

Dr Simon Cottrell
18 Windsor Esplanade
Cardiff Wales
CF105BG

I&S

20th February 2023

Re: Reference for Request - M2B/SC/01

Dear Ms Whittaker,

I have attached the outline information that you requested on my background and my role in the Welsh Government Technical Advisory Group (TAG) meetings.

Yours Sincerely,

Simon Cottrell.

Question 1

EDUCATION AND QUALIFICATIONS

March 2021 2007 – 2010	Awarded honorary membership to the UK Faculty of Public Health Master of Public Health (part time), Cardiff University (School of Medicine)
1999 – 2004 1995 – 1998	PhD (Applied Microbiology), Cardiff University (Biosciences School) BSc Hons Biochemistry, Swansea University

CAREER SUMMARY

<p>Apr 2020 - present</p>	<p>Scientific Lead/ Senior Principal Epidemiologist, Public Health Wales NHS Trust, Vaccine Preventable Disease Programme (VPDP) and Communicable Disease Surveillance Centre (CDSC).</p> <ul style="list-style-type: none"> ▪ Lead epidemiologist for surveillance of vaccine preventable disease, vaccination programmes, acute respiratory infection and developing long term COVID19 surveillance. ▪ Developing surveillance of the COVID19 vaccination mass vaccination programme, including enhanced surveillance of vaccine equity and vaccine effectiveness, inputting into development of the national COVID19 vaccination registry (WIS). ▪ Contributing to the COVID19 surveillance plan and longer term ARI surveillance strategy. ▪ Developing national rapid surveillance of COVID19 mortality. ▪ Overseeing development of the COVID19 daily surveillance dashboard and surveillance reports. ▪ Leading a team of epidemiologists, senior epidemiologists and analysts.
<p>Apr 2016 -</p>	<p>Principal (lead) Epidemiologist, Public Health Wales NHS Trust, VPDP/ CDSC</p>
<p>Mar 2020</p>	<ul style="list-style-type: none"> ▪ Lead for epidemiology and routine surveillance of vaccine preventable disease, vaccination uptake and acute respiratory infections. Overseeing surveillance programmes including the Welsh COVER reporting scheme and surveillance of influenza in Wales. ▪ Scoping, developing and managing new vaccination programme and infectious disease surveillance schemes in line with emerging threats, issues, new technologies and new vaccination programmes. ▪ Teaching and training professionals from a variety of background in epidemiological issues and interpretation of reports. Supervising postgraduate research projects and placements. ▪ Providing expert feedback on epidemiology of vaccine preventable disease and respiratory infections to senior Public Health Wales managers and colleagues, NHS and Government. Providing evidence and advice on relevant vaccination policy and policy updates. ▪ Representing Wales and actively participating in UK, ECDC and WHO surveillance and expert groups. ▪ Developing and leading research on vaccination programme impact, equity and effectiveness. ▪ Developing research and ad-hoc surveillance to deal with emerging diseases and vaccines. Leading relevant grant applications and managing research budgets. ▪ Presenting findings from Wales at international conferences and publishing in peer-reviewed journals. ▪ Managing analytical support for relevant outbreaks and incidents, providing field epidemiology and surveillance expertise as required. ▪ Liaising with clinicians, microbiologists and other stakeholders in developing surveillance and analyses. ▪ Providing support to health boards to set up and public health assess interventions. ▪ A senior member of VPDP, providing expert input into other work areas as required.
<p>Sep 2012 -</p>	<p>Honorary Tutor, Masters in Public Health (MPH), Cardiff University</p>
<p>present</p>	<ul style="list-style-type: none"> ▪ Supervision of MPH dissertation projects and dissertation examiner. ▪ Lecturing on the Health Protection module. Leading tutorials and debates across a range of topics.

Dec 2011 -	Senior Epidemiologist , (Public Health Wales NHS Trust, CDSC and VPDP)
Apr 2016	<ul style="list-style-type: none"> ▪ Leading on production of routine reports on influenza surveillance and vaccination uptake. ▪ Developing and enhancing surveillance systems as needed. ▪ Participating in research and developments within the fields of influenza surveillance and vaccinations. ▪ Supporting field epidemiology in outbreaks and health protection incidents. ▪ Developing reporting systems and analysis routines to support them.
Jul 2005 -	Epidemiologist , (Public Health Wales NHS Trust, CDSC and Vaccine Programme)
Dec 2011	<ul style="list-style-type: none"> ▪ Carrying out routine analyses, surveillance, writing surveillance reports, assisting in field epidemiology.
Oct 2003 –	Post-doctoral Research Associate , Cardiff University (Biosciences School)
Jun 2005	<ul style="list-style-type: none"> ▪ Setting up and supporting a clinical trial investigating effectiveness of probiotics in preventing hospital-associated infections. Testing efficacy of antimicrobial compounds against intestinal microflora ▪ Encouraging academic and industrial partnership working.

