Module 3 Week 3

1. Professor Adrian Edwards (Expert in General Medical Practice)
2. Tracy Nicholls OBE (Chief Executive, College of Paramedics)
3. Dr Michael Mulholland (Honorary Secretary, Royal College of General Practitioners)
4. Prof Sir Michael McBride (Chief Medical Officer for Northern Ireland)
5. Sir Gregor Smith (Chief Medical Officer for Scotland)
6. Professor Kevin Fong (Former National Clinical Adviser in Emergency Preparedness Resilience and Response)
7. Professor Sir Chris Whitty (Chief Medical Officer for England)

Professor Adrian Edwards (Expert in General Medical Practice)

The UK doesn't compare very well with other developed countries. The UK has 45 GPs per 100,000 population. This is a decline from 52 GPs in 2015. By comparison:

- Australia has 120 FTE GPs per 100,000
- New Zealand has 74
- Canada 103

Populations in the UK with the highest medical and social care need have the lowest level of provision. What that means is that a GP in the poorest areas will on average have 2,400 patients whereas a GP in a more affluent area will have on average 2,100 patients.

Very little had been done for preparedness in primary care. Much more should have been done. We were flying by the seat of our pants.

We had fewer new patients being diagnosed with conditions like diabetes or heart disease and that means their conditions were not being managed or treated. The numbers recovered in 2021.

Pulse Oximetry is a problem if it becomes a measurement in isolation but as part of a package it can help to assess a patients' clinical state and how they are managing their condition. We were aware that there were some concerns regarding potential inaccuracies in pulse oximeter readings in darker skins. That was raised in December of 2020, and NHS England issued advice in that same month in relation to the pulse oximetry programme in England. I don't recall receiving any such guidance.

Tracy Nicholls OBE (Chief Executive, College of Paramedics)

The College has around 22,000 members. We facilitated some meetings with the ambulance representative on the IPC cell. That did not lead to any changes. We were finding out about guidance at the same time as everybody else.

45 per cent of paramedics and 55 per cent of general practitioners said that one of the barriers to escalating care was access to an ambulance. The crews had patients sitting in an ambulance with them outside the ED for hours, but they were also acutely aware of all those patients who had not been seen by any healthcare professional waiting in the community and quite often deteriorating.

Ambulance trusts recorded the highest rates of sickness absence across the NHS. In my view, it was the failure to provide adequate respiratory protective equipment. Not all environments are the same. The ambulance sector is very unique. Making a risk assessment about Covid-19 was impossible because you didn't know what situation you were being sent to and it's difficult to weigh up risk if the patient is asymptomatic.

The College was not consulted about the guidance. It felt like the IPC Cell was a big echo chamber. Our members were telling us in huge volume that the guidance didn't feel right on the ground. It didn't feel right to be in front of a patient who was seriously unwell and be less than a metre from them and providing care and treatment to that patient. The IPC cell was saying there was no evidence of a risk but it's common sense to take a precautionary approach until such time as evidence is available that either confirms there is no risk or says otherwise.

Around 20 March 2020 The College wrote to Health Secretary Matt Hancock raising their concerns about the PPE shortage on the ground. We asked for a review of the unique environment in which ambulance workers were working and asking that a precautionary approach be taken. There was no response to that letter. That was disappointing.

The guidance was for FRSM and an apron unless undertaking an AGP when an FRSM would be recommended. The response from our members was horror. Paramedics are healthcare professionals and they felt they used for cannon fodder. The supply issue was very inconsistent. Sometimes the stock was incorrect or out of date.

The College requested enhanced PPE. We felt that The Association of Ambulance Chief Executives (AACE) also had concerns even though they were telling us they were happy with the guidance. it's not good enough to do your best you have to do what's necessary to succeed and that's very much what we were trying to put across to PHE. PHE responded that there would be no changes to PPE and reiterated the existing IPC guidance. We were completely unsatisfied with the response. It felt that there was a reticence to understand the unique nature of the work. Someone needed to apply some common sense, go into the back of an ambulance and have a look yourself at the space the crews are dealing with. Most ambulances don't have a window at the back so there was no ventilation, let alone going into patients' homes where the risk is unknown.

A statement was put out by the AACE following the advice from Public Health England, reiterating that there was no evidence that increasing the level of PPE in non-AGP scenarios would provide any additional protection. It didn't stop the ambulance crews getting Covid. There was no common sense.

