

Education Committee

Oral evidence: [Covid-19 and the vaccination of children](#), HC 720

Wednesday 22 September 2021

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Members present: Robert Halfon (Chair); Apsana Begum; Tom Hunt; Dr Caroline Johnson; Ian Mearns; Nicola Richards.

Questions 1 - 86

Witnesses

[I](#): Professor Chris Whitty, Chief Medical Officer for England; Professor Jonathan Van-Tam, Deputy Chief Medical Officer for England; Professor Wei Shen Lim, Chair, JCVI Covid-19 sub-committee; Dr Camilla Kingdon, President, Royal College of Paediatrics and Child Health (RCPCH); and Professor Sir Keith Willett, SRO, Covid-19 and Flu Vaccine Deployment, NHS England and NHS Improvement.

Written evidence from witnesses:

- [Add names of witnesses and hyperlink to submissions]

Examination of witnesses

Witnesses: Professor Chris Whitty, Professor Jonathan Van-Tam, Professor Wei Shen Lim, Dr Camilla Kingdon, and Professor Sir Keith Willett.

Q1 Chair: Good afternoon. Thank you very much for coming today, and for your public service and everything you have done to try to control Covid. For the benefit of the tape and those watching on Parliament TV, can you introduce yourselves and your titles? I will start with the Zoom witnesses first and Professor Wei Shen Lim.

Professor Lim: I am chair of Covid-19 immunisation on the Joint Committee on Vaccination and Immunisation.

Professor Van-Tam: Good afternoon. I am deputy chief medical officer, Department of Health and Social Care.

Professor Sir Keith Willett: Good afternoon. I am the senior responsible officer for the Covid vaccine deployment programme in NHS England.

Dr Kingdon: Good afternoon. I am the president of the Royal College of Paediatrics and Child Health.

Professor Whitty: I am the chief medical officer for England.

Q2 Chair: I will direct this question to Professor Whitty. You have suggested that vaccinating 12 to 15 year-olds will reduce school disruption, improve mental health and enhance preparedness in case of a winter surge. Which of these factors was most important or influential in the decision-making process? Can you explain the reasoning behind these priorities?

Professor Whitty: I am going to give a bit of context to this because I think it is important that people understand the background.

As I think everyone on this Committee knows, the Joint Committee on Vaccination and Immunisation, JCVI, gave advice, and I am going to read two bits from its advice that I think are critical to understanding what we did. "Overall, the committee"—this is JCVI—"is of the opinion that the benefits from vaccination are marginally greater than the potential known harms". JCVI started off from the principle that if a child was vaccinated they were at lower risk, albeit by a small margin, than if they were not vaccinated. I am making that point clear because in some of the commentary I think that point has been lost.

It then went on a bit later in the same paragraph to say it is not within the remit of JCVI, "to incorporate in-depth considerations on wider societal impacts, including educational benefits. The government may wish"—and I am quoting JCVI directly here—"to seek further views on the wider societal and educational impacts from the chief medical officers of the 4 nations, with representation from JCVI in these subsequent discussions." What the chief medical officers were doing was responding



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to the fact that that had been the suggestion of JCVI to Ministers and Ministers followed that suggestion from JCVI, and they asked us, and asked us specifically along the JCVI advice. That is the first general point that should not get lost in this, we were following the JCVI suggestion.

The second point was that the CMOs, in making their decisions, took very substantial care to make sure that their advice was firmly in the middle of what we considered to be medical opinion. For that reason, we first consulted the presidents of the relevant royal colleges, including Dr Kingdon but also the Chair of the Royal College of General Practitioners, and each of these consulted their own senior members, the president of the Faculty of Public Health, the Chair of the Royal College of Psychiatrists and the president of the Academy of Medical Royal Colleges, representing all of the medical royal colleges. We also consulted public health experts and directors of public health from around England, Scotland, Wales and Northern Ireland.

I am making that point because it has to be understood that our view is the mid-point of medical opinion. There are people who think we should go slightly further and there are people who are more cautious, but we consider that this is the mid-point of medical opinion. The first point on this is that—

Chair: We have lots to get through.

Professor Whitty: I agree, Chair, but this point has been misrepresented in social media. I think, therefore, that this is a great opportunity to correct the record through Parliament more generally.

The points that were important to us were, first, JCVI's first point, that the benefits outweighed the risks but by a small margin. That is important as a first starting point. If that had not been the case, obviously we would not even have started down this path.

We then started off from a position that had been our consistent position. I would also like to read from what we said in August last year, which is the consistent position of the chief medical officers and deputy chief medical officers, "We are confident that multiple sources of evidence show that a lack of schooling increases inequalities, reduces the life chances of children and can exacerbate physical and mental health issues. School improves health" and so on. We gave a long letter that we wrote to parents on that subject. This in a sense was our longstanding position.

Thirdly, we then looked at the question of whether it was likely that vaccinating children, in addition to its individual benefits identified by JCVI, could reduce the risks that children would get infected, for which there was clear evidence, and further then reduce the risks that there was disruption in schools. Our view was that while that was not going to be a silver bullet, and we were very clear that this would not be a silver bullet, it would significantly reduce—the extent we don't know for



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absolutely sure—the amount of disruption. I think that the logic of that is really important.

Q3 Chair: Okay, I understand that and you have said this publicly. The JCVI also said, “The available evidence indicates that the individual health benefits from Covid-19 vaccination are small in those aged 12 to 15 years”. It says, “The committee is of the opinion that the benefits from vaccination are marginally greater than the potential known harms”. Could you define what is meant by “marginal” and whether or not the vaccination will protect children from infection or serious illness?

Professor Whitty: I will have a first view on that but I would like to get some additional views from the chair of JCVI, who is one of your witnesses, and from Professor Van-Tam, who is an expert in this area.

Chair: Can I start with you first?

Professor Whitty: Yes, exactly, I am going to give you my own view, but I just want to make clear that I think it is important you get a view more widely.

Chair: Absolutely.

Professor Whitty: We started off with JCVI’s own numbers and we did not at any point redo its homework. We simply took the numbers that JCVI put. Its estimate was that per million first doses—first doses because that is what we are recommending on this—it would stop on average 87 hospitalisations. It would stop slightly over 15 PIMS-TS cases, and paediatricians here could give an explanation of that, but it is an unpleasant inflammatory condition that children can get. It would stop around two intensive care admissions. Set against that was the possibility of myocarditis, which can happen both with infection and with vaccination. Both of those; really important. It is not just with vaccination. It estimated three to 17 cases. That was what it meant by marginal in terms of numbers. These are small numbers. What we have said, again consistently—the CMOs and JCVI all agree—is the risk to children is small and the risk of vaccination is small. Both of them are very small.

Q4 Chair: It also said that the individual health benefits from Covid-19 vaccination are small.

Professor Whitty: All of us are completely agreed on this and there is no point of disagreement between JCVI and the CMOs on this. Professor Lim might wish to expand on that as chair of JCVI.

Professor Lim: Thanks very much. I hope that you can hear me fine. I want to emphasise two main points. The first is that the Covid-19 vaccines that are regulated in the UK are all extremely safe. The risk that we are talking about here, and in particular you have raised myocarditis, which is inflammation of the heart muscle, is an extremely rare event. The vaccines are overwhelmingly safe.



The second point to make is that for children who are 12 to 15 years-old, who do not have an underlying health condition that puts them at higher risk of Covid-19 or children who are otherwise healthy and well, their risk of severe illness from Covid-19 infection is also very, very small. Most of them have very mild infections. Many of them have no symptoms whatsoever. It is that that underlines the reason why we can say to children that they should go back to school and it is safe to go back to school. We are talking here about very—

Q5 Chair: Does the vaccination protect children from infection or from serious illness?

Professor Lim: The vaccination does protect children and adults from infection and severe illness.

Chair: So from both.

Professor Lim: But the number of children who get severe illness is very, very small. We are talking here about two very small, different things in the balance. Overall—

Q6 Chair: You also say, “The margin of benefit, based primarily on a health perspective, is considered too small to support advice on a universal programme of vaccination of otherwise healthy 12 to 15 year-old children at this time.” Do the other professors agree with this statement that you made as the JCVI, or could you explain that?

Professor Whitty: I can give a short one-word answer: yes.

Chair: And yourself, Professor Van-Tam?

Professor Van-Tam: Yes, I think that Professor Whitty has made it very clear that there is no disagreement from anyone within the CMO apparatus about the conclusions that JCVI has come to.

The contextual point that I would add is that we are currently facing widespread circulation and, indeed, complete dominance of the Delta variant of SARS-CoV-2 virus. We know very clearly from the epidemiological data that this is about 60%, possibly slightly more than that, more infectious than the Alpha variant that was circulating in very early 2021. Thus, I think it is very important—

Q7 Chair: Can I just come in on that? I beg your pardon for interrupting, but the JCVI statement also said, given what you have just said, “the committee is of the view that any impact on transmission may be relatively small, given the lower effectiveness of the vaccine against infection with the Delta variant.” From what I understand, and you may correct me, children are not significant vectors of transmission in general but especially not of the Delta variant.

Professor Van-Tam: I will ask Professor Lim to come back to that point about the vaccine effectiveness, but lower does not mean anything close to zero. That is an important point. The point I was going to make was



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that because the Delta variant is so infectious, we are not looking at a theoretical risk of children 12 to 17 becoming infected. I think that it is really quite inevitable that they will be so at some point. The point of infection, if left to happen, is not of their choosing and may be at a point in their educational careers, thinking particularly of GCSEs and A-levels, when it is extremely inconvenient to be laid low, albeit for a short number of days, with cough, fever and respiratory symptoms.

Q8 Chair: But we know that there is low transmission, which you have acknowledged, and we know that there is a marginal benefit.

Professor Whitty: Can I correct you, Chair? We did not say that. Absolutely, that is not true. There is definitely substantial transmission happening in this age group. In fact, the age group we are talking about is the one in which the highest rate of transmission is currently occurring, as far as we can tell from the current data.

Q9 Chair: But the JCVI said, "the committee is of the view that any impact on transmission may be relatively small". If the impact is relatively small, what is the case, then, that you are making?

Professor Van-Tam: Chair, I think that the Committee needs to hear, first of all, what the impact on the prevention of infection is estimated to be now, with the current vaccines, against the Delta variant, and then what the additional estimate on reduced transmission is on top of that. I think you should probably hear that from Professor Lim in the first instance.

Chair: I am very happy to hear from Professor Lim.

Professor Lim: I want to clarify that the impact on transmission is something that we all hope that vaccines would have, and a very good vaccine, for example, would have what we call sterilising immunity. It would stop somebody being infected and stop them being able to transmit to somebody else next to them. If you have a vaccine that is able to do both of those things, then it is possible to vaccinate a large number of people and it will stop the virus transmitting.

Unfortunately, with the Delta variant, as you probably have heard elsewhere as well, we do not think it is possible to stop transmission completely. That does not mean that there will be no impact on transmission; it just will not work quite as well as it would have done if we were dealing with Alpha or the wild-type variant. We are talking about a lower effectiveness against infection and transmission.

The estimates of vaccine effectiveness against infection and transmission are not well defined for Delta, they are better defined for Alpha. If you combine the two, estimates range from around 50% to a top maybe of about 70%, going down to a low of about 30%. It is that sort of range that we are talking about. We are certainly not talking about 80% or 90%, which would be a very good vaccine. I am afraid we are not there for the Delta variant.



Q10 Chair: I will move on because my colleagues will expand on this. I know that some of my colleagues are going to ask about school disruption. The JCVI said that delivery of the vaccine would be disruptive to education in the short term. When you made this judgment, did you calculate the amount of school days that would be lost as a result of the rollout of vaccines to children? What have you done to assess the impact—and I am not just talking to the JCVI, I am talking to all of you in this—of the side effects of the vaccination in terms of lost days at school by children?

Professor Lim: We did consider it, although we didn't quantify it. Let me give a flavour of what we considered in terms of deployment affecting school and school education. A vaccine programme that is deployed from a school-based programme requires obviously school nurse-led programmes, but it also requires the school itself to engage. That may mean taking over school halls and taking children out of classes in order to be vaccinated. We know that with the Covid-19 vaccine it is not like the flu vaccine. The Covid-19 vaccine has to be given as an injection and there is a 15-minute wait after being injected. All of those have to be considered when thinking about how to deliver a school-based programme.