RECENT PUBLICATIONS

- Pacchiarini N, Sawyer C, Williams C, Sutton D, Roberts C, Simkin F, King F, McClure V, Cottrell S, Clayton H, Beazer A, Williams C, Rey S, Connor T, Moore C. Epidemiological analysis of the first 1000 cases of SARS-CoV-2 lineage BA.1 (B.1.1.529, Omicron) compared with co-circulating Delta in Wales, UK. *Influenza and other respiratory viruses*. July 2022, DOI: 10.1111/irv.13021
- Perry M, Gravenor MB, Cottrell S et al. COVID-19 vaccine uptake and effectiveness in adults aged 50 years and older in Wales UK: a 1.2m population data-linkage cohort approach. March 2022. *Human Vaccines and Immunotherapeutics* 18(2):1-10 ▪ Perry M, Akbari A, Cottrell S et al. Inequalities in coverage of COVID-19 vaccination: A population register based cross-sectional study in Wales, UK. September 2021. *Vaccine*, 39(11)
- Lopez-Bernal J, Andrews N, Gower C, Robertson C, Stowe J, Tessier E, Simmons R, Cottrell S, Roberts R, O'Doherty M, Brown K, Cameron C, Stockton D, McMenemy J, Ramsay M. Effectiveness of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines on covid 19 related symptoms, hospital admissions, and mortality in older adults in England: Test negative case-control study. May 2021. *BMJ Clinical Research*, 373:n1088
- Currie J, Boyce T, Evans L, Luker M, Senior S, Hartt M, Cottrell S, Lester N, Huws D, Humphreys C, Little K, Adekanmbi V, Paranjothy S. Life expectancy inequalities in Wales before COVID-19: an exploration of current contributions by age and cause of death and changes between 2002 and 2018. *Public Health* 2021;193(12):48-56
- Brueggermann A, et al. Changes in the incidence of invasive disease due to *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Neisseria meningitidis* during the COVID-19 pandemic in 26 countries and territories in the Invasive Respiratory Infection Surveillance Initiative: a prospective analysis of surveillance data. *Lancet Digital Health* 2021;3:e360-70
- Bernal JL, Andrews N, Gower C, Robertson C, Stowe J, Tessier E, Simmons R, Cottrell S, Roberts R, O'Doherty M, Brown K, Cameron C, Stockton D, McMenemy J, Ramsay M. Effectiveness of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines on covid-19 related symptoms, hospital admissions, and mortality in older adults in England: Test negative case-control study. *BMJ* 2021 13;373:n1088
- Emmerson C, Adamson JP, Turner D, B Gravenor MB, Salmon J, Cottrell S, Middleton V, Thomas B, W Mason BW, Williams CJ. Risk factors for outbreaks of COVID-19 in care homes following hospital discharge: A national cohort

