Written evidence for Health and Social Services Committee

- **Update on the COVID-19 pandemic, including the impact of the easing of restrictions over the summer.**

The coronavirus pandemic is far from over. The potential for significant direct and indirect harms remains very significant. COVID-19 should be viewed as an on-going and unprecedented challenge to public health.

Cases of COVID-19 have increased across Wales and they are likely to increase further as school and university teaching resumes. It is currently difficult to predict with any certainty what impact the relaxations and increased social mixing at Alert level 0 have had and will continue to have on the public health situation, however the observed rising cases (481 cases per 100,000 people at the time of writing) and high positivity rate 18.7% indicate that the disease should be carefully monitored through local, regional and national surveillance. The UK Joint Biosecurity Centre consensus estimate of the reproduction number for Wales is between 1.2 and 1.4 (as at 10 August 2021), while Public Health Wales estimate is between 1.5 and 1.6 (25 August 2021). Note that JBC's estimate is typically lagged by 2-3 weeks while Public Health Wales estimate, which uses a different methodology, is lagged by around 1 week.

Whilst high vaccination rates have significantly affected the ratio between recorded COVID infections and the most serious effects of the disease, the number of new daily admissions to hospitals with suspected or confirmed COVID-19 is increasing. Total hospital occupancy now higher than in previous waves, although the majority of patients are not associated with COVID-19. However, in general, the ratio of cases to hospitalisations and deaths remains low, with numbers of COVID-related deaths, and COVID-related admissions to ICU remaining lower when compared to the same point in previous waves. We continue to monitor the position very closely; press ahead with the vaccination priorities; and continually assess the appropriateness of measures to reduce transmission.

- **Vaccination, including COVID boosters and flu.**

Vaccination is one of the most effective ways to protect our families, communities and ourselves against COVID-19. At the time of writing, almost 2.4 million (90.7%) people in Wales aged 16+ (based on the 2020 mid-year estimates) have received a first dose of the COVID19 vaccination, and almost 2.2 million (84.2%) people have received a second dose.

Efforts to boost take-up continues, with a range of actions in place to enable easy access and build trust, for example utilising outreach vaccination and pop up clinics in a targeted way.

The first dose of a Covid vaccine now also being offered to all 16 and 17 year olds and is targeted to those who are aged 12-17 years and deemed clinically at risk, in line with Joint Committee on Vaccination and Immunisation (JCVI)recommendations. Data from Public Health Wales suggests that more than 67% of 16 and 17 year olds (based on data in the Welsh Immunisation System) have now received a first dose.

Disparities in vaccination coverage between socio-economic, age groups and ethnic groups as well as internationally remain important and efforts continue to seek to address the underlying reasons for vaccine hesitancy such as historical marginalisation and concerns regarding safety and potential long term effects on health. Examples include engagement events with religious/cultural groups, use of influencers, webinars in various languages and 'Ask the experts' public events.

In the meantime, the COVID-19 Vaccination programme has been planning for the autumn booster based on the JCVI interim advice. Subject to the final JCVI advice, the booster programme will start from September with the most vulnerable groups and their carers.

Emerging evidence on waning immunity will need to be interpreted for Wales such the predicted impacts are understood and used to guide action.

- **Flu vaccination**

Last winter, uptake of influenza vaccination was the highest ever recorded in Wales and this coming season the challenge is to see influenza vaccination maximised in priority groups who are most at risk of catching flu and suffering severe outcomes, or who are at higher risk of infecting other people.

In particular, we need to prepare for potentially higher levels of influenza circulating, along with other seasonal causes of respiratory infections, given the low levels recorded throughout 2020-21. Achieving a high vaccination uptake will be an important priority this coming autumn to reduce morbidity and mortality associated with influenza, and to reduce hospitalisations during a time when the NHS and social care may again be managing winter outbreaks of Covid-19.

The 2021-22 flu programme will again include all people aged 50 to 64 years, who should be offered influenza vaccination alongside others as part of the main campaign. In addition, for 2021-22 the vaccination programme will be extended further to include all children in secondary school years 7 to 11.

Public Health Wales, working closely with Welsh Government colleagues will deliver a comprehensive communication campaign encouraging all those who are eligible for the flu vaccine to avail of the opportunity.

- **Disaggregated data/modelling to explore impacts on/issues for particular groups/communities.**

During the first phase of the pandemic we gained a greater understanding of how COVID-19 was directly affecting people's health depending on factors such as their age, sex, ethnicity, their underlying health status and their socio-economic conditions. The indirect effects of the disease and responses to it have also effected people differently. For example, COVID cases, admissions and deaths have been around twice as high in the most deprived than the least deprived quintile of Welsh Index of Multiple Deprivation (these are age standardised rates so not related to differences in age structure). Wales/Office for National Statistics analysis continues to show people from ethnic minorities have been more affected by COVID-19 even after controlling for socioeconomic disadvantage. Reduced economic activity in the pandemic has especially affected young people entering the labour market.