We are also aware that there will be side effects just from receiving the vaccine. Some people at the time of receiving a vaccine may feel dizzy. This happens more often—

Q11 Chair: You have set this out, so what I am asking is what analysis has been done, whether by the Department for Education or the Department of Health or by you here, in terms of lost days due to both the rollout of the vaccine and also possible—and I stress possible—side effects of the vaccine? What is the modelling that has been done and the impact that that may or may not have?

Professor Lim: We have not tried to calculate the number of days off from vaccine deployment itself. That is not a health item that JCVI would calculate.

Q12 Chair: Has anyone else on the panel, any of the other professors, modelled this at all? You have been very clear about the number of school days that you think will be made up and stop being lost, but I want to understand whether you have made that calculation as well.

Professor Whitty: There are two separate elements to this, Chair, and it is obviously a very critical question.

The first thing is that, of course, you are not comparing a child being vaccinated against nothing happening. You are comparing a child being vaccinated against a near certainty that child will get Covid. That is the correct comparison, not against nothing. Under that environment, our estimate is probably you would have fewer days lost as a result of being vaccinated compared to allowing people to be infected. Some children will have significant symptoms and you would expect a child who was actually



infected not to be at school. In that sense, that comparison goes in favour of the vaccine.

We then looked very specifically at the broader question about what would happen in terms of disruption. There is some modelling, which is online and we have put links to it online. At the very lowest level, and this is assuming in my view quite optimistic numbers, there was an assumption that vaccination would probably reduce by about 110,000 days—

Chair: We are going to come on to that.

Professor Whitty: —but much higher numbers were we to have significant surges subsequently.

Q13 **Chair:** What I am asking is what is the modelling on the days potentially lost for, as the JCVI says, short-term disruption but also if there are side effects. You must have done that modelling alongside the modelling that you have just pointed out.

Professor Whitty: I will ask Professor Van-Tam to come back on this, but our view is firmly that people who have an infection are likely to be off school for longer than people who have a vaccination, on average. Therefore, since virtually any child unvaccinated is likely to get an infection at some point between 12 and 15, that is the correct comparison, not against nothing. That is a key point. Professor Van-Tam, do you want to add to that?

Professor Van-Tam: There is very little I would add to that, other than to support it and to say that we are talking here about the first dose of the Pfizer BioNTech vaccine. I think it is very clear from the extant data collected by the MHRA and others that the side effects associated with the first dose of the Pfizer vaccine are lower than the second.

Chair: Camilla, you were looking at me. Was there anything you wanted to say on that or not?

Dr Kingdon: No, thank you.

Q14 **Chair:** Okay. Finally for now, before I pass over to Dr Caroline Johnson, can I ask you about the issue of the right to a private life? We know that Article 8 of the ECHR protects the right to a private life, which includes an individual's right to confidentiality in terms of the respect of health and medical treatment. If vaccinations are carried out in school, will there be a guarantee that confidentiality will be maintained and that for those who choose not to for one reason or another there will not be any kind of vaccine favouritism or they will not be stigmatised in any way for not going ahead with that? Will you publish guidance so that you ensure that each child's right to make their own confidential decision as to whether or not to have the vaccination is respected?



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Professor Whitty: Can I suggest that Dr Kingdon and then Professor Sir Keith Willett answer that because they are much more involved in this? My general point would be that the chief medical officers were clear that the views of families should be respected and no one should be stigmatised in either direction.

Dr Kingdon: Professor Whitty has essentially outlined exactly our view on this. We have been very clear from a royal college perspective that whatever choice a child makes or whatever choice a family makes, there should be no judgment attached to it. We would expect that children and families who decide not to take up this offer are able to participate in a full range of activities and that their decision is respected.

Chair: But it will also be kept confidential.

Dr Kingdon: In the schools immunisations programme, which delivers a number of other vaccines, these processes are well tested. Clearly, the process around this vaccine is slightly different because of some of the practical issues that we have already discussed. Professor Willett will, I am sure, go into some detail about this, but there is no reason to expect that any privacy would be overcome.

Chair: We will start with Professor Willett first because he was specifically referred by Professor Whitty, and then Professor Van-Tam. Then I will bring Tom in briefly on this point, and then I will bring in Caroline Johnson.

Professor Sir Keith Willett: I think that the context just needs to be set around the school-age immunisation services that are used.

Once we receive a direction from the Secretary of State to mobilise an immunisation programme through what is called the commissioning intentions under section 7A, we institute a process to do that. In England, we have chosen to use the established and well tried and tested programme of using school-age immunisation services. As Professor Kingdon indicated, these are well established and lead other vaccination programmes. It is important to understand that they are school-age immunisation services and not school services. That means when we commission them through our regional NHS England teams, we commission them to offer vaccination to all school-aged children, whether they are in mainstream education or in other environments, detained settings, child mental health units, home educated or whatever. That is important.

These school programmes have been running for a long time with very professional, experienced and trained healthcare staff. They go through a process. Consent is not an event, it is a process that involves the school immunisation services contacting and working with the school to get information out to the parents and to the children, which is appropriate information. That is an important part of the consent process. The school also provides the school immunisation service with the contact details—



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Chair: Can I just interrupt because we have a lot to get through? What I am talking about is confidentiality. We will come on to consent in a bit, but what I am talking about is confidentiality.

Professor Sir Keith Willett: There will be no breach in confidentiality, as has already been explained. This is done as a closed service that is commissioned by the NHS.

Professor Van-Tam: Chair, you asked about potential discriminatory behaviour based on whether a child had or had not received a Covid-19 vaccine. Accepting that the processes are slightly different, the UK has been immunising children of school age against another respiratory virus, influenza, for more than a decade and I have never once heard of any differential or discriminatory treatment of children according to whether they had or had not had the live attenuated influenza vaccine nasal spray delivered by the school immunisation service. While I understand the theoretical question you are raising, I believe I am extremely reassured personally by the extreme competence of the system to have avoided that for at least a decade in terms of influenza immunisation.

Q15 **Tom Hunt:** We have heard a lot so far about the benefits that having the vaccine can provide for the 12 to 15 age group. We have also heard about transmission and how potentially with the Delta there is less of an effect but still some effect. I could see how it is conceivable that 12 to 15 year-olds having a vaccine could provide wider societal benefits beyond just that age group. Was your recommendation solely about the welfare of 12 to 15 year-olds in terms of mental health, education and also the threat of the virus, or did it to some extent take into account what is in the best interests of wider society and potentially those in other age groups?

Professor Whitty: It is a key question and the CMOs were really clear that the only evidence they would consider was things that directly or indirectly were beneficial or problematic to children 12 to 15. No other age groups, we only considered that age group. There may well be wider societal benefits. They were not part of our considerations at all and we have not mentioned them in any of our arguments one way or the other. We have stuck strictly to that age group.

Q16 **Tom Hunt:** I guess sometimes it can be a bit complicated, though. For example, if by having the vaccine 12 to 15 year-olds were less likely to transmit the virus to somebody who may be vulnerable to Covid and has not had a vaccine, that could prevent pressure being put on the NHS, or it could—we hope not—lead to a situation where there could be more disruption to education. I guess sometimes it is quite difficult to entirely disentangle what is in the interests of 12 to 15 year-olds' education disruption and also what—

Professor Whitty: You are right, but we constructed our own views very narrowly. The exception to that was a decision that JCVI had already made, which is that where a 12 to 15 year-old child—and Professor Lim



can expand on this if you want—was living with a child or adult who was highly immunosuppressed or had very significant risks, then offering vaccination—this is in advance of our views—was a reasonable thing to do very narrowly within the family. More widely, we kept entirely to benefits to the 12 to 15 year-old age and left all the other theoretical potential benefits out of the equation because we considered that that was the right ethical framework.

Chair: Professor Van-Tam, could you answer briefly before I come on to Caroline?

Professor Van-Tam: I would add to that and say that our terms of reference were very clear, written down and agreed on, and they are as Professor Whitty says. I was also, of course, in a great many of the meetings where the breadth of the medical profession offered their views. I can say categorically that if ever their views strayed into, “And there would also be knock-on effects in X, Y and Z groups” there was a very clear and deliberate suppression of those views to say, “That is fine, that may well be a valid view and an important point, but we are not considering it in any way, shape or form in our deliberations”. I am very categorical about what I heard and how I heard those being dismissed in the sense of the considerations of the UK CMOs. You should hear that from me as a witness.

Q17 **Dr Johnson:** Thank you for coming today. I should declare an interest first of all in that I am a member of the Royal College of Paediatrics and Child Health as a practising paediatrician.

I wanted to ask you a question slightly obliquely related to this, first of all, Professor Whitty. As part of my reading around this, I found that Professor Viner, Dr Smith and others had researched the cases of the 61 children who sadly died in the first year of the pandemic within 28 days of a positive coronavirus test. They found that, of those, 25, or just under 41%, had died of coronavirus and the remaining 60%-ish had died of other causes but had a positive test at the time of death. There has been lots of speculation about the accuracy of the death figures that are on the news each night. Do you think that a 40:60 split is representative of the adult population were it to be so thoroughly reviewed as the child population has been?

Professor Whitty: On those particular numbers, it might also be worth getting a view from Dr Kingdon on the paediatric side.

What we can see around the world is that people both overcount and undercount Covid. We know that some cases of Covid are going to be missed and we know that some people are dying of Covid who are not recorded as Covid. That is true in every country. The UK is better than average at picking them up, but I think we still miss them. We also know that there will be people who will come in with a positive Covid test and genuinely have Covid but, in fact, that is not the reason why they died. You have to have a definition and the case definition we currently have of



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28 days is considered to be a reasonable compromise, accepting there will be some people either way.

I have said very firmly from the very beginning of this epidemic right back at the beginning of last year that ultimately the most important measure is all-cause excess mortality. In a sense, you take the mistakes that are made in diagnosis in either direction out of the equation. You also take into account the indirect effects of Covid, which are very important. Excess mortality numbers around the world look quite different from the Covid numbers, and in most countries they are higher. In the UK they roughly equate, although at the moment they are running slightly lower. I would urge people that in the long run, not immediately, I do think all-cause excess mortality is the key metric.

- Q18 **Dr Johnson:** Thank you. You have been very clear in the various briefings that you have done in No. 10 for the media throughout the pandemic that your role is to provide medical advice rather than political advice. Was the decision that you made on children's vaccines entirely a medical decision and not either political or influenced by politicians?

Professor Whitty: Yes, I can categorically say that. There is no point in asking for professional advice, and you as a doctor will completely accept this, if you then take into account extraneous things. Ministers ask us for a professional view and we give them a professional view. They then have an important political step, which is their decision. We hand our professional advice over, so our professional advice is completely medical.

- Q19 **Dr Johnson:** On the reasons that were given for children getting their vaccines, the first one was, "the mental health benefits that come from people knowing that they are protected from this deadly virus." That was stated by the Minister in his statement to the House and also by the Health Minister yesterday. Why do children need vaccinating to protect them from fear of something that is so unlikely to harm them?

Professor Whitty: In a minute I am going to ask Dr Kingdon to comment on that, but can I be very clear? In fact, it goes back to your last question. I am responsible for what I write and say. I don't consider that you should assume that exactly what Ministers say is exactly what we have advised. Our advice is written down extremely clearly and it started off with the physical benefits identified by JCVI. It went on to the wider benefits of public health and public health from the point of view of education, and it also then went on as a third line to some of the points that were made very forcefully to us, to be clear, by general practitioners, by public health people and by paediatricians as part of our evidence gathering.

I would like to ask Dr Kingdon to comment, but I want to be clear: please don't assume that what I say is what a Minister thinks and equally don't assume that what a Minister says is what I think. Those two are separate sets of issues.



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Q20 **Dr Johnson:** The reason given, which was quoted by Mr Zahawi and others yesterday, was, “mental health benefits that come from people knowing that they are protected from this deadly virus.” Presumably, the best way to protect a child from such thoughts is to reassure them that they are not at huge risk of dying of this virus, which is undoubtedly deadly but almost certainly not to a healthy child. Are you saying that you would not consider that a reason for vaccination?