analysis. *Influenza and Other Respiratory Viruses*: 2021; 15(3)371-380

- Bright D, Brown G, Roberts RJ, Cottrell S, Gould A, Jesurasa A, Daniels P, Davies L. COVID-19 contact tracing: The Welsh experience. *Public Health in Practice*. 2020 Nov; 1: 100035.
- Boddington NL, et al. COVID-19 in Great Britain: epidemiological and clinical characteristics of the first few hundred (FF100) cases: a descriptive case series and case control analysis. *Bulletin of the World Health Organisation*. 2020 May doi: <http://dx.doi.org/10.2471/BLT.20.265603>
- Perry M, McGowan A, Roberts R, Cottrell S. Timeliness and equity of infant pertussis vaccination in Wales: Analysis of the three dose primary course. *Vaccine* 2020; Feb 5; 38(6):1402-1407.
- Perry M, Townson M, Cottrell S, Fagan L, Edwards J, Saunders J, O'Hare R, Richardson G. Inequalities in vaccination coverage and differences in follow-up procedures for asylum-seeking children arriving in Wales, UK. *European Journal of Pediatrics*. 2020 Jan; 179(1):171-175
- Perrett SE, Cottrell S and Shankur AG. Hepatitis B vaccine coverage in short and long stay prisons in Wales, UK 2013-2017 and the impact of the global vaccine shortage. *Vaccine* 2019; 37(15).
- Richard Pebody R, Abdelmajid Djennad A, Joanna Ellis J, Nick Andrews N, Diogo F.P. Marques DFP, Simon Cottrell C, Arlene J Reynolds
AJ, Rory Gunson R, Monica Galiano M, Katja Hoschler K, Angie Lackenby A, Chris Robertson C, Mark O'Doherty M, Mary Sinnathamby M, Nikolaos Panagiotopoulos N, Ivelina Yonova I, Rebecca Webb R, Catherine Moore C, Matthew Donati M, Muhammad Sartaj M, Samantha J Shepherd SJ, Jim McMenemy J, Simon de Lusignan S, Maria Zambon Z. End of season influenza vaccine effectiveness in adults and children in the United Kingdom in 2017/18. *Eurosurveillance*, Vol. 24, issue 29.
- Cottrell S, Moore C, Perry M, Hilvers E, Williams C, Shankar AG. Prospective enterovirus D68 (EV-D68) surveillance from September 2015 to November 2018 indicates a current wave of activity in Wales. *Eurosurveillance* 2018, Nov 15:23(46).
▪ Pebody R, Warburton F, Andrews N, Sinnathamby M, Yonova I, Reynolds A, Robertson C, Cottrell S, Sartaj M, Gunson R, Donati M, Moore C, Ellis J, de Lusignan S, McMenemy J, Zambon M. Uptake and effectiveness of influenza vaccine in those aged 65 years and older in the United Kingdom, influenza seasons 2010/11 to 2016/17 Uptake and effectiveness of influenza vaccine in those aged 65 years and older in the United Kingdom, influenza seasons 2010/11 to 2016/17. *Eurosurveillance* 2018, Sep 27:23(39).
▪ Harvala H, Broberg E et al. Recommendations for enterovirus diagnostics and characterisation within and beyond Europe. *Journal of Clinical Virology* 2018, 101(pp11-17).
- Currie J, Davies L, McCarthy J, Perry M, Moore C, Cottrell S, Bowley M, Williams C, Shankar AG, Stiff R. Measles outbreak linked to European B3 outbreaks, Wales, United Kingdom, 2017. *Eurosurveillance* 2017, Oct 19:22(42).
- Pebody R, Warburton F, Ellis J, Andrews N, Potts A, Cottrell S, Johnston J, Reynolds A, Gunson R, Thompson C, Galiano M, Robertson C, Byford R, Gallagher N, Sinnathamby M, Yonova I, Pathirannehelage S, Donati M, Moore C, de Lusignan S, McMenemy J, Zambon M. End-of-season influenza vaccine effectiveness in adults and children, United Kingdom, 2016/17. *Eurosurveillance* 2017, Nov 02:22(44).
- le Polain de Waroux O, Saliba V, Cottrell S, Young N, Perry M, Bukasa A, Ramsay M, Brown K, Amirthalingam G. Summer music and arts festivals as hot spots for measles transmission: Experience from England and Wales, June to October 2016. *Eurosurveillance* 2016, Nov 3;21(44). pii: 30390.
- Pebody R, Warburton F, Ellis J, Andrews N, Potts A, Cottrell S, Johnston J, Reynolds A, Gunson R, Thompson C, Galiano M, Robertson C, Byford R, Gallagher N, Sinnathamby M, Yonova I, Pathirannehelage S, Donati M, Moore C, de Lusignan S, McMenemy J, Zambon M. Effectiveness of seasonal influenza vaccine for adults and children in preventing laboratory-confirmed influenza in primary care in the United Kingdom: 2015/16 end-of-season results. *Eurosurveillance* 2016, Sep 22;21(38).
- Moore C, Cottrell S, Watkins J, Mason B, Williams C, Jones R. Increased detection of enterovirus type D68 associated with acute flaccid paralysis and severe respiratory illness in Wales, January–February 2016. *Journal of Clinical Virology* 2016, Sep (82) p54.
▪ Roberts RJ, McGowan A, Cottrell S. Measuring inequalities in immunization in Wales and the impact of interventions. *Human Vaccines and Immunotherapeutics* 2016, 12(10), p2704-2706.
- McGowan A, Perry M, Lewis R, Cottrell S, Roberts R. Monitoring the uptake of pertussis and influenza vaccine in pregnant women in Wales. Conference poster, 5 Nations Health Protection Conference 2016, Cardiff.
- Pebody R, Warburton F, Andrews N, Ellis J, von Wissmann B, Robertson C, Yonova I, Cottrell S, Gallagher N, Green H, Thompson C, Galiano M, Marques D, Gunson R, Reynolds A, Moore C, Mullett D, Pathirannehelage S, Donati M, Johnston J, de Lusignan S, McMenemy J, Zambon M. Effectiveness of seasonal influenza vaccine in preventing laboratory-confirmed influenza in primary care in the United Kingdom: 2014/15 end of season results. *Eurosurveillance* 2015, 20;36(1).
- Moore C, Cottrell S, Hoffmann J, Carr M, Evans H, Dunford L, Lawson H, Brown KE, Jones R. Self-collected buccal swabs and rapid, real-time PCR during a large measles outbreak in Wales: Evidence for the protective effect of prior MMR immunisation. *Journal of Clinical Virology* 2015, Jun(67),1-7.
- Pebody RG, Warburton F, Ellis J, Andrews N, Thompson C, von Wissmann B, Green HK, Cottrell S, Johnston J, de Lusignan S, Moore C, Gunson R, Robertson C, McMenemy J, Zambon M. Low effectiveness of seasonal influenza vaccine in preventing laboratory confirmed influenza in primary care in the United Kingdom: 2014/15 mid-season results.