The mental health of health and social care workers is important both for the well-being of individuals working in these sectors as well as overall sustainability of the sector, particularly as the COVID-19 pandemic extends into Winter 21/22. Following a rapid review[1], evidence suggests there has been a substantial adverse impact on the mental health of health and social care workers. Female staff, people with pre-existing or prior mental health disorder and having worries about COVID-19 transmission/ PPE may require most support. It is also worth noting that the Social Care sector may be seeing more than average turnover of staff at a time when the need for domiciliary and residential care workers is increasing. Wales continues to work with the ONS and academic experts to understand the impact that a drain on the social care sector may have over the winter and beyond.

- **Emerging or potential variants.**

The risk of a novel variant emerging that has a transmission advantage, escape from immunity, or leads to more severe health outcomes or a combination of these factors remains a realistic possibility. The Delta variant is the current predominant variant in Wales, continuing to account for the majority of newly confirmed and sequenced cases. New variants of SARS-CoV-2 are related to the amount of circulating virus, with higher rates of circulation and transmission creating opportunities for new variants to emerge. One of the biggest risks to our vaccination programme and the easing of restrictions is that existing vaccines are not effective, which could result in a greater risk of the NHS becoming overwhelmed as people once again become seriously ill with a new strain of coronavirus, despite having had a vaccination.

The previous waves have shown that the ingress and growth of a new variant occurs over a brief period, 7-8 weeks. Reducing transmission and employing strategies that break chains of transmission, increasing vaccination, monitoring new variants and being able to update vaccinations are key to an early and effective response. Careful monitoring of sensitive populations and settings, at local and regional levels as well as

[1] Impact of the COVID-19 pandemic on the mental health of health and social care workers within the UK. RR_00002. (July 2021) Available here:

engagement at a UK and international level continues to be important preventative strategy.

SARS-CoV-2 is primarily a human disease and the driver of community and international spread remains human-to-human transmission[2]. To date there is no evidence of an animal species acting as an epidemiologically significant reservoir of infection to humans.

Representative and targeted genomic sequencing and analysis will therefore continue to be an important feature of our response, particularly in identifying and characterising new variants – although the purposes of pathogen genomics are broader.

- **International travel**

International travel continues to pose risks of importing coronavirus infection to Wales, especially Variants of Concern. Robust border health measures are required to help prevent importing infection and mitigate onward transmission risks. A suite of measures exists to mitigate risks, including passengers being required to provide personal/travel details and evidence of a negative coronavirus test before travel to the UK, and adhere to post-arrival quarantine and testing regimes. A country risk-rating policy determines post-arrival testing and quarantine regimes.

There have been recent changes to border health measures, notably the removal of quarantine and relaxation of testing requirements for fully vaccinated adult arrivals from amber-list countries. These changes are not without risk; they weaken the line of defence on importing infection and increase opportunities for variant infections to arrive in the UK and Wales. Vaccines can help reduce this risk, but only if effective against Variants of Concern and high-risk Variants under Investigation.

The border health measures in place across the UK go some way to continue to protect against the importation of infection and the introduction of variants. A four-nations collaborative approach is critical to evaluate and implement effective border

[2] SARS-CoV-2 in animals – Situation Report 2 (oie.int)

control arrangements. Since Wales shares an open border with England, and most arrivals to Wales enter through ports outside Wales, it is ineffective to have separate policy arrangements for Wales.

Public health risks linked to international travel are kept under review by the UK Joint Biosecurity Centre; their three-weekly risk assessment cycle considers global epidemiological data, sequencing capabilities and Variant of Concern reporting, vaccine coverage and traveller volumes, amongst other metrics. This underpinning process of assessing global risks in the context of travel to the UK remains crucial, as does the need to ensure good compliance with testing requirements (and genomic sequencing) to generate robust surveillance data; both can inform action to mitigate risks through timely policy intervention and legislation change.

- **Modelling of the future trajectory of the pandemic, in particular as we move towards the winter, and potential impact of other factors e.g. flu.**

There is more complexity in the system now that society is more open, which brings much greater uncertainty to modelling. Uncertainties remain including: the further evolution of SARS-CoV-2, reinfection and waning immunity, seasonality, coinfections and potential future status as an endemic disease. The dynamics in the coming months are highly unpredictable and even a short period of raised transmission could be very problematic if prevalence is already high (“at limit”) – there could be very little room to manoeuvre to reduce prevalence (perhaps 1-2 doublings, 10-20 days). This risk is exacerbated if ‘flu and other infections also feed into healthcare demand also if acquired immunity wanes significantly in the near term. Reduction in COVID might be required to make space for other infections. The reintroduction of NPI would also reduce both COVID and ‘flu (and other infections).

Winter may prove challenging with the re-emergence of other seasonal acute respiratory infections alongside COVID-19. Due to the change in transmission dynamics caused as a result of the measures to control COVID-19 there may be a period of unpredictable epidemics of these diseases before their normal seasonal patterns return. If circulating infections interact it could take a considerable amount of

time to establish an equilibrium (e.g. RSV season might shift to an earlier pattern of circulation).