Professor Whitty: What I think you are implying is that the order in which you are quoting a Minister saying it is the same as the way we have done it. What I have done is laid out what our professional view is, and I would really like Dr Kingdon to comment as a paediatrician on this.

Dr Johnson: But it is based on what your advice is and it was your advice on which the Government made their decision, with respect.

Professor Whitty: With respect, the advice we gave is written down extremely clearly with the logic laid out. Mental health is one element of that, an important one, which—

Q21 **Dr Johnson:** Mental health is important, I agree with that. I am sorry to interrupt you. The mental health benefits that come with knowing you are protected from a deadly virus, is that one of your reasons or is it not?

Professor Whitty: No. That is, in a sense, a simplification of a much wider point, and Dr Kingdon is in a much better position to lay out what we actually meant.

Dr Kingdon: It is important that we do talk about the mental health consequences of this pandemic. Fortunately, children have been very minimally affected. Tragically, there have been a small number of deaths and, in addition, there have been a small number of children who have been very ill, but the vast majority have been mildly or, in fact, entirely asymptotically affected by the virus.

Where we have seen the bulk of the impact from the pandemic is around mental health, lost educational opportunities, some of the anxiety that goes with the disruption to life because of schools not happening and so on. If we think about mental health in the broadest sense, then providing reassurance to children—yes, it is a deadly virus globally but it is not a deadly virus to children. The clarity of messaging is extremely important.

In the soundings we have taken from children and young people through the royal college, because we have about a thousand children who we work with and form views with and test some of these ideas with, one of their most consistent messages to us has been around saying, “We want clear information, we don’t want this sugar-coated, but we want to understand what the issues are for us”. The absence of clear information plays into the anxiety and stress and disruption to normal life that children have experienced for the last 18 months.

Q22 **Dr Johnson:** Thank you. I was going to come to this question later on



but it is probably a good time to come to it now.

You wrote a letter to all members of the Royal College of Paediatrics and Child Health, of which I have said I am one. As part of that, you have suggested that children should not be tested if they are asymptomatic. At the moment, children, unlike adults, are being tested routinely in school; my daughter will be having her Covid lateral flow test today, as she does twice weekly. You have suggested that that is stopped. Does that contribute to children's anxiety, that regular testing, and can you elaborate on why you think regular testing of asymptomatic children should be stopped?

Dr Kingdon: I should stress that this is the view of the Royal College of Paediatrics and Child Health, this is not something that fellow panellists may necessarily agree with. It is our view that because children are so unlikely to be seriously affected by the viral infection, anything we can do to give them back their normal lives—let's face it, having a swab shoved up your nose twice a week is not part of a normal life for a child.

Dr Johnson: It is not very pleasant.

Dr Kingdon: There are an awful lot of children who, frankly, loathe the experience. We very much want to move as paediatricians towards a place where SARS-CoV-2 is treated like other viral infections that affect children. In our experience, we are not seeing problems from Covid infection to any greater extent compared to other viral infections. We ultimately would like to move to a position where if your child is ill they stay at home, regardless of what has caused that state of unwellness, whereas if they are well they go to school. Hence why we have put it out there that we would like to suggest a review of some of the measures that are currently in place in schools around particularly Covid-19.

Q23 **Dr Johnson:** Thank you. I appreciate that. The other thing I wanted to look at is the second reason that was given for vaccinating children, which was about the disruption to education. In some ways, the figures have been slightly confused. You said a moment ago that it was near certainty that children would get it. What proportion of children do you think have already had it? I know that the ONS has estimated recently 50% to 70%, but what is your estimate of it?

Professor Whitty: It varies by age and it does also vary by setting. If we go for roughly half, I think that is a reasonable stab at this. That is half over the period of the entire epidemic to date, and we have quite a way to run. We are running into winter so there is still quite a lot of damage that could be done in terms of disruption.

Q24 **Dr Johnson:** You said it was a near certainty they would get it, but the estimates that you have published on the GOV.UK website of the effects of the vaccine is that if the children were vaccinated it would prevent 40,000 to 60,000 cases. I appreciate that you are assuming in that that you get 60% vaccination, so there is a potential for that to increase, but you are talking about 1.5 million children in this age group that have not



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had the disease already. Why is there such a big discrepancy between those two numbers?

Professor Whitty: What we are assuming is, first, that the vaccines are not fully effective for the reasons Professor Lim was talking about, and secondly, I assume you are talking about the modelling papers that have been done here?

Dr Johnson: You are saying you have 3 million children of which 1.5 million children have already had it, so arguably the vaccine has not really helped them at all.

Professor Whitty: No, that is not—well, let's come back to that. That is not strictly true.

There is a group of people who have not had it. Let's make an assumption that the great majority of children who have not currently had Covid are going to get it at some point over the next period. It won't be necessarily in the next two or three months, but they will get it sooner or later because this is incredibly infectious. Because immunity wanes, we are not going to see a situation where it just stops at a certain point. So, over the next years we will see that happening.

Vaccination will reduce that risk, as Professor Lim was saying, by—I am going to say for the sake of argument—50%. It is probably slightly more than that, but 50% for the sake of argument. Some of the people who have already had the infection will go on to get it a second time, that we know, so the vaccination will further reduce that number. It won't produce a complete protection for those who are vaccinated, and there will be some people who will not even be infected at all, but they will be a very small number. You can put a lot of different assumptions into this and the bit that we don't know most and the one that is going to have the biggest impact, I think, in the medium to long term is how rapidly this wanes in terms of protection. Assuming no new variant, and that is a very important assumption, that probably is the thing we don't know most, so the confidence intervals around almost all of the numbers are quite wide. We can give broad indications of this but with all of these, and the modellers would agree with this, no one should put too much emphasis on individual numbers. I think we have to see them as a central projection within quite a wide range.

Q25 **Chair:** On natural immunity, you said that wanes. How soon does that wane compared to the vaccine?

Professor Whitty: In children my view is that we do not yet know. I would anticipate that vaccines and natural immunity in the sense of if you got infected, let us assume, will be broadly similar. I would secondly assume that it will take longer probably to wane in children than in older adults, just because we know that in older adults things tend to wane. That is an assumption. Both of those may be untrue. I would be interested in Camilla's and Wei Shen's views on this. I do not think we



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should assume that either having had an infection or, indeed, having been vaccinated provides full long-term protection. I think that would be optimistic based on what we know from other areas. Wei Shen, do you want to add to that?

Professor Lim: Yes, thanks. There has been a trial done in children. When they estimated the amount of protection in children who were naturally infected alone, it was about 70% protection. I would suggest that if somebody has been naturally infected then they get 70% protection.

In terms of waning duration, in adults we know they are well protected for six to nine months. As Professor Whitty says, it is likely to be as good as if not longer for children.

Professor Whitty: Do you want to add anything?

Dr Kingdon: No, that is all right. We are confident that children mount an exceptionally good immune response, so probably on the nine-month end of the spectrum rather than the six.

Q26 **Dr Johnson:** You have talked about children getting it again and people can have cases directly positive, but we also know that most children are asymptomatic. We know that some viruses can be carried in the noses of healthy people all the time; meningococcus is an example of that. How do you know whether you are picking up a case or a carriage in those children?

Professor Whitty: I am going to try to explain this. You will understand this but I am going to try to do it in a simpler language, because the people who in a sense I am trying to talk to through you are families. What Dr Johnson is talking about is that there are some infections, and meningococcus, which you talked about, is an important one, that people can carry in their noses for quite prolonged periods of time but without, in most cases causing problems but in a very small number, can cause very severe problems. That is a very different sort of disease. We do not think it is likely, at least it is my view, that we are going to have immunocompetent children—children who have normal immune systems—carrying this virus and continuing to excrete for long periods of time. We expect them to have it for relatively short periods of time and then their immune system will deal with it. They will not be excreting at that point. They will no longer have the virus. At some later stage, however, the immune system will be weakened to a degree that they can get a further infection. I am simplifying a very complicated area, which you will fully understand, but broadly this is not one of those things where you expect it to have long-term carriage in the way that some other infections have long-term carriage. That is my view.

Q27 **Dr Johnson:** I want to drill down, if I can, if you will allow me, Chair, on education and educational disruption. We took evidence on the fact that if you have severe educational disruption, it has mental health, social and



educational disbenefits to children. That much is to an extent obvious. What evidence did you have on the scale relative to the number of days missed? We know that there are many children who will be taken voluntarily by their parents on a week's holiday every year and that some children will have other illnesses that keep them out of school for a week or more each year. If we have 3 million children in this group, of which half have already had it and some won't get it, some might get it again, but roughly speaking 1.5 million children could get it eventually and they would have to have 10 days in isolation, and two of those would be weekend days, even if they all caught it at the beginning of the term and the beginning of a week; the most they would have is eight days off school. The average, then, must be less than four days, even if all the children get it at the beginning of the week and in the early part of the school term, which they will not. What evidence did you have, therefore, that four days of educational disruption is enough to cause children significant enough damage?

Professor Whitty: One of the things that makes this difficult is that the disruption does not just occur because an individual child has been infected and then for a period afterwards, although that clearly can happen if people are symptomatic and I note the point that Dr Kingdon made earlier. But it also happens when you get outbreaks in schools. I am sure that every member of this Committee, which is after all the Education Committee, is aware of evidence that when outbreaks happen in schools that causes disruption.

Chair: I beg your pardon. We are going to have to go and vote. I do apologise. We will come back as soon as we can.

Sitting suspended for a Division in the House.

On resuming—

Chair: Caroline, can you resume your questioning, please?

Q28 **Dr Johnson:** We were talking about educational disruption and the evidence that you had for it. Did you have any thoughts before you went into the evidence gathering process on what level of disruption would be considered harmful and what level of disruption would cause minimum difficulties? Presumably having five minutes out of the classroom is not going to cause huge problems. Having the whole year out would clearly cause significant problems. At what level do you think that the disruption becomes significant to a child's mental, educational or physical wellbeing?

Professor Whitty: First, disruption spread thinly and evenly across the country at all times, is a very different situation to if it is highly concentrated in particular areas or if it happens to children whose parents are unable to support them in the home or if, for example, there are pre-



existing mental conditions or stresses. There is no such thing as the average child. That is the first important thing to start on.

Q29 **Dr Johnson:** We are talking about healthy children here, aren't we?

Professor Whitty: Nevertheless, this is healthy in the narrow sense of being not at high risk of dying from Covid. We are still talking about children across the board. The evidence we got very powerfully from our colleagues in general practice, from paediatrics, from mental health, and from public health, was that this was having a substantial impact, particularly in areas of deprivation, particularly among certain groups in society, and particularly on children who had pre-existing stresses and other issues. This is not an average issue. This is something where it can be catastrophic for some children and of very limited importance to others. It is important not to try and average the children out. I think that is a misunderstanding. Dr Kingdon, you might want to add to that.

Dr Kingdon: The children of the UK are incredibly resilient but what we have seen in the past 18 months, with the level of disruption to their lives, the kind of uncertainty that the pandemic has brought upon them inasmuch as you think you are going to go to school on Monday, and then you get a message just before you set off, just after you have left, to say, "Somebody has tested positive. Everyone is going home", that kind of level of disruption, has led to a raised level of anxiety among all our children. We know from our mental health colleagues that some children have been very badly affected. I have no doubt that you will have seen this yourself. The uncertainty and the anxiety that has been brought upon our children should not be underestimated. As Professor Whitty said, it is particularly the case for children living in the lowest socio-economic groups where the capacity to do home schooling has been high impossible, and where they have lost significant chunks of their education, which translates into an alteration in life chances.

Q30 **Dr Johnson:** I quite agree that the last 12 months have been extremely difficult for children. The difference between last year and this year is that the Government have removed the need for bubbles and removed the requirement for children under the age of 18 and a half—which is basically schoolchildren, and certainly all the children in the 12 to 15 year-old age group—to isolate unless they personally have tested positive. So the level of disruption that we have seen over the previous 12 months, over the previous school year, should not be seen again unless the Government should want to change the rules, I guess. So is there any evidence under the current rules, which are presumably what you have looked at, the current rules—I see you are nodding—of how much disruption there would be? The children have, as you said, experienced wide-ranging and different amounts of disruption over the last 12 months. Have you looked the level of disruption versus the effect on their mental and physical wellbeing?

