Response to UK COVID-19 Inquiry: Module 2 - Rule 9 Request to Professor Anthony Costello - Reference: M2/ISAGE/01/PAC

Please provide the following information:

A brief overview of your qualifications, career history, professional expertise and major publications.

Qualifications

2018 FFPH (Honorary): Fellow of the Faculty of Public Health
2017 FRCOG (Honorary): Fellow of the College of Obstetrics and Gynaecology
2011 FMedSci (Global health), Fellow of the Academy of Medical Sciences
1997 FRCPCH (Paediatrics), Royal College of Paediatrics and Child Health, London
1994 FRCP (Medicine), Royal College of Physicians, London
1980 MRCP Parts 1 and 2 (Medicine), Royal College of Physicians, London
1978 MA, MB BChir Medicine, The Middlesex Hospital Medical School, London
1975 BA parts 1a and 1b Class 1 in both parts, Medical Sciences, St Catharine's College, Cambridge University

Career history

2018- current.	UCL Professor of Global Health and Sustainable Development
2015-2018	WHO Geneva. Director, Maternal, Newborn, Child and Adolescent Health;
2006 –2015	Director, UCL Institute for Global Health
1990 – 2015	UCL Senior Lecturer, then Reader (1995) then Professor (2001) in International Child Health

Professional expertise

- Consultant Paediatrician.

- Professor specialising in trials and evaluations of community and public health interventions especially in low and middle income countries. I have published 450 academic papers, including leading the coordination of twelve large scale randomised controlled trials in Bangladesh, India, Malawi and Nepal to assess improvement in health outcomes through mobilisation of women's and men's groups. Results showed that in populations where more than 30% of pregnant women joined the women's group programme, maternal death and newborn deaths were cut by one third. The intervention has now been recommended by the World Health Organization (WHO) for scale-up in poor, rural populations.[6]

- Our trials have shown, variously, large impacts in reducing newborn mortality, infant nutrition, maternal depression, and diabetes risk factors and prevalence, in different settings in low income populations. Our work on newborn mortality led to a change in WHO policy, an independent recommendation for this approach to be adopted in vulnerable populations, and sustained cuts on newborn mortality after government scale-up in Jharkhand state in India.

- As **Director of the WHO Maternal, Newborn, Child and Adolescent Health** department I joined the core emergency team in October 2015 that tackled the **global zikavirus epidemics** which affected pregnant mothers and their newborn infants in 86 countries. In March 2015, Brazil had reported a large outbreak of Zika virus infection and in early 2016, WHO declared that the recent association of Zika infection with clusters of microcephaly and other neurological disorders constituted a Public Health Emergency of International Concern. I was involved in
  - the development of integrated surveillance systems, prevention through integrated management of vectors, risk communication and community engagement,
  - strengthening health systems for care and support for individuals and families and communities,
  - research studies commissioned to to improve prevent, detect and control zikavirus, production of public health guidelines to minimise the impact of the virus, to ensure pregnant women were protected from mosquitoes, and to provide clinical support to infected women and to those whose babies suffered brain damage.

- I learned much about national and global public health and epidemic emergency management from 18 months involvement with this programme.

- I also led the development of
  - the **Global Strategy for Women's, Children's and Adolescents 'Health** (2016–2030) with its three objectives of surviving, thriving and transforming – to end preventable mortality, to promote health and well-being, and to expand enabling environments. Its guiding principles include equity, universality, human rights, development effectiveness and sustainability.
  - the **global accelerated action for the health of adolescents** (AA-HA!)
  - an expert review group called ***Maternal and Newborn Information for tracking Outcomes and Results*** (MONITOR) to harmonize maternal and newborn health indicators.
  - In February 2017, together with UNICEF and the United Nations Population Fund (UNFPA), I led the launch of the **Network for Improving Quality of Care for Maternal, Newborn and Child Health** to introduce evidence-based interventions to improve quality of care for maternal and newborn health supported by a learning system. The Network works to improve care in Ethiopia, Nigeria, India, Bangladesh, Malawi, Côte d'Ivoire, Uganda, Tanzania and Ghana. I also led work on community empowerment for family health - what it means, how to measure it, and how to plan interventions at the district level.[12] With UNICEF, he helped coordinate a new Lancet Commission on redesigning child health for sustainable development goals.
  - I set up a **WHO UNICEF Lancet Commission**, chaired by the Right Honorable Helen Clark, former Prime Minister of New Zealand, and Dr Awa Coll-Seck, Minister of State for Senegal, with 41 experts from around the world which led to a report **in the Lancet on 'A Future for our Children?'.**[13] In 2020, based on this commission, I led the the development of **Children in All Policies 2030** which has set up links in Argentina, Senegal, Ghana, South Africa, India, Nepal and the Pacific Islands. The focus of the work is on building a commitment to children in all sectors of government, to placing children at the centre of sustainable development policies, advocacy for climate change and strategies to protect children from commercial exploitation.