Eurosurveillance 2015, 20;5.

- Cottrell S, Evans H, Moore C, Hoffmann J, Hayes S, Elliott C, Midgley C, Thomas D, Jones R, Lyons M, Roberts R, Williams C. A large and foreseeable outbreak of measles in Wales. Conference presentation ESCAIDE 2015 (3143), available from: <http://ecdc.europa.eu/en/ESCAIDE/programme/abstract-book/Documents/escaide-2015-abstract-book.pdf>
- Broberg E, Snacken R et al. Start of the 2014/15 influenza season in Europe: drifted influenza A(H3N2) viruses circulate as dominant subtype. Eurosurveillance 2015, 20;4.
- Green HK, Charlett A, Moran-Gilad J1, Fleming D, Durnall H, Thomas DR, Cottrell S, Smyth B, Kearns C, Reynolds AJ, Smith GE, Elliot AJ, Ellis J, Zambon M, Watson JM, McMenemy J, Pebody RG. Harmonizing influenza primary-care surveillance in the United Kingdom: piloting two methods to assess the timing and intensity of the seasonal epidemic across several general practice-based surveillance schemes. Epidemiology and Infection 2015, 143;1, p1-12.
- Perry M, Lewis R, McGowan A, Cottrell S, Roberts R. Determining uptake of influenza vaccination in pregnant women: a comparison of automated data collection from General Practice and a survey of women at the point of delivery in maternity units. Conference poster, 5 Nations Health Protection Conference 2016, Cardiff.
- Mereckiene J, Cotter S, Nicoll A, Lopalco P, Noori T, Weber J, D'Ancona F, Levy-Bruhl D, Dematte L, Giambi C, Valentiner-Branth P, Stankiewicz I, Appelgren E, O Flanagan D; VENICE project gatekeepers group. Seasonal influenza immunisation in Europe. Overview of recommendations and vaccination coverage for three seasons: pre-pandemic (2008/09), pandemic (2009/10) and post-pandemic (2010/11). Eurosurveillance 2014, Apr 19;16.
- Moore C, Perry M, Cottrell S. The Emerging Role of Community Sentinel Surveillance in the Understanding of the Clinical Features and Epidemiology of Acute Mycoplasma pneumoniae Infection The Experience in Wales, UK 2009-2013. Clinical Microbiology and Infection 2013, 20;8 ppO489-O492.
- McGowan A, Cottrell S, Roberts R, Lankshear A. Minimising pain response during routine infant immunisation. Community practitioner 2013, 86;6, pp24 – 28.
- Pebody R, Andrew N, McMenemy J, Durnall H, Ellis J, Thompson C, Robertson C, Cottrell S, Smyth B, Zambon M, Moore C, Fleming D, Watson J. Vaccine effectiveness of 2011/12 trivalent seasonal influenza vaccine in preventing laboratory-confirmed influenza in primary care in the United Kingdom: Evidence of waning intra-seasonal protection. Eurosurveillance 2013, 18;5.
- Crocker J, Porter-Jones G, McGowan A, Cottrell S. Teenage booster vaccine: Factors affecting uptake. Journal of Public Health 2012, 34;4, pp 498 – 504.
- Cottrell S, Roberts R. Measles outbreak in Europe. British Medical Journal 2011, 2011;342:d3724.