Professor Whitty: The correct thing to compare this to is if Covid was not there at all and then the difference you would get with vaccination.



We looked at this as best we could, with very strong and powerful testimony from all around the country, all four nations of the UK, from all our professional colleagues. What they have all said is that in some areas the disruption has been repeated and if there are even small amounts more, the impact of that could be very substantial, although in others much less. This is not an evening-out kind of situation. We have had modelling done as part of this process and the range they came to was from the most benign situation, which I think is very improbable, of 110,000 days of schooling lost compared to if there is no vaccination, up to a higher end, which is not the absolute top of the range, of 12 million days of schooling lost, if we were to have a significant surge over winter. I do not know, you do not know, and nobody knows, exactly what kind of surges we are going to have over time and how we will have to respond to them, but I think what this does do is provide an insurance policy to reduce—not eliminate, by any means—significantly the impact that any significant surge would have. Even at the current level, I would be surprised if any of the people on this Committee could say that in their constituencies there is no disruption, even at the current levels. If you can, please say, but that is not our experience and this is from around the country and from very well plugged in professional colleagues.

- Q31 **Dr Johnson:** That does not really answer my question, with respect. What I am trying to get at is this. You have talked about the scale of difference being between what is effectively 15 minutes per child, which is less than the time that it is going to take them to have the vaccine, and which is the figure you have given of 110,000 days lost, to 12 million, which would assume that all children who haven't had it all got it at the beginning of a week and each had that average of four days off, effectively. What evidence do you have that having those four days off is damaging? What evidence do you have, medically? Who has looked at how much disruption equals how much harm? There must be examples of schools where very few people had very much time off and of other children who have had more time off. Who has done the research looking at those different children and how much effect it has had and how did that inform your decision that this disruption of between 15 minutes and four days on average, for an average child, and 10 days maximum for any child, effectively, would cause enough damage to their childhood to require them to have a vaccine?

Professor Whitty: First, we do not assume that the only disruption is to a child who is infected at that moment. That is not the experience, certainly of GPs, certainly of public health people working across the country. To assume that somehow it is only those children who will be affected, whatever Government say, I think is to misunderstand the lived experience of schools around the country.

Secondly, what is really clear to us is that the pandemic is at its most dangerous in the areas of deprivation—you only have to look at a map to see that—it has been consistently so, and it will be consistently so, and those are the areas where the greatest educational advantage is to be



had from people being in schools and where families are least able to support children at home because they may be doing jobs that do not allow them to work from home. This idea that you somehow spread the amount averagely and then it seems reasonable is to misunderstand how heavily concentrated the disadvantage of this educational disruption has been, particularly to the most disadvantaged children and particular in the most disadvantaged areas. That has to be fundamental to the understanding of why this is important. This is powerful testimony from across our profession.

Chair: You can wrap up, Caroline.

Q32 **Dr Johnson:** Why not vaccinate just those children? We know that children from black and ethnic minority groups are more at risk from Covid. We know that boys are more at risk of myocarditis. We know quite a lot of children, half of them, have already had it. So if you are one of the hundreds of thousands of white boys, for example, who have had it already, is the vaccine still a good idea for you?

Professor Whitty: You could do a theoretical thing where you say if you are a middle-class white boy, we will do a blood test, work out if you are serology positive and if you are, we won't do a vaccination.

Dr Johnson: Yes.

Professor Whitty: I am not convinced that feels to me like an effective public health intervention. What we wanted to do was build on what JCVI said, that there is still benefit of vaccination over harm—

Dr Johnson: For that child?

Professor Whitty: Yes, for every individual child, on average—before you go on to education—

Dr Johnson: You want to spread everything out for those children but not for education.

Professor Whitty: To be in a situation where we say we are not going to offer—the key word here is “offer”; this is a voluntary thing—this vaccine to people on some degree—we will discriminate on some basis, and you would have to lay out exactly who you thought should not get the vaccine on your plans, does not seem to me to be something that is operationalisable nor necessarily even desirable. I would go back to the fundamental point that we were really hit by the incredibly powerful testimony from around the country on the areas of deprivation, but it has happened everywhere. I would be surprised if any school in your constituencies has had zero disruption and no children affected adversely in terms of their education.

Chair: Do you have a last question, Caroline?

Q33 **Dr Johnson:** So just to be really clear on this, if you are a parent of a child in a rural area with relatively low levels of Covid disruption so far, who is white, male and already certainly had Covid and tested positive for



Covid before, is the vaccine still, for that child, in their benefit?

Professor Whitty: The vaccine will be at a smaller benefit if a child has definitely had Covid in terms of increasing infection. It is not of zero benefit because it will certainly strengthen the immune response, so this is not a no-effect. Certainly the people we are most concerned about are those who have not had Covid previously, in terms of healthier children. However, trying to differentiate is very difficult, practically, and it is not obvious to me what gain you would get, given that even at an individual level, benefits marginally exceed harms, as JCVI laid out. If you try to design a programme where you said the Government refuse to vaccinate the following people, if you wrote that down, I think you would find it quite difficult to put something out that both made sense and was deliverable. At a certain point, public health is about pragmatism and about saying what is in the benefit of the people who are the most disadvantaged, which is very much our starting point.

Q34 **Dr Johnson:** I am disappointed that there does not seem to be any figure in your mind—or certainly given to me—of what amount of minutes or time of disruption as an average over the schoolchildren is enough to vaccinate them. You have made a decision based on reducing the amount of school disruption, but you don't seem to have a figure for how much school disruption is damaging.

Professor Whitty: We have said that at the top end of the range, 12 million days lost is a very substantial number. At the bottom end of the range, in my view, 110,000 is still a non-trivial number. I don't think parents and children listening to this would say that is nothing. That assumes that we would not have a surge over the winter.

Q35 **Chair:** What is that per pupil?

Dr Johnson: Either 15 minutes or four days.

Professor Whitty: This goes back to the adverse effects of this being not averaged comfortably and equally over every child. If they were, we would be in a very different situation, for the disease as a whole, not just for this.

Q36 **Dr Johnson:** One last question. If you were to catch it on a Monday and you get your 10 days isolation so you have had eight days off school, that is the most, how likely is a child to have to do that twice?

Chair: Professor Van-Tam wants to answer this.

Professor Whitty: Professor Van-Tam would be in a good position. Why don't you repeat the question to Professor Van-Tam.

Dr Johnson: Professor Van-Tam?

Chair: You heard Caroline Johnson's question, presumably Professor Van-Tam.



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Professor Van-Tam: Chair, I did not. I had my hand up to say something else in response to Dr Johnson.

Chair: Sorry.

Professor Van-Tam: I am happy to take her question first.

Chair: Okay. If you would just ask it quickly again.

Q37 **Dr Johnson:** Thank you, Professor. The most disruption that a child gets other than, I suppose, missing children from their classroom, is that they have to isolate because they unexpectedly are diagnosed with coronavirus. If they have it, they have a 10-day isolation period which would include at least two weekend days. They are going to have eight days off school, assuming they are not too unwell with it. How likely is a child to require that twice? How likely is a child that has already had coronavirus to get it a second time and require to isolate a second time?

Professor Van-Tam: We have some data from healthcare workers, which we have studied in great detail, about infection and the chance of reinfection. I would put the likelihood in the range of 5-15% but I would not want to frame the problems for a child of being isolated in a room of their house for 10 days to be confined just to missing four days from school. The children that I know are very focused on their social lives and their leisure and sporting activities that are critical for them and the highlights of their week, whether it is football training, squash, whatever. From that perspective, I think it is a bit broader.

The point I wanted to make to you was that while I understand the kind of epidemiological rationale for the idea of a targeted vaccination policy, if one were to do that, in relation to areas of high deprivation, which are to a large extent areas of high ethnicity—and I have to say this as somebody from an ethnic minority—I think it would raise deeply unsavoury problems in relation to how this pandemic was beginning to be framed in its later stages around a problem related to deprivation and ethnicity, which in my view it is not. It is a problem for all of us until it is fixed and we are out the other end.

Q38 **Dr Johnson:** Let me come back on that. That was not the point I was making. The point I was trying to get at is that each parent will need to make a decision for their own child and when they are making their decision for their own child, they will only consider their own. If you were talking about, as you said earlier, not looking at it for altruistic reasons but only for the benefit of the individual child, my question then was is it for the benefit of the individual child if they are a low-risk child who has already had it and, because they are a boy, a high-risk child for side effects of myocarditis compared to a girl.

Professor Whitty: Can I clarify, because that was not an accurate reflection of what we said; our fault for not explaining it properly.



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We said of the benefits, direct and indirect, in that age group, there will be some benefits to the children around that child and we consider those are legitimate to consider, other children in the same class. What we were not considering, and would not consider, is the benefits to any other age group other than the one we are talking about. We are confident about the benefits to the individual children, as JCVI originally said, but we also think there are wider benefits, and that was the point we made.

Q39 Chair: We are going to move on to Nicola Richards, but first can I ask a question? I asked you about the potential disruption from the vaccination programme itself and you talked about the 12 million days or possibly four days. Teddington School, in Middlesex, part of the Bourne Education Trust, are vaccinating their students and then telling all students to go home the next day, on Friday 24 September, to do remote learning. I quote from their letter: "This allows for any students who are not feeling 100% to work from home and for all new Year 7 students to experience remote lessons for the first time". Surely that should not be happening because that is one of the four days or however you want to describe it. For a school to send all their students home after being vaccinated, if that is going to happen across the country, or in a lot of schools, that is going to significantly impact on one of the reasons why you are saying that the vaccinations need to happen in the first place.

Professor Whitty: I would like to turn it over to Sir Keith on this one, but before I do, that is an illustration of the fact that schools do not do exactly as Government say on a whole bunch of things and that is where a lot of the disruption can come from. The assumption that Government just lay it down, "Here are some rules" and they are exactly followed—schools rightly have autonomy. Head teachers rightly have autonomy, as I am sure you, the Committee, would want.

Q40 Chair: You can say as a medical officer that there is no need to send every child home after they have been vaccinated.

Professor Whitty: I will ask Keith, because he is the person who is responsible overall from the NHS point of view for the programme.

Professor Sir Keith Willett: That is not a part of the policy that we have laid out with the School Age Immunisation Services, but obviously the head teachers in schools have run those schools and can make decisions. The information we have given to schools around the vaccination programme, and to address the earlier point, the amount of time impacted by the vaccination programme, working with our School Age Immunisation Services, is very small. When they go into a school, the average secondary school size in the country is 22 pupils, and when the vaccination team goes in, perhaps the average would be that 10 vaccinators would go in to any one school and even on the revised figures for Covid, given the fact that there is a longer consent process and a longer observation period, each team going in would do about 260 vaccinations a day—



Q41 **Chair:** Will you be contacting schools like this? Do you not agree that if this becomes common practice, one of the most important reasons that you have given for the vaccination will be weakened considerably because thousands of children will be sent home for one day, or whatever it may be?

Professor Sir Keith Willett: Schools have had extensive communication and that has not been part of any of those communications. The guidance to schools does indicate what the common side effects are and I am sure all of us in this call have had a vaccination so we know the sensations that you may get and it may be that a small number of people have some mild feelings of unwellness that may last hours or a day or two. There is a suggestion that if children are ill or unwell, those children only should rest and take paracetamol. That is the guidance to schools—

Q42 **Chair:** Thank you. I am going to pass on to my colleague. I am just trying to find out what you are going to do to try to stop—I know you set out the guidance, you and the DfE—this sort of thing going on because clearly, you are saying, it is not necessary and that Teddington School in Broom Road, Middlesex should not be sending all their students home for the day after vaccinating them. That is correct. Is that correct?

Professor Sir Keith Willett: That is not the policy that we have put out, no.

Q43 **Nicola Richards:** I want to clarify something. One of the benefits of vaccinating young people, children, is that the young people from lower socio-economic backgrounds are worse off when they have to self-isolate or be away from school. Do we have any data on whether young people from those backgrounds are going to be having the vaccine and that the uptake is high enough to have that positive effect?