Short and medium term forecasting alongside longer term policy modelling with (revised assumptions) will be key to policy decisions. For example if waning immunity is shown to significantly increase hospitalisations of extremely clinical vulnerable and older people in the short to medium term (e.g. over winter), this could create additional and unsustainable pressure of the NHS and social care.

Other respiratory viruses like influenza (flu) and respiratory syncytial virus (RSV) can also be modelled. These viruses were largely absent in winter 2020/21 but are likely to recur, and may rebound at a higher rate than a typical winter, partly due to an 'immunity debt', for instance in 1-2 year olds who have not been exposed to RSV. The incidence of RSV in children is increasing quickly, with the RSV season starting 15 weeks earlier than normal in Wales. Both flu and RSV may show asynchronous growth in different parts of Wales, and the impact of flu will depend on type, clade and vaccine composition.

It may be that individual behaviours around wearing face coverings, self-isolation and staying at home with symptoms, and other changes in terms of infection prevention and control in health and social care, will have longer term effects in preventing transmission of several viruses, but this remains to be seen, and we need to prepare for the possibility of very challenging conditions with lots of viruses in circulation. Modelling shared with JCVI has suggested that the 2021-22 flu season could be 50%-100% higher than a typical season and could peak at a different time.[3]

A planned health protection response to respiratory illness for the winter is underway It has the following aims;

- Reduce impact of Covid-19 and influenza infections through effective delivery of both vaccination programmes and other pharmaceutical interventions.

[3] JCVI interim advice: potential COVID-19 booster vaccine programme winter 2021 to 2022 - GOV.UK (www.gov.uk)

- Deliver a comprehensive surveillance programme that: provides timely intelligence on incidence of respiratory infections; allows for rapid detection of incidents and outbreaks and supports the public health system to take appropriate action to reduce harm.
- Deliver a testing strategy that allows for rapid identification of causative virus in those who are symptomatic.
- Deliver a targeted contact-tracing model.
- Ensure key settings, such as health and social care, prisons and other critical services, are supported by appropriate guidance on management of respiratory outbreaks.
- Through effective communication support the public to reduce personal risk of respiratory viral illness through frequent hand washing, respiratory etiquette, social distancing and mask wearing where advised to do so.
- Through collective action minimise wider harms incurred through our response to respiratory outbreaks or epidemics.

- **The roles of legislation, guidance and messaging in the ongoing response to the pandemic.**

  As set out in the public document Coronavirus Control Plan: Alert Level Zero (July 2021) the latest phase of the pandemic emphasises the need to collectively manage; with the joined up efforts of government, individuals, the private sector, the third sector and others.

  Remaining legislation focuses on areas where people to not have a choice or full control over managing their own personal risks (such as going to work or accessing services) and includes legal requirements to self-isolate, legal requirements on businesses, employers and other organisations to carry out a coronavirus risk assessment and put in place reasonable measures to mitigate the risk of spreading coronavirus, and legal requirements to wear face coverings in indoor settings. We continue to ask people in Wales to work from home where they can; this is a reasonable measure we expect employers to put in place where appropriate.

Despite this legislation remaining in place, many of the detailed restrictions have been taken out of regulations. This places more emphasis on people managing their own personal risk. The move to alert level zero has required a distinct new phase in public communications, with a greater emphasis on normalising protective behaviours to curtail the spread of the virus. The Welsh Government has produced a smaller suite of core guidance to communicate the on-going restrictions in place and to reiterate important messages to the public and key stakeholders which focus on what people should be doing as opposed to what they legally cannot. This is aimed at helping people manage their own risks and to support businesses and other organisations carry out their required risk assessments.

Changes in population behaviours (which may be different in different groups) and in particular how quickly they return to pre-pandemic levels are a key uncertainty. The peak of the resurgence will be much lower if the return to pre-pandemic behaviours is gradual, irrespective of legislative decisions (i.e., any changes happen over several months) than if it is rapid, and if more measures to reduce transmission are maintained (high confidence).

As restrictions are lifted remains important for messaging to communicate the continued risks from COVID-19 and effective mitigations, including information on how to minimise within household spread. SAGE advises that continuing to provide near real time local information on prevalence is necessary to develop models and design appropriate interventions effectively[4]. Communication targeted to both individuals and organisations will be important.

- **Indicators and measures in respect of indirect harms from the pandemic and the response to it.**

[4] SPI-M-O: Local interventions and spatial scales, 6 August 2020 - GOV.UK (www.gov.uk)

There is considerable debate around the impact of measures to contain SARS-COV-2 outbreaks. In Welsh Governments' 'Leading Wales out of the Coronavirus Pandemic: a framework for recovery and unlocking our society and economy: continuing the conversation', the careful balance between the direct harms from COVID-19 with the indirect harms of restrictive measures such as lockdowns are described such as the impact on mental health, wellbeing, the economy and society. These are set out alongside the indicators and measures that are taken into account when deciding on the role of regulations as 'necessary' and 'proportionate' to limit the incidence and spread of coronavirus in Wales.