered and responsible for the planning and delivery of most health and social care services for their populations. A further programme of reform is also underway to enhance public health service delivery including through the implementation of the Crowe Horwath recommendations and of existing public health strategy and policy.

The Group has the following recommendations to bring increased coherence and representation to the delivery of public health within the HSE:

- Continue the implementation of the Crowe Horwath recommendations including the planned recruitment of public health staff as outlined
- Undertake a comprehensive mapping of the current delivery of EPHFs across the HSE and improve coherence of their delivery within the HSE
- Streamline leadership and reporting lines across public health functions to the new National Director of Public Health who should sit on the Executive Management Team
- Appoint a representative with public health expertise to the HSE Board and/or the Amendment of the Health Service Executive (Governance) Act 2019 to specify public health expertise as being required by a HSE Board member
- Strengthen and improve consistency of formal public health input into the clinical programmes
- Embed public health in the new Regional Health Areas
- Sufficiently resource public health emergency management functions in the HSE to strengthen preparedness for the operational aspects of responding to future public health emergencies, and to build resilience against future threats
- Work closely with the new aegis body, once established, through clear, formalised mechanisms

Strengthen regional and local delivery of the EPHFs

Much of the delivery of the Essential Public Health Functions takes place at regional and local levels.

The Group recommends the following to strengthen delivery at these levels:

- Visible public health leadership roles to be central to the establishment and implementation of the new Regional Health Areas (RHAs). As above, the recently appointed Area Directors of Public Health should sit also on the senior management team in their respective Regional Health Area.
- Strengthen regional public health with adequately resourced multidisciplinary teams in each RHA, taking a population health approach
- Increased collaboration and intersection across RHAs to ensure consistency of approach, including a Public Health Learning Network linking RHAs
- The Regional Health Areas should link systematically to local authorities and to the national bodies, building on the good work underway in Healthy Ireland and national emergency management
- Continued efforts to embed Healthy Ireland at regional and local level including the expansion of the Sláintecare and Healthy Ireland initiatives around Healthy Communities, Cities, Counties and Campuses, and associated initiatives. These initiatives provide a blueprint for cross-Government work with a focus on increasing health and wellbeing services delivered through partnership between with the HSE, local authorities, local communities, statutory, voluntary and community groups
- Enhancement of public health-specific regional and local visibility and communication
- Integration of public health activity with local partners including the community and voluntary sector
- Regional and local ownership of the delivery of public health functions, guided by a new national public health strategy and outcomes framework

Rationale for these recommendations to the delivery model

The hybrid model outlined above is considered the most appropriate operating model to ensure the delivery of the full range of Essential Public Health Functions in Ireland. Establishment of a new public health body, Public Health Ireland, combined with the strengthening of defined public health activities within the Department of Health, the HSE, and at regional and local levels, is seen as the most effective way to ensure a sustained focus on the delivery of the necessary functions. Strong governance, close networking and engagement, and a clearly defined scope of activities, must underpin this model to ensure the coordinated and cost-effective delivery of the EPHFs.

There is a clear need for improved organisation which addresses current fragmentation, poor coordination and the siloed approach to public health, with improved oversight and responsibility for the delivery of the EPHFs which is currently distributed across many bodies and agencies at national level. Those working in public health have highlighted the need for strengthened collaboration and communication; leadership, management and governance; legislation, policy and a national public health strategy. The current lack of senior public health leadership and input at the most senior levels of the health and social care system; along with unclear public health governance structures are seen as significant barriers to change within the current structure.

The most commonly reported success story of the pandemic response during the consultation and engagement process was the improved collaboration between organisations, however, with moving towards a 'business as usual' approach to COVID-19, there is a significant risk of reversion to previous approaches, and a risk of failure to systematise strengthened collaboration and work practices.

While efforts to address some of these issues may be made within existing structures, competing demands are evident and it may be challenging to achieve the necessary prioritisation of public health requirements and sustained investment. The challenge of prioritising longer-term outcomes and reforms against immediate demands, in a secondary/tertiary care focused system are well known and somewhat inevitable given the necessary focus of the healthcare system on urgent healthcare delivery requirements such as tackling waiting lists. The establishment of a new body dedicated to public health is considered by the EAG as an important mechanism to mitigate against these risks and to support a strong focus on the effective delivery of public health and the optimisation of population health.