The college put out a statement in support of the Resuscitation Council UK (RCUK) that CPR was an AGP. We knew our statement was contrary to national guidance, but RCUK are the experts in resuscitation. AACE supported the view taken by PHE. This was not understanding how people who perform CPR

actually work. We knew our statement would cause some anxiety, but you must tell the truth and say what you think is right.

Dr Michael Mulholland (Honorary Secretary, Royal College of General Practitioners)

There are 54,000 GPs across the UK. It was widely accepted that there were not enough GPs to meet the level of demand prior to the pandemic. General practice was already close to breaking point when the pandemic hit. By the second wave doctors were working at 127% of capacity.

Not all patients were set up for online consultations so I'm sure some people were left behind. We were very concerned that we knew that there were many people who would have diseases developing who did not seem to be coming into our rooms and seeing us in the same way. Agree that there should have been more clarity that we were open.

We publicly expressed concern on 26 March 2020 about the availability and guidance for PPE and wrote to the Secretary of State for health and social care, asking for clarity about whether GPs should begin wearing PPE for all face-to-face consultations because even at that stage we still did not know.

We could advise patients to shield if they felt vulnerable but that didn't always connect then with the national picture of who should be. At the start of the pandemic there were things like food delivery prioritisation if you were on the extremely vulnerable list but that didn't necessarily happen for those patients that we identified.

Oximeters were not new to the pandemic. We were not aware of the issue of incorrect readings with black and brown skin beforehand. I don't know why nobody had thought of it before then as they had become common practice in the past decade.

Prof Sir Michael McBride (Chief Medical Officer for Northern Ireland)

Northern Ireland's Chief Medical Officer since September 2006. The role is to provide independent professional advice to the health minister but is independent of political influence. My role as CMO is different to the CMO in England because I am a member of the Department management.

The pandemic hit just three weeks after the Executive had reformed. There were new ministers in post who were just getting into their brief. That did present some challenges.

I did not have a direct role in the IPC measures that were to apply in NI. We had an IPC cell which was headed by the PHA which has expertise in IPC. There was guidance in NI, but it fully aligned with the guidance in the UK. It was not my role to scrutinise the guidance. I must recognise my own limitations, and IPC is not an area of my expertise. If I had a concern, I would have raised it. My advice came from UKHSA. We did not have the technical ability to replicate that expertise in Northern Ireland. I accepted the advice that I was provided. I was aware of the different views about transmission. I am not an expert on that.

The population of Northern Ireland did not have the healthcare service that they needed at the start of the pandemic. It was not as resilient in 2020 as it had been in 2009. Many healthcare professionals were becoming increasingly demoralised at the gap between the need and our capacity to deliver.

28th Jan I sent a message to the other CMOs saying that there was evidence consistent with asymptomatic transmission during the incubation period. That was based on a case in Germany. The response from Chris Whitty was possibility of but not evidence of. I agreed. I was raising the possibility and that we should be alert to it and Prof Whitty was flagging that we did not have evidence of it. Knowing that asymptomatic transmission occurs is quite separate from knowing to what extent asymptomatic transmission occurs. It was actively considered by SAGE and NERVTAG. It wasn't until I think the NERVTAG meeting of 13 May that concerns were flagged about asymptomatic transmission.

In health services we put in place one-way systems, social distancing, moving to remote consultations, all those interventions were put in place because there was the possibility of asymptomatic transmission. So, while we didn't have evidence of it, we acted in a precautionary way because we couldn't be certain that it wasn't occurring. If it was, we did not know the extent of it.

When I reviewed the surge plan there were inconsistencies in terms of decision-making about escalation and how bed capacity would be increased, to ensure equitable access. I felt the plan needed more work and more regional coordination.

Surge planning would include staff capacity, but staff sickness would not come under my remit – that would be for the HR cell within the strategic cell. It would not have been possible for me to be across the detail of every single aspect. As Chief Medical Officer I would wish to know about staff deaths, but those professional policy responsibilities did not fall directly within my remit. There is a statutory requirement on trusts under the RIDDOR to report those occurrences. Note from Broudie Jackson Canter – you may recall the evidence from the HSE in week 1 from Richard Brunt of the HSE, that the HSE does not think RIDDOR applies to deaths from Covid - CTI should have explored this with the witness and whether the witness is concerned this represents a gap.