- I chaired the **2009 Lancet Commission on Managing the Health Effects of Climate Change**,[8] and a second Lancet Commission which linked the UK, China, Norway and Sweden on emergency actions to tackle the climate health crisis, published in June 2015.[9] In 2016 I led the development of the **Lancet Countdown: Tracking Progress on Health and Climate Change**.[10][11] These annual reports, developed by a network of 43 universities and research institutions, produces an annual Lancet report on the health impacts, adaptation progress, renewable energy, economics and public engagement related to climate change.

- In November 2018 I published the book ***The Social Edge. The Power of Sympathy Groups for our Health, Wealth and Sustainable Future***.[7] The book explains why a new science of cooperation is needed and suggests twenty two social experiments which use sympathy groups for resolving 21st century problems.

References

WHO Recommendation on Community Mobilization through Facilitated Participatory Learning and Action Cycles with Women's Groups for Maternal and Newborn Health. WHO Guidelines Approved by the Guidelines Review Committee. World Health Organization. 2014. hdl:10665/127939.

BBC News. Race to understand Zika link to baby microcephaly. Feb 2 2016. https://www.bbc.co.uk/news/health-35471545

Costello A, Dua T, Duran P, Gülmezoglu M, Oladapo OT, Perea W, Pires J, Ramon-Pardo P, Rollins N, Saxena S. Defining the syndrome associated with congenital Zika virus infection. Bull World Health Organ. 2016 Jun 1;94(6):406-406A. doi: 10.2471/BLT.16.176990. PMID: 27274588; PMCID: PMC4890216.

Costello, Anthony (2018). The Social Edge: The Power of Sympathy Groups for Our Health, Wealth and Sustainable Future. Thornwick Limited. ISBN 978-1-912664-00-9.[

Prost, Audrey; Colbourn, Tim; Seward, Nadine; Azad…Tripathy, Prasanta; Wilson, Amie; Costello, Anthony (May 2013). "Women's groups practising participatory learning and action to improve maternal and newborn health in low-resource settings: a systematic review and meta-analysis". The Lancet. **381** (9879): 1736–1746. doi:10.1016/S0140-6736(13)60685-6. PMC 3797417. PMID 23683640

"Lancet Countdown". Lancet Countdown. Retrieved 3 December 2019.

"Launch of Network for Improving Quality of Care for Maternal, Newborn and Child Health". Geneva, Switzerland: World Health Organization. The partnership for Maternal, Newborn and Child Health. 4 May 2017. Retrieved 8 December 2018.
Clark, Helen; Coll-Seck, Awa Marie; Banerjee, Anshu….Stenberg, Karin; Tomlinson, Mark; Ved, Rajani R.; Costello, Anthony (22 February 2020). "A future for the world's children? A WHO–UNICEF–Lancet Commission". The Lancet. **395** (10224): 605–658. doi:10.1016/S0140-6736(19)32540-1. PMID 32085821. S2CID 211163182.

An outline of when you participated in Independent SAGE, the role that you performed and any matters that you advised on.