The new body is envisaged to help address the inadequacy, non-alignment and duplication of the delivery of EPHFs across the current structures. The principles of national public health institutes, as specified by the International Association of National Public Health Institutes (IANPHI)[43] can be leveraged in the development of the new body. IANPHI emphasises improved cohesion and cost-effectiveness which can be delivered through a dedicated body with a focused return on investment. The recommendations outlined are also intended to shift the system away from a disproportionate, although important, focus on health protection towards a more holistic approach to improving a comprehensive set of public health outcomes. The recommendations also seek to address system fragmentation and the lack of coordination between central and regional Public Health Departments.

Finally, independent, evidence-based public health advice is central to public health initiatives. COVID-19 has shown the importance of this in the context of a specific public health threat. Public health must be empowered to ask and advise on difficult and occasionally politically unpalatable questions and areas. Furthermore, the ability to independently communicate with, and engage, the population, as well as supporting a whole-of-system, cross-sectoral approach, are seen as key strengths of a dedicated body.

While differences in health systems, existing infrastructure, demographics, political and health sector governance mean that there is no one size fits all approach to public health structures, general international practice, which has evolved based on optimising the delivery of public health and managing public health threats, favours the use of dedicated public health institutes or bodies. Such institutes are typically supported and enabled through appropriate legislation and governance, accountable leadership, and a sustained focus on actions to improve and protect the physical and mental health and wellbeing of the population.

[43] International Association of National Public Health Institutes. (2009, December 3). *National Public Health Institutes: Core Functions & Attributes.* **https://ianphi.org/_includes/documents/sections/tools-resources/nphi-core-functions-and-attributes.pdf**

Implementation

The Group's recommendations are as laid out above. Subject to Government's approval of the report and its recommendations, the EAG proposes the following actions, in Year 1, for the implementation of the recommendations:

Implementation Oversight Group

The Department of Health to establish an Implementation Oversight Group to oversee the implementation of the EAG's recommendations. This should be chaired by the Chief Medical Officer (CMO) with representation from core areas of policy within the Department, representation from across Government, the Health Service Executive, other health agencies, local Government and other relevant bodies.

It is proposed that the Group will carry out the following core activities (this is not an exhaustive list):

- monitor and support the progress of agreed recommendations and actions
- develop an Engagement and Communications Plan to engender understanding and prompt conversations of the proposed future model with partners and the public for the purposes of transforming health and wellbeing in Ireland
- oversee a programme to prepare for and manage the establishment of Public Health Ireland

The Department of Health

Sufficient resourcing of public health within the Department of Health to carry out the activities required to deliver on the Group's recommendations, for example through the creation of new units and/or a project team structure to carry out activities including:

- completion of a further piece of work to determine options towards the establishment of Public Health Ireland, a new public health body under the aegis of the Department of Health. This will include undertaking a mapping analysis of the functions that will be brought together in the establishment of Public Health Ireland, where they currently exist and where the skill gaps are, and securing the resources required for the start-up phase of the new body in the 2022 estimates process seeking support to resource the core recommendations in 2023
- appointment of a Chairperson to lead the Board of Public Health Ireland and appoint an interim Board subject to the timeline of the full establishment of the new body. The Chairperson should appoint the inaugural Interim Chief Executive of Public Health Ireland who may become the substantive Chief Executive following the legislative establishment of Public Health Ireland. The interim Chief Executive should appoint the Executive Team and, together with the Board, design the structure of the new body and work with the Department of Health to confirm the resources required
- drive the policy and legislative changes outlined in the recommendations by establishing a public health reform programme with the priority of developing strengthened public health legislation
- develop the National Public Health Strategy in an inclusive, cross-Government and cross-sector co-designed approach
- commission further work from partners for example the World Health Organization, and other partners as appropriate, to inform the development of the National Public Health Strategy

Health Service Executive

- The HSE should appoint a National Director for Public Health who will be directly accountable to the Chief Executive of the HSE and be a member of the Executive Management Team. The post holder will work closely with the Chief Medical Officer, Department of Health
- The HSE Area Directors of Public Health should report to the National Director of Public Health and should continue to be responsible for managing the local specialist public health teams
- Suitably qualified and experienced public health experts and stakeholders to be appointed to the Regional Health Area working groups tasked with design and implementation. The working groups should also include local/regional representation from local Government
- The HSE should continue to implement the reforms underway in line with the Crowe Horwath recommendations