20 March direction was given for RQIA to suspend inspections. I did consider the need for them to review the IPC measures but there was absolutely a need to ensure reduced as far as possible all unnecessary footfall into healthcare facilities. The inspectors would have taken staff away from conducting their work so continuing inspections would have added more pressure to an already pressurised service.

There is no doubt that at this time there was significant anxiety that the demand for access to specialist service including intensive care would outstrip our ability to meet that demand. I established a Covid-19 clinical ethics forum which developed clinical guidance that was issued. We also held a series of workshops to ensure the guidance was understood. We also established a clinical ethics committee in every trust in Northern Ireland. We made clear in the guidance that if doctors faced ethical dilemmas, then advice and support was available to them within their individual trusts.

The guidance we issued was very clear that DNACPR only applied to CPR and not to other treatment.

I'm not certain that there was sufficient support available to healthcare workers working anywhere during the pandemic. And I only wish that we could've done more.

There were very significant pressures in the system at that time and those pressures may have resulted in communication not being as it should've been. And as a consequence, significant mistrust and distrust and hurt and sense of guilt has developed.

Sir Gregor Smith (Chief Medical Officer for Scotland)

SAGE was a useful source of evidence and scientific consensus from which the CMO could develop advice for the Scottish Government, but a drawback was that observers and Scottish Ministers could not ask questions directly of SAGE participants. This was why the FM arranged for Dr Calderwood then CMO to set up the Scottish Covid-19 advisory group. I have no doubt it presented a much greater opportunity for people in Scotland to be able to directly question the scientific advisers.

I tried to make it clear in public messaging that the NHS remained open for people who needed it. I was particularly concerned as we began to see a real fall off in the early referrals for the possibility of cancer, and people were not presenting with chest pain and heart attacks to hospital. That illness hadn't gone away, it hadn't disappeared, but people were perhaps absorbing that.

Aerosol transmission could present a higher population level risk in some settings. The kind of setting I am talking about there is a closed, poorly ventilated environment. I wouldn't have considered hospitals as being as part of that description because of the improved ventilation and filtering in modern hospitals. It doesn't mean that it is impossible, but it is less likely than crowded indoor environments such as crowded hospitality settings.

The WHO statement on 28 March 2020 that Covid is not airborne. I felt it was perhaps unhelpful to state so unequivocally. Because no matter how small, there was still the possibility of some aerosol spread. I thought the WHO was failing to acknowledge the possibility of aerosol transmission. I don't think I should have done more to express my view because I thought the contribution of aerosols was very small. If airborne transmission was confirmed to be a significant contributor to transmission, then, yes, there would be a need to emphasise some parts of the response more than we were currently doing, in particular ventilation.

Regarding IPC, we did not need to take additional measures unless there was new evidence that showed there was a significant level of transmission from aerosol spread. It would have been inappropriate to apply the precautionary principle because the evidence suggested that the contribution was small and, therefore, the gains which would be made by applying those additional measures would be so small that it would be disproportionate.

In Scotland IPC fell under the remit of the Chief Nursing Officer rather than the Chief Medical Officer, and it was an area which although I was involved at times, and gave views on, I wasn't closely involved in.

I was aware of the lack of consensus on which aspects of CPR were AGPs. I had no reason to dispute the view that had been taken by the IPC cell. They had considered it carefully and the evidence they presented around chest compressions seemed reasonable.

Personally, I didn't take any steps to ascertain whether the health boards were still experiencing shortages in supply of PPE because this responsibility lay with a particular Directorate team within Scottish Government.

Approval was given to use the time expired PPE. No concerns were raised with me about this at the time. Given that they had been through a quality assurance process and passed by the health and safety I didn't have any concerns. It would not have been the remit of my team to follow up on concerns about issues with time expired PPE but if the issues had raised with me, I would have taken it to the responsible team for them to look into.

DNACPRs should always be on an individual basis and there should never be a blanket policy. I have never seen any data on the number of DNACPR decisions taken during the pandemic. I am not aware of any breaches of professional codes of practice, and I am not aware of any cases that have been taken by any regulatory authorities against any clinicians in relation to that.