Dr Kingdon: If you are addressing the question to me, I don't think we have any evidence about that. We have worked hard as a Royal College to support the information leaflets and other kinds of packs of information for parents, schools and children. We have used our consultation with our own children and young people to try to get the language right so that it is pitched at the right level. But we have just started this process so I would not feel able to predict—

Professor Whitty: We can say with some confidence that certainly in older age groups, including people of parental age with secondary-school children, rates of uptake are very high. You can never be sure. Even with the relatively recently launched 16 to 17 year-old vaccination programme, over half have already chosen to have it and the numbers are still rising. Let's see, because families will be choosing, but the evidence so far is that in the UK people fully see the impact of Covid, fully see the impacts more widely, and people are choosing, certainly in older age groups, to be vaccinated. The only way we can be sure is to make the offer and then we will see how families respond.

Q44 **Nicola Richards:** Do you have any wider data for the cohorts of people



and whether they have been reluctant to take it up? Is this something that you look at when it comes to this age group?

Professor Whitty: There is a differential but the majority in every ethnic group, the majority in every geographical area, have chosen to be vaccinated, out of older age groups. We will have to see with this. We have made it very clear that the risk-benefit is a more balanced decision here, we have made that explicitly clear, than it is in older age groups. We very much want to make sure that this offer is available and understood equally in all sections of the community. We do not want anyone to feel disadvantaged.

Q45 **Nicola Richards:** To clarify: if people in the specific groups of people that you think this programme will benefit are not having the vaccine, do you have any further plans to deal with it?

Professor Whitty: You are absolutely right. The groups who are most likely to benefit are the ones we are most keen to take up the offer if they choose to do so. There are already quite significant programmes to try to make sure that we reach out to different communities through different communication channels very much to say let's tailor the message so that people feel they have trusted voices who they can talk to, they can hear from, voices that are more tailored to particular groups. Absolutely, that should be part of what we are doing and that is very much part of Keith's plans, I know. Keith, do you want to add to that?

Professor Sir Keith Willett: This is something that has been right through the vaccination programme since day 1, working at the very local level. We now call it the hyper-local level because you have to work with trusted people in the community, with leaders, with teachers, with faith leaders, in order to access the communities. We now say "failed to reach" rather than "hard to reach" because it is an issue for the programme, but this is something that has been consistent throughout and that is one of the reasons why, for the 12 to 15 year-olds, as I indicated earlier, we have used the established process because it gives access to all children. All the past evidence on vaccination programmes is that by using a schools-based approach, you reach all the children. In addition to that, I have talked about the children who are outside mainstream education who are also part of this commissioned programme.

Q46 **Ian Mearns:** Professor Whitty, you have explained already the benefits of vaccination to individuals in this age group and those closely around them, but you have also said that the likely benefits of reducing educational disruption on balance provides sufficient extra advantage to recommend in favour of vaccinating 12 to 15 year-olds. That is a relatively complex message. How are we going to effectively communicate that to schools, head teachers, staff, parents and children themselves?



Professor Whitty: I will have a first go but I would again like Dr Kingdon and Sir Keith to come in because they have to do it on a day-to-day basis.

Of course the advice that we were giving, although we tried to make it reasonably clear, was, however, advice to Ministers and it was pitched at Ministers. We wanted them and indeed parliamentarians to understand and follow the logic of what we were saying. It has then been translated, also using information from JCVI and other sources, to various forms of documents that are trying to provide full information in accessible ways for parents as well children of different ages. Maybe Dr Kingdon will talk a bit about that first, and then Sir Keith.

Dr Kingdon: You have asked a very pertinent question. It gets to the heart of how this is going to happen on the ground. It is about having a conversation with a child, because it will be the vaccinator in the school saying to the child, "Have you had all the information about this vaccine? Have you managed, with your parents, to reach a decision? Have you got any questions for me?" and then working through the questions as they arise. You are right, that this is a more challenging conversation to be had, but as with any medical intervention, be it vaccination or any treatment, it is about being transparent about what the benefits are, any risks that are evident that we know about, and helping the child to understand the balance of the risks and the benefits. That is a conversation. It may not be a conversation that can be had on a single day. It may be something whereby you allow the child to go away and think about it and come back. Professor Willett, I am sure, will tell us how that would work practically, but that has been the way in which we would take it forward and likewise, the way in which we would talk to parents. It is about saying, "Help me understand what your questions are. Let me see if I can allay any of your fears. Let's have an honest conversation about what we believe are the benefits for your child versus the risks".

Q47 **Ian Mearns:** That communication issue is obviously vitally important and I understand that you have been quoted yourself as saying that the roll-out of the vaccine programme for 16 to 17 year-olds was at the time frankly shambolic. Are we better prepared now for rolling out the vaccine to this age group, from that particular juncture?

Dr Kingdon: I did describe it as shambolic. That was quite some time ago and I think we have come a very long way since then. We have been on a learning curve around how to do this most effectively, how to get the information for children and young people in the kind of language that works for families. As a Royal College, we have had full engagement with the vaccines team, NHS England and the devolved Nations, to try to support getting this right. It was our perception that it was shambolic but that would not be my opinion now. I think we have come a very long way and are far more confident about the position we are in today.

Professor Whitty: Would it be helpful for Sir Keith to also comment, because the NHS is delivering this programme?



Chair: That is very diplomatic of you, given that you are sitting next to the chief medical officer.

Professor Sir Keith Willett: Going back to the programme we are using through the School Age Immunisation Services, they work, and have done for many years, in conjunction with the local authorities, with the schools, the regional commissioners for education and the directors of public health. They know the localities. They know the groups that are particularly difficult to reach. The information that goes out to parents, not only does it go out to parents and children but it goes out in accessible versions. There are 27 different translated languages, there are videos, it is in Braille, it is in British sign language. Everything is done to try to reach people. In addition, at the time of contacting the parents and the child, there is an offer made for direct communication with the school age immunisation health professionals to be able to talk through the issues because this is a very personal, individual decision. We recognise that in all vaccination programmes but probably more so with Covid than any other vaccine we have led before. All of that is in train and is rolling out with the programme starting at full strength today.

Q48 Ian Mearns: We are now in a situation where adults who were first part of the vaccination programme are being urged to get a top up vaccine when that becomes available. What is likely to be the timespan between a first vaccination and when a top up vaccination will be needed in this age group, the 12 to 15 year-olds?

Professor Whitty: I will give a first version. I will also be interested in Professor Van-Tam's and Professor Lim's view on this. At this point, all we are recommending is the first vaccine because we think the risk/benefit there is the most understood. Most other European and North American countries are ahead of us on vaccinating children of this age. We are accumulating information from them, from their health professionals, and we will in the UK as well, so the question even of the second vaccine, we have not yet got to and we will very much turn to JCVI and to Professor Lim to give the view on that. A top up, in terms of beyond the second, that is way away in the future for us to consider. That is a bridge we haven't even got in sight, let alone come anywhere near. JV-T, do you want to add to that and then Professor Lim?

Professor Van-Tam: Thank you for the question. I think there is relatively little I could add except to say that there is a big difference between a consideration of the second dose in children, which is a matter that is undecided, requires further data and JCVI will look at, versus the matter of a third dose, which is a genuine booster dose for those very elderly cohorts, and as you know from the announcements, moving down the ages, who are going to require a top up to give them a longer duration of immunity, particularly with this winter in mind.

I would confidently expect that the protection afforded to children who decide to take up the offer of the first dose of Pfizer will last at least until the rest of the winter. A question about whether there will need to be



another dose is a matter that JCVI will have to look at in due course when there are more data. Indeed there may also at that point be even more vaccination product options available in 2022. We have to wait and see on that.

Professor Whitty: Professor Lim, do you want to add to that?

Professor Lim: I do, yes, please. Thank you, and thanks for raising that.

The second-dose options for children are varied. A trial has just been announced, as you may have heard, of a lower-dose vaccine being given, Pfizer vaccine, to children under the age of 12. That does not mean that a lower dose could not be used in older-age children, nor as a second dose as well. There are a number of options that we need to consider when we come to think about second doses in order to get the right balance of benefit and harm. We are just not there yet but we will make those considerations in due course.

I can say that it is not expected that a second dose will be offered before the usual eight to 12 weeks that we already prescribe for everybody else. It is not going to be soon. It is going to be sometime later.

Q49 **Ian Mearns:** I represent a constituency in the north-east of England where during the pandemic we have, at some times, been very high in terms of the incidence of Covid among our general population. Given that children can transmit and catch this infection, have you done any analysis of, and are you concerned about, the likelihood of new variants developing among children, which may detrimentally impact, from a medical perspective, children themselves?

Professor Whitty: It is obviously a critical question. It is very difficult to be sure about anything on variants but I think the probability that a serious variant would occur in children in the UK is relatively low. Of course we have had one bad experience with the Alpha variant. It was first described in the UK, though whether it arose here we still do not know. Delta, of course, did not arise here. In terms of the proportion of the risk around the world, potentially everybody who is infected is at risk. Vaccines will in due course select for particular variants, but they do not make it more likely that they will arise. They do make it more likely that they would subsequently be selected for and this the reason we all believe—this is a problem everywhere—we have to get the rates right down to reduce the risk that new variants do arise anywhere in the world, whether it is in the UK or elsewhere.

Q50 **Ian Mearns:** I fundamentally understand, and am totally on board with, the idea of vaccinating the general population but there has been resistance. I have a concern that the very children that we would most want to get a vaccination, and their parents, might be from those communities that have resisted getting the vaccine in the first place. Do we have a magic bullet to sort that out? It does seem to me that we are going to have to have intensive public health interventions on a



community basis in order to make this work.

Professor Whitty: If any doctor believes in magic bullets, they are in the wrong profession. This is definitely not something that happens. I completely agree with the point you are making and if I can, through you, make the point that political leaders—MPs, local political leaders—have huge influence in their local communities. Where you see communities being left behind in this area, anything that can be done to help make sure that we do not big disparities is very powerful.

Q51 Ian Mearns: Obviously I watch the briefings on the TV with interest. Is there anything we can do from a public health perspective to dampen down the nonsense that is being transmitted from the anti-vax groups and so on? I am afraid to say that I regard them as a major threat to this being a success.

Professor Whitty: I will give a view. Although the anti-vax sentiments are very loudly expressed, I think in the UK they represent a tiny fraction of the population. There is a large group of people who have perfectly legitimate questions to ask and that is perfectly sensible. People who have what I would consider to be anti-vax sentiments, basically trying to persuade other people not to get a potentially life-saving vaccine or something that at least will improve people's lives, are a minority. I do not think highly of them. I doubt most of the general public thinks highly of them. They exist. Fine. Most people just ignore them and I think that is the best thing to do. You can usually spot them. One thing I would say about almost all of them is that the three kinds of people you want to take advice from are people who are knowledgeable, logical, and kind. If you read the kinds of stuff that anti-vax people produce, it is pretty obvious that they are not knowledgeable, they are not logical, and they definitely are not kind.

Q52 Ian Mearns: That is absolutely true but, at the same time, some people are susceptible to being taken in by this stuff. People quite innocently are now raising questions based on stuff that they have read, I am afraid to say, on the internet. Can we not have a much effective rebuttal system for this nonsense, please?

Professor Whitty: From the point of view of the public health people, all we can do is lay out evidence as carefully as we can, as we try to do in this Committee, be fair about it and be balanced about the way we do it. I completely agree with Dr Kingdon's views on this. Others are much better at communication than we are and we would very much rely on them but I would also say that there is strong leadership role for political leaders on this. That is obviously something that this House can do a huge amount about.

Ian Mearns: Thank you very much.

Q53 Dr Johnson: Just one question because I think communication is really important and it is really important that when families make a decision, they do so with informed consent. As doctors, we are very familiar with



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the concept of informed consent. The leaflets that I have been given—I don't know whether they are something that you have responsibility for, Professor Whitty—there is an easy read version and a guide for children and young people. One is a consent form. One is a consent leaflet for children to read before they consider whether they will or will not have the vaccine, and for their parents to read with them. Both documents talk about Covid as being an illness that might have deadly consequences, which is fair because it is true, but neither of them say that the effects are marginal or tiny or small or any other word that might be understood by children. Neither of them mention the educational rationale at all. Do you think that is fair?