Question 2. A list of the groups (i.e. TAG and/or any of its subgroups) in which you have been a participant, and the relevant time periods.

Member of TAG.

Attended the Virology and Testing subgroup of TAG (VTTAG) in an ad-hoc capacity when specific input on surveillance was required.

Question 3. An overview of your involvement with those groups between January 2020 and May 2022, including:

- a. When and how you came to be a participant;
- b. The number of meetings you attended, and your contributions to those meetings; and
- c. Your role in providing research, information and advice.

TAG

I attended weekly TAG meetings from the week commencing 22nd May 2020. I was invited by the Chair of TAG to attend, after a request from Dr Chris Williams, head of the Communicable Disease Surveillance Centre (CDSC Wales) for me help with specialist epidemiological input to TAG meetings from CDSC Wales.

I attended most weekly TAG meetings over the period May 2020 to May 2022. TAG met most weeks during this time, although meeting frequency was adjusted if situations were stable and there were no pressing issues to discuss.

My role within TAG meetings was to help provide a brief summary of the latest surveillance information from Wales, and to help with interpretation of surveillance information (which often encapsulated data from a variety of sources). My summaries were based on surveillance reports that were published through the PHW surveillance dashboard and circulated to key stakeholders. I also contributed to discussions within my specialist areas respiratory infection surveillance, and vaccine programmes surveillance and epidemiology.

Alongside colleagues from Public Health Wales, I contributed to situation updates and provided input into discussion. My role within the group was not to receive research commissions or requests for work (which tended to go through formal channels of the Director of Health Protection or Head of CDSC Wales). I contributed to some requests from TAG for more in depth surveillance information, but this was through my substantive role within the PHW surveillance team, rather than my role with TAG.

VTTAG

I was first invited to VTTAG in November 2020, by the co-chair of the group, to gain insight into any testing changes and their impact on COVID-19 infection surveillance, rather than in an advisory capacity. I attended on an ad-hoc basis throughout the period, when there were items on the agenda that may relate to surveillance (receiving feedback from PHW colleagues of any key developments in between my attendances).

Question 4. A summary of any documents to which you contributed for the purpose of advising TAG and/or its related subgroups on the Covid-19 pandemic. Please include links to those documents where publicly available.

I contributed to discussions on documents presented at TAG or written by members of the Welsh Government Technical Advisory Cell. Other than this, my role was to verbally summarise and help the group interpret surveillance reports produced by Public Health Wales on COVID-19 and COVID 19 vaccinations.

Question 5. A summary of any articles you have written, interviews and/or evidence you have given regarding the work of the above-mentioned groups and/or the Welsh Government's response to the Covid-19 pandemic. Please include links to those documents where publicly available.

I have nothing to report here.

Question 6. Your views as to whether the work of the above-mentioned groups in responding to the Covid-19 pandemic (or Wales's response more generally) succeeded in its aims. This may include, but is not limited to, your views on:

a. The composition of the groups and/or their diversity of expertise;

Diversity of expertise in the group was usually sufficient to arrive at a reasoned joint opinion. Subject matter expertise tended to come from Public Health Wales, the NHS and academic members of the group, with Welsh Government members overseeing and interjecting with feedback from discussions they had been involved in at UK level. Other attendees were drafted in to input into subject specific discussion from time to time, where addition feedback was required. This included authors of reports from outside Wales and key members of English expert discussion groups.

The group included a number of subject matter experts. There was also a number of civil service members who prior to 2020 had limited experience (or no) expert level

experience in respiratory infections, pandemics and related issues; or were not specialists in analytical methods. Although these members of the group undoubtedly had much experience in other areas of government, or areas of academia (and were all highly performing in their areas), on occasion opinions from people without extensive experience or subject matter expertise were discussed with the same credibility as those with genuine expertise in the field.