Appendices

Appendix A: Glossary

AMR
Antimicrobial Resistance

CEO
Chief Executive Officer

CMO
Chief Medical Officer

CPHM
Consultant in Public Health Medicine

EAG
Expert Advisory Group

ECDC
European Centre for Disease Prevention and Control

EMA
European Medicines Agency

EPA
Environmental Protection Agency

EPHF
Essential Public Health Function

ESRI
Economic and Social Research Institute

HERA
Health Emergency Preparedness and Response Authority

HSE
Health Service Executive

HIQA
Health Information and Quality Authority

HPRA
Health Products Regulatory Authority

HPSC
Health Protection Surveillance Centre

HRB
Health Research Board

HSPA
Health Systems Performance Assessment

IANPHI
International Association of National Public Health Institutes

ICT
Information and Communications Technology

ICU
Intensive Care Unit

IEMAG
Irish Epidemiological Modelling Advisory Group

IHI
Institute for Healthcare Improvement

IHR
International Health Regulations

iNAP 1
National Action Plan on Antimicrobial Resistance 2017-2020

iNAP 2
National Action Plan on Antimicrobial Resistance 2021-2025

NHS
National Health Service

NPHET
National Public Health Emergency Team

NSP
National Service Plan

OECD
Organisation for Economic Co-operation and Development

RHA
Regional Health Area

RIVM
National Institute for Public Health and the Environment (Netherlands)

UCD
University College Dublin

WHO
World Health Organization

Appendix B: List of written submissions received

- Association of Public Health Registrars in Ireland co-submitted with the Lead Non-Consultant Hospital Doctor (NCHD) for Public Health Medicine
- Department of Agriculture – One Health
- Health and Safety Authority
- Health Information and Quality Authority
- Health Products Regulatory Authority
- HSE Consolidated submission
- HSE - Environmental Health Service
- HSE - Health Intelligence Unit
- HSE - National Health and Social Care Professions Office
- Institute of Public Health
- Irish Epidemiological Modelling Advisory Group
- Irish Medical Organisation
- Irish Nurses and Midwives Organisation - Public Health Nurses
- Irish Pharmacy Union
- Irish Society of Specialists in Public Health Medicine
- National Physical Activity Plan Implementation Group
- National Screening Advisory Committee
- Obesity Policy Oversight & Implementation Group
- Pharmaceutical Society Ireland
- Royal College of Physicians of Ireland
- Royal College of Physicians of Ireland – Faculty of Public Health Medicine
- Royal College of Surgeons in Ireland
- Road Safety Authority
- School of Public Health, University College Cork
- The Directors of Public Health Group
- Tusla
- University College Dublin - National Virus Reference Laboratory
- University College Dublin - School of Public Health, Physiotherapy and Sports Science
- University of Limerick - School of Medicine

Appendix C: Some comparators to inform the development of the new aegis body

Ireland is one of a small number of European countries that do not currently have a national public health body. National public health bodies across Europe can therefore provide models for the development of Ireland's national public health body.

EU and UK public health bodies

- Gesundheit Österreich GmbH (GÖG) - Austria
- Sciensano - Belgium
- National Center of Public Health and Analyses (NCPHA) - Bulgaria
- Hrvatski Zavod Za Javno Zdravstvo - Croatia
- National Institute of Public Health (SZU) - Czechia
- Statens Serum Institut (SSI) - Denmark
- UK Health Security Agency (UKHSA) - England
- Tervise Arengu Instituut - Estonia
- Finnish Institute for Health and Welfare - Finland
- Santé publique France - France
- Robert Koch Institut - Germany
- Istituto Superiore di Sanità - Italy
- National Institute for Public Health and the Environment (RIVM) – Netherlands
- Public Health Agency – Northern Ireland
- Narodowy Instytut Zdrowia Publicznego (PZH) - Poland
- Instituto Nacional de Saúde Dr. Ricardo Jorge (INSA) - Portugal
- Instituto de Higiene e Medicina Tropical (IHMT) - Portugal
- Public Health Scotland - Scotland
- National Institute of Public Health (NIJZ) - Slovenia
- Instituto de Salud Carlos III - Spain
- Folkhälsomyndigheten Public Health Agency of Sweden - Sweden
- Public Health Wales - Wales

Two exemplars provided by Group members are as follows:

RIVM (The Netherlands)

RIVM, the National Institute for Public Health and the Environment, works towards a healthy population living in a sustainable, safe and healthy environment.