I was a founder member of Independent SAGE. In March and April 2020, through Twitter, articles in the Guardian and speaking at online webinars, I expressed the view that the UK Covid strategy was deeply flawed and had ignored essential public health principles for infection control. In May I was contacted by Sir Personal Data former chief government scientist and Personal Data of 'All the Citizens' about forming an independent group of scientists to assess and monitor UK strategy given the secrecy and lack of public health expertise within the work of official SAGE.
At the end of April I sent a longlist of potential experts in public health, primary and intensive care, epidemiology, data analysis and communication, virology, immunology, community mobilisation, and work with ethnic minorities. We agreed that Sir David would chair the group, that we should hold regular meetings in public, and we would issue short reports on our website about new developments, and encourage engagement with the public through social media and the mainstream media. A few invitees were too busy or reluctant to be involved but most people accepted.
Since late May 2020 we have held weekly public meetings (with August and Christmas breaks) which are regularly viewed by 12000 or more each week. We have brought a wide variety of stakeholder group guests (trade unions, health professionals, bereaved families, adolescents and young people, global health experts, and specialists in our own areas of expertise), to debate Covid issues and answer questions from the press and public.
My role has been to sit on the steering committee, occasionally chair meetings, contribute to weekly team discussions and to join most public meetings. I have done a lot of media work including with BBC News, CNN, Australian Broadcasting , Sky News, Channel 4, ITV News, documentaries on the pandemic, and many radio outlets including Radio 4, Radio 2, regional radio across the UK, LBC, Times radio, Turkish, Australian, Austrian and US radio. I refused requests to speak on RT and GB news. My expertise has mainly been around UK public health interventions, children, global health and vaccine strategy, and equity issues. The website has an archive of our meetings and many of our press interviews and articles.
https://www.independentsage.org/

A summary of any reports and/or articles you have written, interviews and/or evidence you have given regarding the work of SAGE and/or its subcommittees and/or the UK's response to the Covid-19 pandemic. Please include links to those documents where possible.

Early tweets on coronavirus and articles in mainstream media

March 1 2020 Tweet: My own crude projections of deaths and hospitalisations based on potential infection death rate and the population attack rate. I suggested a range between 67,500 and 201,000 deaths in the UK, and globally 7.72 million and 23.16 million deaths globally.
https://twitter.com/globalhlthtwit/status/1234180593736388613?s=20&t=7qZBYSg-rnCyEv0sbeAD1Q

March 4 on economic threats from the pandemic..
https://twitter.com/globalhlthtwit/status/1235161687319359489?s=20&t=0V6xtsAuuEJ6-bYcFZOztQ

BBC's Newsnight March 12 2020 I presented these data together with reports that intensive care units in Italy were two days away from being overwhelmed, that we needed social distancing, isolation and a national effort immediately to get the epidemic in the UK controlled. (https://twitter.com/BBCNewsnight/status/1238244080557133830?s=20).

My twitter thread March 13 2020 after the government press conference. Here are EIGHT questions about this HERD IMMUNITY strategy: (THREAD)

https://twitter.com/globalhlthtwit/status/1238425621375651840?s=20&t=Mot8xK1QYuM868KnRuX02g

March 19
https://www.itv.com/news/2020-03-19/uk-very-close-coronavirus-test-to-reveal-who-has-had-covid-19-with-no-symptoms/

March 25
https://www.theguardian.com/commentisfree/2020/mar/25/mass-covid-19-testing-is-vital-but-the-data-must-be-localised

March 31
https://www.theguardian.com/world/2020/mar/31/coronavirus-uk-labs-could-test-tens-of-thousands-more-people-says-expert

https://www.telegraph.co.uk/authors/anthony-costello/

https://www.theguardian.com/profile/anthony-costello

April 1 https://www.theguardian.com/commentisfree/2020/apr/01/public-inquiry-coronavirus-mass-testing-pandemic

April 2 https://www.theguardian.com/politics/2020/apr/02/a-glimmer-of-hope-but-little-detail-experts-react-to-hancocks-test-plan

April 3 https://www.theguardian.com/commentisfree/2020/apr/03/matt-hancock-government-policy-herd-immunity-community-surveillance-covid-19

April 10 https://www.theguardian.com/commentisfree/2020/apr/10/lift-lockdown-uk-east-asia-coronavirus-pandemic

April 17 https://www.theguardian.com/world/2020/apr/17/uk-to-start-coronavirus-contact-tracing-again

April 28 https://www.theguardian.com/commentisfree/2020/apr/27/gaps-sage-scientific-body-scientists-medical