Professor Whitty: Although you have generously asked if I am responsible, the answer is no, I am not, although obviously—

Q54 **Dr Johnson:** Who is?

Professor Whitty: The people who can probably answer this best are Sir Keith—

Q55 **Chair:** As I understand it, it does not mention the risk, albeit very minimal, of myocarditis.

Professor Whitty: Chair, that is incorrect.

Dr Johnson: One of them does; one of them doesn't.

Professor Whitty: What I suggest is, why don't we hear from Sir Keith.

Chair: I have been asked by the media and approached by parents about it, that there is some leaflet going round that does not mention myocarditis.

Dr Johnson: This one doesn't.

Professor Whitty: All the ones that are aimed, as I understand it, at older children and families explicitly mention myocarditis. In fact, what they don't mention is that they can also get myocarditis from Covid, but that is by the by. The Royal College of Paediatrics and Child Health has been consulted on this. Public Health England has been involved and obviously Keith has also been involved. Do you want to maybe go first, Camilla?

Dr Kingdon: Yes. The documents belong to Public Health England, to the vaccines programme. We certainly inputted to support some of the language used and so on. Certainly the documents I have seen, I think they talk about heart muscle inflammation or some kind of lay term for myocarditis. Certainly I was happy that it had represented the risk that I know that people are focusing on particularly at the moment, as one of the risks of this vaccine.

Q56 **Dr Johnson:** One is from the UK Health Security Agency and the NHS, the coronavirus consent form for children and young people, does not mention myocarditis or education at all as reasons for Covid, simply to



"stop you getting very poorly". That is a quote.

Covid-19 vaccination: A guide for children and young people from Public Health England and the NHS does mention myocarditis and does explain the symptoms, which is good, but again, it does not recognise that the health benefit, in terms of weighing up the health benefit that the JCVI did, was small and it does not talk about education. Do you think it should?

Professor Whitty: Keith, do you want to comment on this, because it is your programme?

Professor Sir Keith Willett: Yes. Thank you. These are documents produced by Public Health England in consultation with clinical teams and, as Dr Kingdon said, the colleges. We have those now. The one I think you are referring to is one that was produced initially for all 12 to 15 year-olds, starting with the at-risk groups, as well as involving, subsequently, the universal offer to 12 to 15 year-olds. That may be partly behind the way it has been interpreted.

Chair: It just mentions a headache or a sore arm.

Professor Whitty: Keith, why don't you finish your comment. I will come back to that because—I have tweeted out and everyone else has—there are lots of different versions of this depending on age and appropriateness. All the ones I have read at least do mention myocarditis specifically.

Q57 **Dr Johnson:** It is the educational balance that I am particularly interested in; the easy read version does not mention myocarditis. I can understand not wanting to frighten children with learning disability, perhaps that it is intended for, but neither of the guides mention education as a reason. It is all about health reasons and the health benefit being tiny is not mentioned either.

Professor Sir Keith Willett: There are a series and you have identified one there that may not. These are produced by Public Health England and they are distributed through the vaccination programme by NHS England. Certainly the one that I have in front of me, which is the one that goes out to schools and to young people, the vaccination programme does deal with that and talks about the various rare serious side effects. There is a range of information, all of which is available on GOV.UK and, as I say, these documents are available in different languages as well. I cannot specifically answer the question without seeing the documents.

Dr Johnson: Sir Keith, would you lift up the one that you have, which does talk about educational disruption?

Professor Whitty: Dr Johnson, with respect, I have the seven pages of one version of this, and there are multiple versions of it. I am sure we can get back to you.

Q58 **Chair:** Can I turn this question around a bit before I pass on to Nicola?



Whatever has gone on a previous leaflet, do you agree that all leaflets on this issue—in terms of vaccinations for 12 to 15 year-olds—should include the issue of minimal risk, and be made clear, of myocarditis?

Professor Whitty: All the ones that I have seen, which are current as far as I am aware, in terms of ones where you are expecting the children and young people and the adults both to be involved in the decision. A few mention that explicitly and interestingly they do not do it on the side of people who have Covid, which it does happen, as for example they do not mention some of the other things you get with Covid. You cannot obviously be complete but all the ones I have seen do mention that explicitly, and usually there is a paragraph about it.

Chair: Not the one that Caroline has.

Dr Johnson: It is the fact they do not talk about the education being the reason for vaccinating.

Dr Kingdon: To the point about the education, I do not know the version you are looking at but we have to remember that we are also immunising 12 to 15 year-olds who are at risk. The impact of education would not be one of the primary reasons for advocating the vaccine. It would be entirely correct not to mention education in that setting because you are having a conversation with a child who has unstable asthma or significant congenital heart disease. That is an entirely different consent process.

Dr Johnson: It still adds to the reason for doing it though, doesn't it, because those children are still at school? It is still a reason.

Dr Kingdon: Absolutely. As with any child, education is as big a part of their wellbeing as anything else but the imperative to vaccinate the at-risk groups, the driver is different.

Q59 **Nicola Richards:** I agree with Professor Whitty's assessment of those who spread Covid misinformation but I wanted to go back to, at the moment, TikTok's algorithms, the reports that it is promoting misinformation about Covid vaccines, that is something that is going to influence the decisions of this age group that we are looking at. We also believe that young people are more likely to believe in Covid misinformation as well. With all this in mind, are there any plans to reach out to this age group on the platforms that they are seeing this kind of disinformation?

Professor Whitty: Keith, I do not know if you feel competent to comment on that; I certainly would not.

Professor Sir Keith Willett: The Department of Health and Social Care leads on the security issues related to information in this regard. There is the Malicious Communications Act, which is the legal basis on which they involve the regulatory authorities and the police, and action can be taken through that. It is not my area of expertise but that is our reference point. That is the information that we do give to schools and people



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involved in this programme. I would recognise that we are talking about security now and the misinformation—

Professor Whitty: Sorry, can I just interrupt, because the question was slightly different? Which is given that there is this misinformation on platforms like TikTok, are there plans to also put out the positive messages through TikTok? That is correct, isn't it? That was your question.

Nicola Richards: Yes.

Chair: In a nutshell please.

Professor Sir Keith Willett: The answer is yes, there is a continuous social media programme that is led between the Cabinet Office, the Department of Health and Social Care and NHS England to put out the positive messages, the truth. It is not a process whereby you directly challenge the misinformation because the evidence on that from behavioural insight is that it provokes an argument and a greater heightening of the references to it. But it is very important we do have an equivalent programme, which we do.

Q60 **Apsana Begum:** I want to go back quickly to a question that was asked earlier but the answer did not seem clear to me. Where there are cases where there are adverse effects from the vaccine, who would be responsible if a child has suffered, knowing the risks that we are already aware?

Professor Whitty: Keith, do you want to answer that?

Professor Sir Keith Willett: You are talking here about the adverse reactions to the vaccine?

Apsana Begum: Yes. Who would be responsible where there are adverse effects to the vaccine?

Professor Sir Keith Willett: The responsibility for the vaccination programme sits with the provider, which is the School Age Immunisation Service. They carry the liability as an NHS commissioned organisation. We obviously therefore have in place the full clinical responses to deal with adverse events that occur on the day, anything from fainting through to more serious consequences on the day. They are covered through the NHS indemnity scheme, so the liability would sit therefore with that scheme.

Q61 **Apsana Begum:** In terms of heart inflammation in those cases, what has been the approach there?

Professor Sir Keith Willett: Again, in terms of the responsibility, that would sit with the NHS to manage those cases. The care of anybody who suffered those complications would sit with the NHS; the responsibility and the liability.

Q62 **Apsana Begum:** As a Committee, we have seen a lot of mixed



messaging around parental consent for the vaccine. The NHS website explains if a young person refuses treatment, which may lead to their death or severe permanent injury, their decision can be overturned by the Court of Protection. We have seen in a recent interview with Sky News, the Health Secretary said children would get the final say if there were disagreements between them and their parents' preferences. Also the former Vaccines Minister said—I think it was to *The Times* newspaper—that children would only be able to have the vaccine against parents' wishes after a meeting with the clinician. Can you explain to us what your interpretation is of how the Gillick test will apply to universal vaccines for children in that particular age group of 12 to 15?

Professor Whitty: That is a critical question. I completely agree there has been quite a bit of confusion about this, so I will lay out the framework and it is probably quite useful for Dr Kingdon to talk about how paediatricians would deal with it on an actual basis, and then maybe Keith in terms of how the programme would.

The framework for how to deal with this was laid down by the Law Lords, who preceded the Supreme Court, back in the mid-1980s. Before I was qualified and most doctors currently practising were qualified. It has been the standard approach that has been taken ever since then. I am going to read—I have never done this before—from one of the Law Lords because it is a clear exposition from Lord Scarman, when he gave his judgment back in 1985, published in 1986, "As a matter of law the parental right to determine whether or not their minor child below the age of 16 will have medical treatment terminates if and when the child achieves sufficient understanding and intelligence to understand fully what is proposed." That is the legal rubric. Actually—this is the much more important point—in the great majority of cases parents and children agree and, in general terms, the younger the child the more the absolute assumption would be that if there is a disagreement the parents will be the right people to turn to for this.

The two ends of the spectrum are once you get to 16 there is a general assumption and once you get to 18 there is an absolute assumption that the person themselves will make a decision; the young person or young adult will make the decision. If you are talking about children below 12 you would make an absolute assumption that the parents will make the decision. There is a bit of a sliding scale but, in practice, it is very rare that, particularly at the lower age ranges, this is relevant at all because almost certainly there will be agreement either way—we are not trying to push this—between the parents and the children. Camilla, do you want to add to that?

Dr Kingdon: This principle would be applied by the schools' vaccination service in all the other immunisations of their delivery because remember they are delivering it to that same age group; the HPV jab, the booster jab. The process of assessing whether the child is competent to consent



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to the immunisation will be something that they would be very familiar with.

As Professor Whitty said, in the vast majority of cases the child will almost certainly arrive with their parents' consent form and the child will want the vaccine and the parents will have consented.

Professor Whitty: Or the other way.

Dr Kingdon: Or neither want it.

Apsana Begum: Rare it might be but we are talking about in situations where it is not like that.

Dr Kingdon: But the point is that in the vast majority of cases the child and the parent would have made the same decision. At that point you either give the vaccine because both parent and child have agreed or you do not because neither have.

In the unusual circumstance that a child arrives asking for the vaccine, but they do not have their parents' consent, then the first step that the vaccinator would need to take is to start a conversation with the child to say, "Tell me a bit about what you understand this vaccine, what is the point of this vaccine. Do you understand the benefits from the vaccine? Do you understand the potential risks from the vaccine?" While you are having that conversation as the vaccinator you are essentially forming a view about whether the child is Gillick competent or not.

If you think they are and they do not have their parents' consent, in the real world the next step would be to say, "Tell me about your mum and dad, did you discuss this with them at home last night or over the last few days? What are their views?"

Q63 **Apsana Begum:** Can they ultimately overturn their parents' refusal or can the parents overrule their own decision if it is a decision that they do not want to have the vaccine?

Dr Kingdon: Based on Gillick competence, if the child is Gillick competent and they wish to have the vaccine they have the right to receive the vaccine.

Professor Whitty: That would be very rare, even in that subsection. Also the younger the age the less likely that is to be the case.

Dr Kingdon: Which is why I preface it by saying if they are Gillick competent. That is much more likely to be the kind of 14, 15 age group. There are some 12 and 13 year-olds who have a genuine and deep grasp of an issue like this and are capable. Ultimately it is the judgment of the vaccinator. We are talking about tiny numbers here.

Apsana Begum: It would be interesting to know maybe from the other members of the panel in terms of how you plan to maybe monitor or evaluate this aspect. Again, rare it might be the occasions of cases.



Professor Whitty: Sir Keith is probably the person to talk to about this.

Q64 **Chair:** Can I come in on that to ask what training the vaccinators have to psychologically assess children for Gillick competency? Would they ask teachers and staff of the child, is it the GP? What happens, just to turn it around, if a Gillick competent child refuses to have the vaccine, would the parents then be able to overrule their decision and give consent on their behalf?