RIVM is a knowledge institute and pursues its goals based on independent scientific research, including active surveillance of population health, health determinants (including, e.g., population seroepidemiology supporting the national immunisation programme), cure and care capacity, and the environment. Working with commissioning clients, it identifies the research that is needed and conducts studies accordingly. RIVM can also initiate research itself. It provides advice to the Government and parliament, to professionals and to members of the public, and shares its knowledge. It is an institute of the Netherlands Ministry of Health, Welfare and Sport. The Ministry is the owner of RIVM and provides their facilities. The Ministry of Health, Welfare and Sport is also a commissioning client. RIVM is independent in the performance of its commissioned projects. The RIVM Act safeguards that independence by law. The RIVM has 13 specialised knowledge centres, ranging across three domains of specific knowledge and expertise: Infectious Diseases and Vaccinology; Environment and Safety; and Public Health and Health Services.

Public Health Wales

Public Health Wales is the National Public Health Institute in Wales.

It is constituted as an NHS Trust and is part of the health family with a unitary Board, the Chair of which reports to the Minister for Health and Social Services, and the Chief Executive reports to the Chair with an Accountable Officer reporting line to the Director General.

The main functions of the organisation are:

- *National Health Protection and Screening Services:* providing national leadership and delivering a wide range of services including microbiology, pathogen genomics and health protection services. Leading and delivering the seven national population screening programmes for Wales and adopting innovation in their delivery. An increasing focus on one health, environmental health, air quality and climate change. Working with local and national resilience fora, leading and coordinating the public health role in biosecurity preparedness and response
- *Health and Wellbeing:* the focus is to support the adoption of evidence-based interventions to improve health and wellbeing across sectors. It includes convening a number of cross sector partnerships, providing support (Adverse Childhood Experiences Support Hub), supporting local specialist public health, delivering national wellbeing programmes in schools, workplaces and communities, and the Behaviour Change Unit for Health and Wellbeing in Wales
- *Data, Knowledge and Research:* the focus is on system leadership for innovative data science, research and evaluation to transform health and wellbeing by providing insight and evidence with structured and unstructured data with partners across sectors
- *World Health Organization Collaborating Centre on Investment for Health and Wellbeing (comprising the Policy and International Health Team).* This includes shaping health in all policies associated with return-on-investment across Government using accessible public health research, evidence and strong international relationships with a focus on preparedness for the European Union Transition. It also includes a Health and Sustainability Hub to support a practical cross-sector focus on health in all policies and evidence-based interventions across -Government and across sectors, and a Behavioural Science Unit for Health and Wellbeing
- *National Health Service Quality Improvement and Patient Safety Service*: this is the national NHS Wales improvement service using IHI and lean methodology. It also provides policy advice on quality and safety with strong international networking

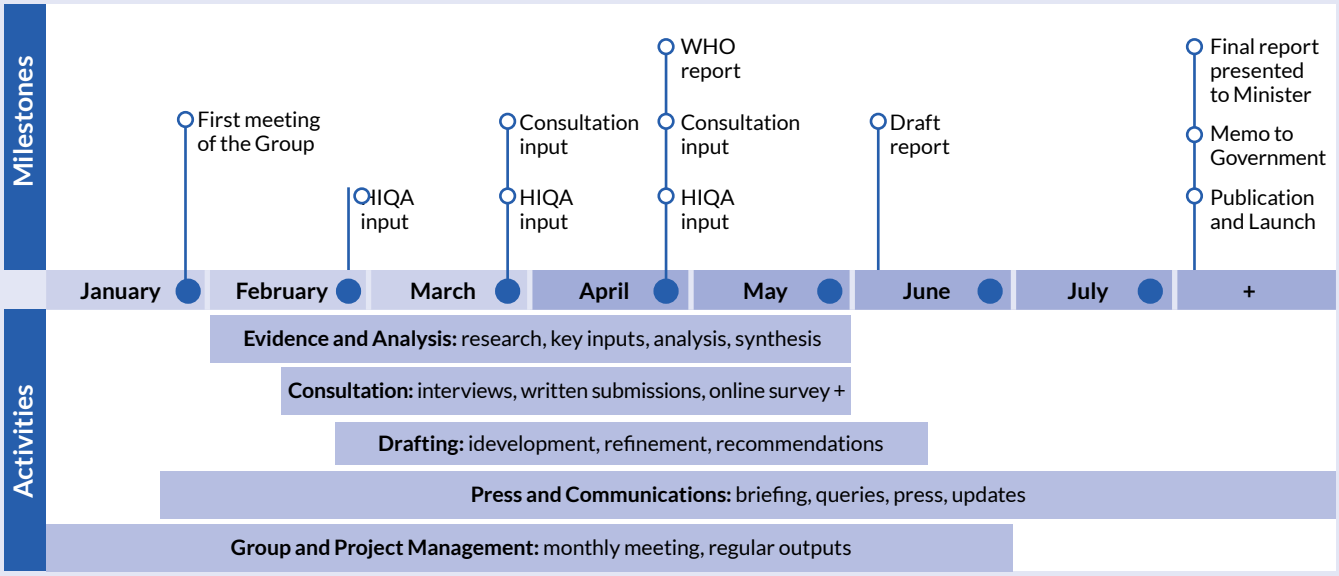
It provides specialist public health advice to the Welsh Government across all of its functions. It works closely with seven health boards and 22 local authorities. Each health board has a Board level Executive Director of Public Health and Public Health Wales provides the specialist local public health teams which are managed locally by the Director of Public Health. They work actively with partners in their areas including local authorities (who have the Environmental Health Officers and associated regulatory functions), education, emergency services, housing and third sector. Public health in Wales is underpinned by the Public Health Act Wales (2017). The Wellbeing of Future Generations (Wales) Act, 2015, establishes a governing structure and ways of working that requires Government and public sector partners to collaborate to deliver a healthier, more sustainable Wales.