May 2020
https://www.theguardian.com/commentisfree/2020/may/18/sage-advice-britain-coronavirus-science-government-policy

August 2020
https://www.theguardian.com/commentisfree/2020/aug/07/covid-uk-quarantine-government-coronavirus-isolate

September 2020
https://www.theguardian.com/commentisfree/2020/sep/10/england-test-trace-winter-failing-system-second-wave

October 2020
https://www.theguardian.com/commentisfree/2020/oct/14/circuit-breaker-england-test-and-trace-reform-lockdown-sage

December 2020
https://www.theguardian.com/commentisfree/2020/dec/22/uk-government-blamed-covid-19-mutation-occur

February 2021
https://www.theguardian.com/commentisfree/2021/feb/10/support-self-isolation-uk-covid-vaccination-effort-virus-replicate-mutations-vaccines

March 2021
https://www.theguardian.com/commentisfree/2021/mar/06/nhs-volunteers-fight-covid-community-health-workers-asia-contact-tracing-vaccine

July 2021
https://www.theguardian.com/commentisfree/2021/jul/07/living-with-the-virus-uk-vaccinated-covid-cases

December 2021
https://www.theguardian.com/commentisfree/2021/dec/14/richest-countries-vaccine-hoarders-international-court-millions-have-died

Matt Frei LBC https://www.lbc.co.uk/radio/presenters/matt-frei/coronavirus-ex-who-boss-questions-uks-herd-immunit/

Matt Frei C4 https://www.channel4.com/news/thats-not-going-to-delay-the-epidemic-its-going-to-escalate-it-says-professor-of-global-health-anthony-costello

Today programme My interview about mass testing Radio 4 Today starts at 1.34. https://www.bbc.co.uk/sounds/play/m000gtm1

https://www.telegraph.co.uk/news/2020/04/16/uk-faces-eight-ten-waves-coronavirus-population-achieves-herd/
Telegraph report April 2020. The UK faces eight to 10 waves of coronavirus before the population will achieves herd immunity.

Health and Social Care Committee on Management 2020. https://committees.parliament.uk/work/81/management-of-the-coronavirus-outbreak/

Health and Social Care Committee Oral evidence: Preparations for Coronavirus, HC 36
Friday 17 April 2020 https://committees.parliament.uk/oralevidence/288/default/

https://www.itv.com/news/2020-04-17/further-waves-of-coronavirus-will-hit-britain-leading-doctor-warns

Your views as to whether the work of SAGE and/or its subcommittees in responding to the Covid-19 pandemic (or the UK's response more generally) succeeded in its aims. We have previously invited independent members of SAGE and its subcommittees to address this issue by reference to the matters set out below. You may find them of assistance, although we recognise that some are likely to be beyond your knowledge. Please address this issue as you see fit.

In brief I share some key messages as follows:

The composition of the groups and/or their diversity of expertise;
Any advisory group, for science or more broadly to tackle a pandemic, should be independent, transparent, diverse and candid in its views. The government SAGE failed in these aspects because there were no guidelines about selecting independent scientists, nor any formal process or criteria for achieving a balance of disciplines.
Given this was a public health crisis affecting the whole population, and particularly a huge challenge to the NHS, we need to know why the SAGE lacked independent population and health care experts who could have added value to the discussions? Why was there not a single independent public health voice among the experts? Why were most experts chosen from among friends, civil servants or bureaucrats most of whom were not independent? Why was dissident opinion excluded, especially in early March, when the evident mistakes required immediate correction? Why were no voices heard at any time from affected countries eg Hong Kong, South Korea, Taiwan? Why was no attention paid to WHO experts, like Dr Bruce Aylward, especially after he led the China investigation and wrote the China Report on actions taken to suppress their national epidemics, published online on Feb 24? SAGE minutes make no reference to this paper.
See my article: April 28 2020 https://www.theguardian.com/commentisfree/2020/apr/27/gaps-sage-scientific-body-scientists-medical