WARNING

Please note, the evidence from Professor Fong is incredibly distressing

Professor Kevin Fong (Former National Clinical Adviser in Emergency Preparedness Resilience and Response)

In March 2020 I received an email from a clinician saying that their ICU was full, that they were overflowing with patients, that they were running out of staff, that they were running out of basic items including drugs and equipment, that they were raiding their resuscitation trollies which are supposed to be kept for CPR when someone has a cardiac arrest. This was very early in the Pandemic. It was shocking account. I was surprised at the scale of the pressure they were facing, and that the data had not captured it. It was at odds with what the data was telling us. The data did not paint the picture of that severity of pressure.

One of the intensive care registrars said, "it's been like a terrorist attack every day since this started and we don't know when the attacks are going to stop".

Nurses were telling us that these diluted ratios with one specialist ICU nurse covering four or six patients at a time meant all they had time to do is manage the alarms, you are not managing the patients, you are managing the alarms, you are putting out fires rather than caring for the patient.

It reinforced my sense that there was a gap between what the data could tell us and what we could understand by talking to people. The data was important and necessary but it was not sufficient alone to give us a good picture of what the state these units were in.

Not everything that counts can be counted, we had to understand this anecdotal picture.

Hospital 2

It usually ran at 30 ICU beds but at the peak of the first wave they had 55. Nearly twice their capacity. They had declared a critical incident shortly before our visit. That says they are unable to maintain an acceptable standard of care without resort to extraordinary measures. They didn't have enough staff to look after the patients coming through the door. Several of their own members of staff had been admitted and died.

They ran out of bed spaces and had to put 2 patients in one bed space. They ran out of normal ventilators and pumps and had to sometimes make decisions about which patients could be taken off a ventilator for a period of time or who could manage a little longer on high flow oxygen without advanced respiratory support. None of that happens outside of Covid. They knew the difference between what they should be delivering and what they were delivering.

This is one of those things that is really very difficult to capture in figures. The scale of death experienced by the intensive care teams during Covid was unlike anything they had ever seen before. They are not strangers to death. They are the intensive care unit so look after some of the sickest patients in the hospital. But the scale of death was truly, truly astounding.

I had never seen anything like this. I have served in a clinical role in several major incidents, I was on the scene of the soho bombing in 1999, I worked in the emergency department during the 7th of July suicide bombing with the helicopter medical service. Nothing that I saw during all of those events was as bad as Covid was every single day for every single one of these hospitals throughout the pandemic.

Hospital 9

This hospital had a baseline capacity of 17 beds. Intensive care unit was operating at a nursing ratio of 1 nurse to 4 patients. intensive care is about the detail. Once you start diluting the detail it kind of stops being intensive care. There were so few staff that some of the nurses had chosen to wear adult nappies because there was literally no one to give them a toilet break and take over their nursing duties.

When we got to the emergency department, we were told that a patient had died in an ambulance waiting to get into the hospital the night before. The same thing had happened that morning. The oxygen alarms are going off. It was the closest I had seen to a state of collapse in my entire career.

In 2021 a consultant said to me *"we ran out of equipment, we ran out of drugs, we ran out of nurses, we ran out of goodwill".* That is what this thing did to those people and those units.

I think that it was easy to convince ourselves that we knew what was happening. But you don't know unless you are the people going into that shop floor. You don't know if you are not the people who are putting on PPE wondering if it is buttoned up okay, you don't know unless you have run out of body bags and put people in plastic sacks. You don't know if you are not the people who held onto i-pads while relatives are screaming down the phone. You don't know if you haven't sat in transfer vehicles next to a

patient who is dying of Covid wondering if your PPE is buttoned up well enough that you might not do the same. It is impossible to know.

Although this is not hard numerical data, the information is important. There is more to know than just what you can count. We go in and we check our machines and count our drugs every day to make sure that they are there when we need them. No one really does that for our staff. We do not have the right mechanisms to measure and monitor, protect and promote the well-being of the human workforce upon whom everything depends. If we do not care for the carers, they cannot look after the patients.

Despite the best efforts of everyone, the surge in demand for healthcare caused by the upswell of critically ill patients by Covid-19 meant that it was not possible to deliver the standard of care that would ordinarily be expected in a non-Covid period.

Professor Sir Chris Whitty (Chief Medical Officer for England)

Overwhelm was never defined. I think that it has become unfortunately quite a loaded term where people, depending on what point they are trying to make say things were or were not overwhelmed.