The Dept Health has 19 aegis bodies currently. A list can be found here **https://www.gov.ie/en/organisation-information/9c9c03-bodies-under-the-aegis-of-the-department-of-health/**. The governance and operation of a new aegis body would draw on the experience of these bodies.

Appendix D:
How the Expert Advisory Group developed its Report

The Group met monthly between January and July 2022 with six online meetings, an in-person one-and-a-half day meeting in Dublin and a number of sub-group meetings and discussions in between these core meetings.

Timeline for the group's work



7 Group Meetings

Stakeholders

- Chair and Group Members
- Minister
- Department & cross government
- HSE and other agencies
- Public service user, others

Inputs to support the work of the EAG

The Group benefitted from a number of significant inputs to support its work including:

- The WHO Report *Essential public health functions in Ireland*
- The HIQA Report *Descriptive analysis of COVID-19 epidemiological indicators and associated contextual factors in European countries*
- The HIQA Report *High level review of configuration and reform of Public Health systems in selected countries*

Consultation and engagement to support the work of the EAG

The purpose of the engagement process was to:

1. Provide an opportunity to gather lessons from the experience of the public health response to the COVID-19 pandemic in Ireland.
2. Provide an important opportunity to engage with and hear the best ideas from all those working across relevant areas of public health with a view to informing the Group's recommendations.
3. Lay the foundations for implementation of the Group's recommendations by engaging with and listening to stakeholders.

Consultation and engagement included:

- An invitation to provide written submissions, with 29 submissions received (these submissions were analysed by HIQA)
- A survey of the public health workforce with 91 responses (survey responses were analysed by HIQA)
- 4 topic specific workshops (online)
- Key stakeholder meetings (online)
- Consultation with marginalised groups who typically experience poor public health outcomes

Delivery models considered by the Public Health Reform Expert Advisory Group

Five basic delivery model options emerged and were considered by the Group to assist in developing their thinking and recommendations. These were:

1. As is – current trajectory (no change beyond that which is in train)
2. Strengthen the existing public health delivery model
3. Creation of an independent public health authority
4. Creation of a new public health institute or agency within Government
5. Delivery model is not the answer - (areas for improvement do not require a reformed delivery model)

The preferred options were then further developed. Criteria were applied so that any recommendations regarding the delivery model should (i) facilitate the achievement of improvements in line with the identified priorities, and (ii) ultimately be in service of improved public health outcomes for the people of Ireland.

Support from Department of Health Project Team and Secretariat

The Group was supported in its work by a cross-divisional Project Team and Secretariat in the Department of Health:

- Sarah Glavey, Principal Officer
- Dr. Ronan Glynn, Deputy Chief Medical Officer
- Dr. Louise Hendrick, Deputy Chief Medical Officer
- Ruth Barrett, Assistant Principal Officer
- Sinéad O'Donnell, Assistant Principal Officer
- Ross McDermott, Administrative Officer
- Dr. Triona McNicholas, Specialist Registrar
- In addition, colleagues at the Department of Health, Michael Murray and Ryan McAdam kindly supported the Group's in-person meeting and Liam Robinson provided technical support for the Group's online meetings.