The way in which the groups were commissioned to work on the relevant issues;
I can't comment on this as I don't have many details. What I found most disturbing early on was the lack of any independent public health or international infection control expertise on SAGE and the predominance of biomedical expertise over public health science. As the months went by and many public health voices raised concerns about UK strategy, I found it equally disturbing that the the Chief Scientific Adviser and Chief Medical Officer did not respond to this criticism in any way, nor make overtures to Independent SAGE and other public health experts to address these concerns nor to gain their support and inputs. It struck me that they were determined to pursue the strategy that they had fixed on from January 28 2020, at their very first SAGE meeting i.e no suppression of the epidemics were possible, despite all the evidence from east Asia. It is acceptable for scientists and doctors to make a mistake in good faith, but not to address it, and to stick with an inappropriate strategy in the face of conflicting evidence was very surprising.
I am unaware of any work that they commissioned on isolation strategies, and the necessity for local and social support for poorer groups to enable support to happen. Again they learnt nothing from East Asian

countries that provided sickness benefits, rental support, salary support, food deliveries, and follow-up of people who tested positive to ensure they were clinically not deteriorating.

The resources and support that were available;

I lack necessary information to make a proper comment. The problem was a systems failure with bad strategic decisions made because of an ad hoc process of pandemic advice and management. Resources were not a critical factor in the failures of strategy, but rather group think among an imbalanced advisory group.

The advice given and/or recommendations that were made;

From the beginning advisors adopted an incorrect and confusing strategy. They did not engage with international expertise in east Asia and the World Health Organization. By sticking to a 'herd immunity ' policy they squandered opportunities to prepare for testing, contact tracing, primary care triage and community mobilisation. Advice to government was secret, not independent, lacked pandemic expertise, and arose from group think in the absence of public health expertise. Civil service employees outnumbered independent views. And mathematical modellers were asked to lead the 'scientific advice 'without basic public health training. The advisory committees did not welcome outside dissident views especially from public health and social science.

The extent to which the groups worked effectively together;

I understand there were concerns expressed about the sharing of data with other universities than LSHTM and Imperial. I also understand there were conflicting opinions among behavioural scientists about 'fatigue' in public responses to messaging, which the senior advisers used to argue for delaying social interventions.

The extent to which applicable structures and policies were utilised and/or complied with and their effectiveness.

The whole public health system was a mess. PHE, the NHS, SAGE and the Department of Health lacked coordination and integration in both planning and implementation. SAGE led the strategic direction and didn't change course when it became evident they had made a major strategic error. As a result , community transmission soared, lockdowns were delayed, ended up being prolonged, and huge economic damage was done as our FTTI system failed to suppress further surges before a vaccine arrived.

Your views as to any lessons that can be learned from the UK's response to the Covid-19 pandemic, in particular relating to the work of SAGE and/or its subcommittees. 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.

1. In any pandemic the government and advisers should '**Act Fast and have No Regrets**'. We didn't do that.
2. We should have had **a standing and integrated pandemic management team**, with clear membership criteria and guidelines for the response and management structure in a pandemic. This PMT should meet annually for two days to review all aspects of pandemic management with strong international, WHO and public health inputs. Our ad hoc SAGE with no clear selection criteria, secrecy and lack of diversity was a systems failure which led to strategy failure.
3. Advice in the pandemic management team should be **Independent, Transparent, Diverse and Candid**. Government civil servants, even with scientific backgrounds, cannot be considered independent. All minutes should be published speedily, within a week of meetings being held. **Diversity** of experts from the four home nations, from vulnerable and BME groups and a gender balance is essential. Science is not just vaccines and diagnostics and drugs. It is population science, public health intervention science, community mobilisation, social science and indeed implementation science.
4. We developed **the wrong strategy** from the very beginning of the pandemic, at odds with WHO, early affected countries' strategies, and expert public health advice. There was a stubborn mentality within SAGE that they knew best. As Dominic Cummings described in his Select Committee strategy: "I*n response to the argument, "But, hang on a second—look at what they are doing in Wuhan; look at what they are doing in Taiwan; look at what they are doing in Singapore; look at what they are doing in South Korea," the entire assumption in Whitehall was, first of all, that will not work for them and they will all have second peaks later on and, secondly, it is inconceivable that the British public are going to accept*

Wuhan-style measures here. Even if we therefore suppress it completely, all that you are going to do is get a second peak in the winter when the NHS is already, every year, under pressure, so we only actually have a real choice between one peak and herd immunity by September—terrible, but then you are through it, by the time the next winter comes. If you try and flatten it now, the second peak comes up in wintertime and that is even worse than the summer." These false assumptions set in train a whole number of policy and planning errors.