Dr Kingdon: No, absolutely not. The thought of them holding a child down, who is Gillick competent, and administering a vaccine against their wishes goes against any child rights argument. No, if the child is Gillick competent they decide whether they do or they do not have it.

Q65 **Chair:** Wasn't the Gillick competency originally meant to be about safeguarding and not applicable to a fairly new vaccine that understandably some parents will have issues with? Are you not concerned it will be challenged? You are saying it will be rare, you are still giving the power to children to make the ultimate decision.

Professor Whitty: This has been made to sound in the media as if this is a new and big problem about this vaccine. I want to go back to my first point. First, incredibly rare. Secondly, this is established law, which Parliament has chosen not to change. The people who can change this are on your side of the table not ours. Doctors operate within the legal framework that Parliament and the courts give us. This is the legal framework that has been identical to the legal framework on which all children's treatment have been done.

Chair: Other vaccines are long in the tooth.

Professor Whitty: This will be true for everything. This is basically standard medical practice. I am sure Dr Johnson would agree with this. This is completely standard medical practice and has not changed in my professional lifetime, and I am sure Dr Johnson's professional lifetime. Is that correct?

Dr Johnson: I have a feeling that when I first qualified they could consent but not refuse.

Professor Whitty: Basically the assumption is that children—

Chair: Apsana, sorry, and then I'll bring in Tom.

Q66 **Apsana Begum:** I wanted to ask one more question, you mentioned media and some of this being discussed in the media. Following on from what my colleague asked earlier about social media and young people, what considerations have been given in terms of information circulating there about competency and consent? Is that something that has already been looked into?

Professor Whitty: Unfortunately a lot of this is completely inadvertently circulated in the mainstream media because this has been understood in a different way to the reality. What we are trying to do is, as



professionals, lay out how we operate the law, which has been the law for decades. This is just how it operates. We are trying to combat that through you by being clear what the law is and is not. The very most important point is this is incredibly rare.

- Q67 Tom Hunt:** A quick question on the Gillick competence. I am trying to practically understand the steps involved. Say I was a 14 year-old and my mum and dad were like, "Right, Tommy, you are having it" and I said, "No, I do not want it" what would be the next step? Would I have a one-to-one meeting with the vaccinator before the jab was planned or would it be just before the jab? What sort of questions would I be subject to?

Professor Whitty: I suggest that Dr Kingdon, as she does it day to day, and then Sir Keith, because he is responsible for the programme, are the two best people to answer this one.

Dr Kingdon: The crucial thing here is this is a process. We would never expect this to be a single conversation where there was a disagreement. You can imagine that a school that is administering the vaccine, you are called in, it might be that children are asked to—Sir Keith will have to tell us the practicalities of exactly how this happens but clearly if there is a difference of opinion between the child and the parents there is an opportunity in private to discuss with the vaccinator. It might be that the vaccinator may choose to call the parents to clarify some of the points. In the real world, where there was clearly a difference of opinion between the two, you would share some additional information, answer any questions that either the child or the parent had, and you may very well opt to not proceed any further on that day but suggest that the child is given another opportunity at a future date. Hence why I said it is a process. This idea that on a day everyone has to be all lined up—

- Q68 Tom Hunt:** That sounds like it is a bit of a process to eventually convince the young person in question to have the vaccine. If they are Gillick competent surely that is the key thing. If they are Gillick competent they should be able to say no and there should not be an assumption there is going to be this long process and eventually they are going to say yes.

Dr Kingdon: Absolutely. If the child is absolutely clear and they are competent that they are not going to have the vaccine then you can draw a line under it. We are not in the business of driving a wedge between children and their parents so the door is always open. If parents wish to have more information, or any party needs some more information, then we would be absolutely keen to do that.

- Q69 Tom Hunt:** I understand in June this summer the MHRA approved the Pfizer vaccine for 12 to 15 year-olds and that the chief executive said it was safe for use, and so on. It was about a three-month gap between the MHRA approving it and then the JCVI making their recommendation and then Professor Whitty making his recommendation. What was the reason for the time lag? Comparing us with other countries, did they have a



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similar time lag between their—for example, EMA and their recommendation, and then their equivalent of the JCVI making their recommendation?

Professor Whitty: It is important to understand, and it would be useful to get Wei Shen's view on this as well, as chair of JCVI. It is important to understand the relative importance of the sequencing of things. MHRA had to make the decision about whether benefits exceeded risks and they made that decision early on. But what all of us have said all along, including me, is this is always going to be more difficult in children than adults because the risks to children of Covid are lower than in adults. The risk benefit becomes more balanced inevitably.

What MHRA do not do though is then say you should deploy it widely. That decision about deployment is normally taken and, in this case, was taken but with an important caveat, which is why I and the other CMOs got involved by JCVI. Wei Shen can talk a bit more about the JCVI process.

It is true that several other countries went faster than we did. They have already started vaccinating the second vaccine for things; the US, several European countries and countries elsewhere. In terms of speed in which we have moved on this, we have been much more careful and cautious about the way we have approached it than many other nations have because we recognise that this is a more balanced decision than it is in the older people.

But JCVI is much more involved in the actual deployment questions. MHRA is starting off with the question, "Is it safer to have it than not to have it overall?" and if they had said no we would not have got to first base. They have to say yes first, "This is a safe, relative"—it is always a relative thing, safety is not an absolute, but it is safer to have than not have in this group. That was a judgment. They have the legal responsibility. JCVI have the responsibility then to talk about deployment and ultimately, in this situation, the CMOs are kind of third umpire in this situation. Do you want to explain how JCVI got involved, Wei Shen, and how they thought about it?

Professor Lim: It is quite a complicated process. MHRA do not approve things on their own. They have to be approached, presented with the right information, and only when they are approached and they approve something. If they are never approached they will never approve anything; that is the first to say. Their timing is based on when they are asked a question. When they can prove something that means that something can be used. JCVI has to decide how that thing might be used. In this case we are talking about a vaccine. JCVI's role is to decide if something can be used—a vaccine—how should that vaccine be used to maximise, optimise the population health. That may mean we use the vaccines in different ways in different age groups, for example.



The process that we take then is to decide deliverability as well as scientific benefit to the population. For young children, that is complicated and we put out a series of advice or statements over time, as you will know. These bits of advice came out at different points from July onwards.

If we were given the advice earlier in June operationally we would not be vaccinating 12 to 15 year-olds in June anyway because the programme was still driving at pace through the other age groups. There is a balance between going too soon and giving advices prematurely without the available information. The more appropriate information—perhaps it might take longer to get the right information ourselves before we can give the right advice. There is a balance of not going too quickly with the advice as well as not going too slowly.

Q70 Tom Hunt: When we look at some of the other similar European countries, I think Spain 79.2% of 12 to 18 year-olds have had at least one dose, and France it is 68%. Italy it is 62.4%. Germany it is quite a bit less, it is 36.7%. We know the US and Canada started in May. I can understand the reasons for wanting to maybe take a bit longer but it does seem a long time—the gap—and I can see the advantages in those other countries being much further ahead. Going into the autumn season they have advanced and the benefits of us making this decision would have accrued and be making themselves felt as that age group are more protected from Covid. Do you think it is regrettable that we have not been able to one way or another get ourselves to a similar position?

Professor Whitty: As you would probably would have recognised from commentary in the press and elsewhere, there are people who think we should have gone faster. Definitely there are a group of very sensible credible professional people who think we could go faster and there are people who think we should go slower. What we have tried to do, as I said at the beginning, is take what we think is midpoint of the medical profession's view based on our current understanding and informed by what has happened in other countries. The fact they have gone ahead of us means we benefited from their fantastic science and their information in the decisions both that JCVI took and that the CMOs are able to take into account.

I do not know if there is a right answer to this. What we tried to do is stick in the middle of what we think is professional opinion and that is the view also—I am looking at Camilla here—of the presidents of the Royal Colleges and the directors of Public Health. They feel comfortable we have tried to get this as a balanced decision.

Tom Hunt: The midpoint of scientific opinion in this country seems it may well be different from a midpoint of scientific opinion in other European countries.

Professor Whitty: In a new pandemic we are all moving at very slightly different speeds. In some areas we have gone faster and in some areas,



for example the JCVI's advice on extending dose interval, which CMOs have agreed with, we are ahead of virtually everyone else. In other areas we have been slower. That is inevitable. This is a new pandemic. We are all learning as we go.

Q71 Tom Hunt: A final quick question. The US and Canada started this age group in May. That is quite a long time ago. Surely we have had more than enough time to look at their data and come to an assessment and go more quickly.

Professor Whitty: I suspect if you took a straw poll around even this table here there would be a range of views as to whether we were going too fast or too slow. What we have tried to do is stick to the middle of what we think is the medical opinion in the UK based on current data. These are finely balanced arguments and we fully accept the arguments in either direction that people want to go faster or slower. Wei Shen wanted to come in. I do not know if you wanted to add to that Wei Shen.

Professor Lim: Yes, I want to just draw two points. First, you said that MHRA approved the Pfizer vaccine in June, and that is correct. JCVI concluded its initial discussions on vaccination for 12 to 17 year-olds on 2 July. That was handed up and publicly released on 19 July. Pretty soon after MHRA approved those vaccines. The very strong difference between the UK and other countries is that we deliberate on whether we could identify from a health perspective children who are at higher risk of Covid-19, and we targeted those children first for the vaccination programme. They were offered vaccination very early on in July.

If you look at many other countries and their risk benefit calculations, they have lumped together children who are at higher risk and children who are at no higher risk. That makes a big difference. One needs to be careful about comparisons across countries without being aware of how our own country is fairing and how a vaccine programme is being deployed.

By far and away the biggest health benefit from vaccination is with adults, and getting as many adults vaccinated as possible must be the priority if we want to save lives.

Tom Hunt: Thank you all for your responses. I appreciate your reasoning for making the decision that you made.

Chair: Apsana, do you have any more questions or not? You have another question, thank you.

Q72 Dr Johnson: Just one quick question. Following on from what Professor Wei Shen said, the other countries have already given some vaccines and that enables us to look at the side effects in a much broader number of people, which is beneficial for us. Adam Finn, paediatrician, wrote in *The Sunday Times*—he is a member of JCVI committee—that the high proportion of the myocarditis patients showed significant changes of the heart and it is perfectly possible these resolve will completely over time.



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It is also possible that they may not. What trials are you aware of ongoing into this small group of children; and it is a very small group of children and very low risk? What trials are ongoing and what efforts are being made in the UK to be ready to recruit any such patients into a trial so we can look at them more closely in this country too?

Professor Whitty: Can I turn to Professor Van-Tam, but just to make a comment on my own before that? It is also important to remember we do not know what the long-term effects of catching Covid are in children.

Dr Johnson: I completely accept that.

Professor Whitty: As with all these things, these are balanced decisions. The risk is not all on one side. All of us need to be very careful where you put the balance on the table.

Professor Van-Tam: We are already aware of the need for there to be some form of research that looks and follows this cohort, which is a very tiny cohort of patients. That work is underway. There are no decisions yet about what is the best or the right study. On top of that, I would want to draw to the Committee's attention, if they have not already seen it, the preprint paper—that means it is not yet peer reviewed—from Mendel Singer and colleagues in the University of Cleveland, where the point that Professor Whitty was making about myocarditis occurring as a result of Covid-19 infection, that paper draws the conclusion that in young males 12 to 15 the likelihood of myocarditis after Covid-19 infection is sixfold higher than is the case related to the administration of the first dose of vaccine.

We can argue altogether about case definitions and so forth in that paper but the comparison between the two from the same data source is important here. My judgment is that even if that figure of sixfold is not absolutely correct that is not going to diminish something that is close to unity unless the data are incredibly badly flawed. From that perspective, that is an important paper that ought to be looked at by the Committee.

Q73 **Dr Johnson:** Are these children in the UK—presumably there are quite a few of them now if it is caused by Covid and potentially by the vaccine in the future—who have had myocarditis been entered into any clinical trials or been asked to be entered into any clinical trials so that we can look closely at what it is that is happening there?

Professor Van-Tam: To go back to my original answer, the numbers that the MHRA have so far received reports of are incredibly low and we are looking at studies that might be able to follow those children up. But I do not think it would be a clinical trial as such because one would need to have a specific intervention to evaluate in a trial, and I do not think we are talking about that. I think we are talking about following up those children.