I'm not saying that where we were was anywhere short of incredibly difficult and in many places individual elements of hospitals, individual hospitals, individual bits of the system were coping nowhere near where they would be if Covid wasn't there.

The NHS continued to treat sick patients throughout. There was still a functioning health service. It was clearly functioning well below the capacity it would have normally.

The UK has a very low ICU capacity compared with peer countries. That is a political choice. Therefore you have less reserve when a major emergency happens. The various attempts at lockdown and other NPI's were really about minimising the impact.

You can buy beds, you can buy space. You can even put in oxygen and set up Nightingale hospitals but fundamentally the limit of that system is trained people. There is no way you can train someone in six weeks to have the experience of an experienced ICU nurse or an experienced ICU doctor. It is simply not possible.

WHO tweet that Covid is not Airborne.

I was surprised by the WHO tweet. Of course, there was some airborne transmission, but the question was whether it was a trivial amount or significant. The data was not yet clear enough to decide one way or the other. So, this tweet seemed surprisingly definitive. WHO was well aware this tweet had not landed well. Trying to get WHO to remove a past tweet did not seem to me to be one of my roles.

The UK was not bound to follow any advice from WHO.

I worried at the beginning; I still worry actually in retrospect about did we get the level of concern right? Were we either over pitching it so that people were incredibly afraid of something when in fact their

actuarial risk was low or did we not pitch it enough, so they were unaware of the risk they were walking in to. That balance is very hard. Some people would say if anything we over did it rather than under did it.

Shielding

- By 7 May 2020 there were 2.2 million people who were CEV. The point of Covid was to do a much more accurate assessment of risk for people dying of Covid. As a consequence, £1.7 million patients were added to the list. Down Syndrome was added in Sept 2020, the others were added in Feb 2021. The big delay was in pulling data from multiple sources e.g., death is from one place and ethnicity is another.
- I think shielding was both beneficial and harmful. Whether it led to a reduction in infection and therefore a reduction in mortality is extraordinarily difficult to test because the group of people who were shielded were by definition at substantially greater risk than the general population.

Aerosol

- I'm still unsure whether it reaches that level of importance (dominant route) but it is certainly substantially more important than the collective view was right at the beginning.

FFP3 vs FRSM

- The evidence that there is a difference between these masks is in fact extremely weak. That may develop over time. That's not to say it doesn't exist. It simply isn't there at this point.
- Are there any down sides to wearing a FFP3 compared to wearing a surgical mask? The answer is pretty clearly, yes.
- People have talked about the "precautionary principle". That only works where there is no downside and if there is, you are talking about a balance of risk and balance of risk is a different concept.

PPE Supply

- Shortages of supplies were certainly felt locally even if they weren't true at a national level
- There was a concern that the reason that people were giving IPC advice was because of shortages
- Communication about that was not as well handled as it should have been. We should have predicted it and done that better.
- I wore the FRSM on a ward with people with Covid. I followed the guidance. Had the guidance been FFP3 I would have followed that. Query - if the guidance had been for FFP3 but none were left – would he have felt safe enough to go onto the ward?

Asymptomatic transmission

We should definitely assume some asymptomatic transmission. There is question about the level of its contribution. But making that assumption is not cost free – you would then be saying presence of

symptoms is irrelevant and everyone is the same risk of spread – do you stop everyone from going about their business when we don't have a test?

AGPs

- The question of what is an AGP was probably the biggest source of tension in the medical profession.
- You absolutely do not want to put someone doing emergency resuscitation at risk but a delay of even minutes in that situation also puts the patient who has collapsed at significant risk and that may be a risk of death or brain injury.
- Therefore, you don't on the one hand want to not have protection that is needed but you do not want to have something which is going to delay things if it is not needed.
- Settling this question seems to me a fundamental issue
- If you look at expert bodies around the world they have not come to a settled view. So the debate in the UK reflects the international experience as well.

Clinical Prioritisation Tool

- There are many things I would do differently. This is not one of them.
- We might well have been in a situation where very junior staff were having to make incredibly difficult decisions for which they were not experienced enough. They would have needed the support from a tool to do that.
- It was a relatively mechanistic system that deviates from normal practice, and it wasn't appropriate in the views of people who wrote it.
- We didn't need at this time, hopefully we will never need it but having the debate seems to me a sensible thing to do.
- You would need to make sure the disability groups who had concerns and the mental health charities who had concerns could talk those through. I would much rather we would never use it.