5. **Who was in charge?** The organogram in the pandemic plan is confusing and months into the pandemic Sir Paul Nurse, the Nobel prize winning scientist and director of the UK's largest biomedical research centre, the Crick Institute, asked on BBC radio's flagship Today programme "Who's in charge? We are desperate for clear leadership at all levels." It was highly unusual for someone in his position to launch a scathing attack on the government.
6. The **failure to set up an effective find, test trace and supported isolation strategy** rests with many actors. It should have been integrated within NHS testing, local public health protection teams, and linked in with primary care, supported by 100-200 volunteers (retired health staff and community leaders) that could have been mobilised quickly and easily. Instead the government chose **an ideological strategy** to work through the private sector which failed to control community transmission and led to second and third waves of cases way beyond what might have happened if an effective system had been in place. This failure largely rests with PHE and the NHS management, but SAGE were key players in giving strategic advice to government and they did not pay attention to the scientific evidence for effective testing, contact tracing and support for isolation in communities socritical for pandemic management.
7. **Community engagement and mobilisation** is absolutely critical to the success of a pandemic response, as we've seen in HIV, Ebola, Zika and many other global infection emergencies and vaccine programmes. There was little devolution of power, delayed and inadequate financial support to public health teams, no attempt made to mobilise community health workers or contract tracers locally, and an entirely ideological and dysfunctional system using outsourced contractors who had no experience of their tasks, and no links with the NHS or primary care system.
8. **Investment in public health** has fallen over the past decade from an already depleted budget. The whole structure of research funding in the UK, through UKRI, Wellcome and other funding bodies is skewed hugely towards clinical and biomedical research. The Nesta Report, the Biomedical bubble in 2018 highlighted that almost 94% of research funds went on clinical and laboratory studies and only 3-4% on population and public health research. The Lansley Reforms damaged the management of public health by taking it out of the NHS and placing it under local authority control. This particularly downgraded infection control capacity within district public health systems. The growing climate crisis and the threat of more frequent pandemics only heightens the need for a thorough overhaul of public health systems, investment and the development of a community mobilisation strategy and capacity that is absent in the UK as well as many other western countries.
9. **Political leadership was shocking** with the PM taking little interest in the pandemic as it unfolded and not attending the first five Cobra meetings. The issues around procurement of materials, PPE and the issuing of contracts to VIP companies **for FTTI** without tenders was a new low for the Westminster government system in terms of political cronyism and frank corruption. The decisions to lift all public health measures after 'freedom day' and to studiously ignore waxing and waning waves of infection, hospitalisations and deaths, together with the lack of leadership and investment in ventilation and CO2 monitors, has contributed to the approximately >80,000 deaths from and with Covid since July 2021.
10. **Vaccine development and procurement was a success.** The credit must go to the university research teams, the decision of the CSA to recruit Dame Kate Bingham to coordinate the procurement of vaccines, and the whole vaccine roll-out team from Minister Zahawi down to the primary care workers in the NHS that helped coordinate it. Nonetheless the poor community engagement strategies have led to marked inequalities in vaccine uptake. The UK government's **opposition to a patent waiver,** along with EU countries, Japan, Switzerland and Canada, has contributed to the grotesque failure of global vaccination. More than 75% of low income country populations have had no immunisations at all. The failure to have a clear vaccination policy for children, despite a safe vaccine which is proven to stop hospitalisations and long Covid, has resulted from ambivalence in JCVI who have ignored, delayed and hindered a vaccine policy that has been implemented by the USA and 29/30 European countries with the exception of Sweden.

A brief description of documentation relating to these matters that you hold (including soft copy material held electronically). Please retain all such material. I am not asking for you to provide us with this material at this stage, but I may request that you do so in due course.

I am writing a book on the UK pandemic strategy, system failures and key ways in which we can strengthen our response and public health systems in future. I plan to finish it before the end of 2022, and hope to publish it in the first half of 2023. I'll be happy to share the proofs with the Inquiry if required.

Relevant articles I wrote and some of the interviews I gave are shown above.