Q74 **Dr Johnson:** Do you have a scale of those numbers? We think 1.5 million children in this age group have had Covid already. What sort of numbers



of children have had myocarditis?

Professor Van-Tam: I can give you from the MHRA paper, and this is data current up to 14 September 2021, the information I have is that under 18 years of age for first dose Pfizer—this is what we are talking about—the rate of reported suspected myocarditis or pericarditis—and these are spontaneous yellow card reports. Some of them will not be substantiated, some of them will have no ECG evidence and so forth. We are definitely seeing that. But that number is 0.9 per 100,000 doses administered in the under-18s.

Q75 **Dr Johnson:** The question I was asking was the number of children in the UK who have had myocarditis recently as a result of Covid itself because we think 1.5 million of these children in this age group have already it. Are we looking at those children?

Professor Whitty: The short answer is we will be but we do not have the data yet. That is a critical question because it is right, as Professor Van-Tam said, that we can replicate the fact that the rates of myocarditis are higher in Covid infection than in vaccination. My own view is there is a high chance that will be true.

The second question, which is critical, which you are rightly implying, is what are the long-term implications of this because as you know most cases of myocarditis, of whatever cause, just get better. It is possible these will be different from other causes of myocarditis but my own view is I start off with it is improbable, let us see, must look, must follow this up, must study it, and it has certainly been done in the US and we will certainly aim to do it here. At that point, if there is a reason to do a trial then we can do a trial. But that is the next stage along.

Dr Johnson: I was wondering if you had any figures on the number of children who have had myocarditis recently?

Professor Whitty: No, at this point we do not that I would feel confident to put into a public domain like this.

Q76 **Chair:** Just to ask some concluding questions—we should finish in five minutes; I know you are all very busy and it is genuinely appreciated. Given that most adverse events go unreported how do you plan to monitor the adverse events if there are significant ones in this age group? What steps are you taking to monitor it?

Professor Whitty: I will give you a view from my side and it will be useful to get a view from the paediatric side. Monitoring the side effects of vaccines, if they are clinically significant, we are likely to pick them up because if they are clinically significant they will go to a GP, they will go to a paediatrician. The time sequence with, "I had a vaccine on Monday and I got this problem on Friday" will be obvious because people know when they have had the vaccine.



The more difficult ones, and this goes back to Dr Johnson's very good question, is the people who have had Covid because a lot of children who have had Covid do not know they necessarily had Covid. We do not know that for sure. The denominator is a lot harder whereas it is much easier to say—people will go back and say, "What happened last week?" the answer is, "I had a vaccine." "Ah, I need to think about it." It is going to take a while for us to be absolutely confident. Paediatricians will be collecting this data, as will GPs, and it takes a while to accumulate them in a way we trust. That is the point. What we do not want to do is show our own data and then end up—

Q77 Chair: Before you come in, can the public access age specific data on the vaccination programme? Is the yellow card system age stratified?

Professor Van-Tam: I beg your pardon, I missed that question.

Professor Whitty: The question was about age stratification of yellow card data.

Chair: Can the public access age specific data on the vaccination programme and is the yellow card system age stratified?

Professor Van-Tam: I am unable to answer that question.

Professor Whitty: The answer is it is age stratified. My understanding is it goes out with a time delay because they want to quality assure it. It is less in real time than the overall data. But if you want chapter and verse on that we can write back to this Committee. Yellow card data are public domain data, there is absolute intention that the data—

Q78 Chair: Have you seen the data from other European countries that have rolled out the vaccine to children? If so, can you make it public? If there are comparators, because obviously some European countries that are doing this kept the schools fully open so I understand that it will be hard. But if there are similar comparators, are you able to model what less disruption there has been in those countries that have had the vaccination for children?

Professor Whitty: The first is an easier answer than the second. First, if the data are given to us in confidence by another country we cannot publish their data without their permission. That would be very odd. But the absolute tradition in medicine is to publish everything. There may be a bit of a delay between us seeing it and it being in the public domain. I would completely expect it to be in the public domain.

School disruption though is much harder to measure and also the way in which different schools respond in different countries is more difficult. The honest answer to that is it will be quite difficult for us to put a number on it but we will certainly try to learn the lessons from other systems, albeit accepting they have different systems as well.

Q79 Ian Mearns: Obviously the point that Tom was making earlier on is that



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other countries are ahead of us in terms of vaccinating this particular age group. Are we learning any lessons about any potential clinical side effects from those other countries and are we asking GPs to very quickly report any incidents of clinical side effects up the chain?

Professor Whitty: The answer on both that I will give is yes. On the first it is an unqualified yes. One of the benefits JCVI has had over some other nations is that many countries are ahead of us and they have benefited both from published data, obviously, but also unpublished data, and data from the regulators that they get in confidence and from companies. Yes, we have learnt from them and we will continue to learn from them.

The decision that JCVI takes on a second dose, if they decide to go for one and, if so what dose, would be very much informed by other nations' areas.

GPs in the UK have a strong tradition of using the yellow card system. They all know how to use it and I would expect them professionally to report anything suspected or definite. We would rather over-call it and then test the data than under-call it. That would be a professional expectation I would certainly have. I am sure the heads of the Royal College of General Practitioners would agree if they were here, that that is an expectation they would have, as is normal medical practice. We have not written saying to specifically do it but that would be the norm with any new drug or vaccine.

Q80 **Ian Mearns:** In that reporting mechanism, what is the route that that would take from a GP? It would be directly back to whom; the CCG or—

Professor Whitty: There are two routes this will get there or maybe even three. There is the formal route via yellow cards to MHRA, which is the custodian of all of it and should be the final common pathway. Their job is to rule how definite this is and put the numbers in and have a proper denominator. There will be data we will pick up indirectly from records information, particularly from hospitals. There are hospital systems data. Then the academic community is obviously heavily engaged in this, and they will independently be analysing this by different routes. There are quite a lot of different ways we can try to get the data but the formal route is MHRA.

Q81 **Chair:** My colleague Caroline wants a further question, but the JCVI said that the vaccine programme could have an impact on the efficiency of the rollout of flu vaccines. What is the latest state of play on that? Is that still the case? Is it going to have any impact on any other ongoing vaccine programmes for children?

Professor Whitty: Keith is the right person to answer this.

Professor Sir Keith Willett: The flu vaccination programme for children has been extended, as people may know, to wider age groups. That programme has already started. That started early in September and will run through to 31 January. The Covid vaccination programme in schools,



in England we are planning to have all invites, the consenting material and the date for vaccination out to every child, every family, before the autumn half-term. This is a much faster process.

While it runs, there is an opportunity for co-administration, so flu vaccination can be given at the same time as Covid. In order to do Covid, we have massively enhanced the capability of the school age immunisation service and made available a 20,000 full-time equivalent workforce. Although there will be an interface we do not anticipate a substantial interference with the flu programme in children.

Chair: You are saying it will not impact on other vaccination programmes?

Professor Sir Keith Willett: It will not impact; the other vaccination programmes tend to go over a much longer timescale. In response to the request to move this programme very quickly, the Covid programme is being run over a matter of six to eight weeks.

Professor Whitty: Can I add to that slightly, Keith? It will not impact from a clinical point of view. It may make some operational difference, but with the HPV vaccine, for example, with a child, you would not expect one week or another to make much difference. I agree with Keith, but I want to make sure that people are aware there may be some shuffling around of exactly in which sequence things are done.

Q82 **Chair:** What are the timescales for this? When are we likely to know what the take-up of the vaccine is, when the process is completed, and whether or not it has been successful?

Professor Sir Keith Willett: We will have data coming through on the uptake within a matter of days operationally and within a few weeks in terms of public reporting. That will give us a figure comparable that we can look at. In terms of the effectiveness of the vaccination, on the wider case rates and others, I will defer to Professor Whitty.

Professor Whitty: The trouble we have is it is not a big, randomised trial because this is a disease that is in very high rates sometimes and not in others. You cannot make an absolute comparison. But Public Health England and academics will look at this quite carefully and make a best estimate based on data on what the impact has been. My broad view would be the bigger the surge we get in winter the bigger the positive effect of the vaccination will be.

If we have had almost no Covid from hereon until March, then inevitably the impact of the vaccination programme will have been smaller. Were we to have, which we may well do, we just do not know, a significant surge over winter and the flu season—most people would say that is more rather than less likely—then the impact of the vaccination programme will be considerably greater. It is going to depend also what the epidemiology is.



Q83 Dr Johnson: I wanted to ask you one question I realise we had not covered but some parents will be wondering. What were the medical reasons that there was not an advice to do some testing beforehand? Knowing that half of the children have already had Covid, why not advise an antibody test and then vaccinate those who do not already have antibodies?

Professor Whitty: I will give a practical answer. I would be interested in Dr Kingdon's view as a paediatrician. What that would mean is taking blood and then half of the people subsequently vaccinated. I am not sure that sounds to me like a thing a child would willingly choose to do; two jabs rather than one in half the cases. But that would be the practical answer.

Dr Johnson: In practice the antibody test they send out for the studies is a finger prick, is it not, like a diabetic would use to check their blood sugars several times a day, including diabetic children? I appreciate some children might not like it, but it is not a blood sampling, is it?

Professor Whitty: It is blood.

Dr Johnson: It is not taking a whole syringe-worth; it is just the prick of one finger.

Professor Whitty: True. I have to admit, having been both vaccinated and having finger pricks, that I prefer being vaccinated. You have many more pain receptors in your fingers than you do in your arm.

Dr Johnson: Not from a practical point of view, but from the risk-benefit point of view of the vaccine.

Professor Whitty: You could do a theoretical argument that if you could be confident that you knew someone's serostatus then you could re-stratify, but in reality the practicalities are important. Even if a child already had Covid that is not a reason not to vaccinate them. The benefits will reduce to some degree but it will still strengthen their immune system and probably prolong it. Do you want to add to that?

Dr Kingdon: As a paediatrician, the thought of advocating a two-step approach of potentially two needles would be deeply unpalatable to most children and most parents. If we are serious about the broader benefits of this vaccine programme we need to make this as easy as possible. Adding in an extra step like that, as a paediatrician, and thinking practically, I cannot imagine being a sensible route.

Dr Johnson: Essentially practical reasons.

Q84 Chair: Is there anything you want to say finally to parents? You have said quite a lot publicly already but is there anything you want to say as we close the session?

Professor Whitty: First, we are grateful to the Committee for the opportunity to lay this out because it has allowed a much more detailed



discussion of what are quite complicated issues. We are grateful for this hearing.

To parents as a whole, I would go back to Professor Lim's view, as put by JCVI, it is important for people to realise that the risks of this vaccination are very small. The risks of Covid also are small but our view is even at an individual level benefits exceed risks, as JCVI said. Additionally we do think it has wider benefits in the population 12 to 15, which is why we recommended it to Ministers to be offered.

Ultimately, it is an offer and this is something that parents with children will be making decisions about. It is an offer, and I want to stress that.

Q85 **Chair:** Thank you. I do not know if the other professors want to say anything.

Dr Kingdon: The most compelling message I got was listening to the children and young people that we interact with at the Royal College. Their message was very much about choice and being offered the opportunity to understand the risks and advantages in an age-appropriate but sensible and coherent kind of way. Choice is important in addition to everything else that Professor Whitty has already outlined.

Q86 **Chair:** Any of the other professors at all? No. The JCVI?

Professor Lim: If I could just add to what Professor Whitty is saying—

Chair: Could you speak a bit louder please?

Professor Lim: If I could just add one more thing, which is to encourage 12 to 15-year-olds and their parents. Where the 12 to 15-year-old has an underlying condition, and is at higher risk of Covid, there is no doubt that in our minds that those children are at higher risk and the benefits of vaccination clearly outweigh the risk on a health ground, quite apart from any educational benefit. Those people should step up if they are offered a vaccine, if possible.

Chair: Thank you very much. It is appreciated. Thank you again, as I said at the beginning, for your service and all that you are doing. We appreciate you coming to our Committee for scrutiny because we have to ask these questions. I wish you all well. Sorry that it went over, partly because of a vote, but thank you.