Being more explicit from the outset on the role of TAG, what it covered and how it differed from other advice-giving functions (e.g. other parts of Welsh Government, or Public Health Wales), may have helped focus discussion and input into the group.

- b. The way in which the groups were commissioned to work on the relevant issues; I have limited insight into this. Having a bigger input from the service experts (including NHS and PHW) in the process of forming the research questions may have helped ensure that they were kept as relevant as possible. Every now and then it seemed that Public Health Wales and the NHS were considered 'data providers', for analyses and interpretations to take place within Welsh Government or Academic partners (there is an inherent risk of misinterpretation of data, and additional input from service experts would help).
- c. The resources and support that were available;
Having more secretariat support may have been useful in keeping up to date with meeting notes, actions and agendas in good time.
- d. The advice given and/or recommendations that were made;
My feeling is that the group did a good job forming relevant advice, contending with a large number of unknowns and in a continually evolving landscape. The response in Wales undoubtedly benefitted from having Welsh TAG as a discussion forum. Due to key differences in health care, infrastructure, and the population, it would not have been appropriate to just implement guidance from England without considering the impact on Wales. Additionally, having TAG meant it was possible to have Wales-specific discussion (even where there was no existing guidance from outside Wales). TAG had maximum impact during the first year of the pandemic. Going into the third year (2022), the focus of TAG and the added value became less clear).
- e. The extent to which the groups worked effectively together;
My involvement was almost exclusively with the main group of TAG. I would personally have found an increased awareness of the subgroups of TAG and more frequent updates from them helpful. I cannot comment on how effectively TAG worked with SAGE and other expert groups in England. A process of keeping TAG members up to date with emerging evidence from other expert groups would also have been helpful, there is a danger of not being up to date in rapidly evolving situations. There were good examples of collaborative work between TAG members (for example, SAIL and WG/ PHW joint work), whilst not always commissioned through TAG, updates on these projects were very useful in informing discussion).
- f. The extent to which applicable structures and policies were utilised and/or complied with and their effectiveness.
It was not always clear whether TAG members were there because of their expertise, or because they were representing an organisation (or a function of an organisation). It was

also difficult sometimes to discern where feedback was from someone with extensive expertise in a given area, or whether it was an organisational view (not that these are mutually exclusive). The role of TAG within WG structure was sometimes confusing and at times appeared to overlap with other WG groups. The role of the Technical Advisory Cell and whether it was different from the Technical Advisory Group was not clear.

Question 7. Your views as to any lessons that can be learned from the Welsh Government's response to the Covid-19 pandemic, in particular relating to the work of the above-mentioned groups. Please describe any changes that have already been made, and set out any recommendations for further changes that you think the Inquiry should consider making.

Firstly, I feel that the experiences over the past 3 years have demonstrated that there is definite value in having a routine forum for expert discussion across organisations to help inform policy development during emergency situations. It is helpful to have access to expert discussions and advice from England (and other countries), but being able to discuss recommendations in a Welsh context is vital. Although senior managers in organisations have a high level of broad expertise, it is sometimes necessary to bring in others who have more specialist insight, including those not at a director level. As the pandemic progressed, I think that TAG took this on board and expanded appropriately. The membership of TAG appeared to take their role seriously and it seemed like individuals prioritised attending wherever possible.

Having absolute clarity about the role of TAG and how it differs from other decision-making bodies, advice groups and organisational remits, is vital for all members. This will allow discussions to be focussed on what is important and needed, and not to stray into irrelevance.

Personally, I feel that tipping the balance of situational advisory groups towards a higher proportion of subject-matter specific expertise would be beneficial (preferably by inviting more expert insights). Additionally, acknowledging the need for a range of specialised expertise is vital in arriving at a sound consensus (for example, having experts in virology/ immunology/ respiratory infection epidemiology/ vaccinology comment on the plausibility and relevance of a modelled epidemic curve).

Not specific to TAG, but at times the demands on surveillance teams to provide data to a large number of groups in Wales and the wider UK significantly added to the burden of work. In addition to being unsustainable at times, this also limited the time and capacity of specialist teams in carrying out urgent/ additional analyses efficiently, or providing interpretations of surveillance data.