STANDING COMMITTEE
OF
TYNWALD COURT
OFFICIAL REPORT

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PUBLIC ACCOUNTS COMMITTEE

Genomic Sequencing

HANSARD

Douglas, Wednesday, 28th April 2021

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Members Present:

Chairman: Hon. J P Watterson SHK
Ms J M Edge MHK
Mrs J P Poole-Wilson MLC
Mr C R Robertshaw MHK

Clerk:
Mrs J Corkish

Assistant Clerk:
Ms N Lowney

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Standing Committee of Tynwald on Public Accounts

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The Committee met at 10.34 a.m.
in the Legislative Council Chamber,
Legislative Buildings, Douglas.

[MR SPEAKER *in the Chair*]

Procedural

The Chairman (Mr Speaker): Good morning and welcome to this public meeting of the Public Accounts Committee. I am Juan Watterson, Speaker of the House of Keys and Chairman of the Committee; and with me are Mrs Poole-Wilson MLC, Chair of the Constitutional and Legal Affairs and Justice Committee; Ms Julie Edge, Chair of the Social Affairs Policy Review Committee; and Mr Chris Robertshaw MHK, Chair of the Economic Policy Review Committee. Unfortunately, Mr Hooper is unable to join us this morning.

Our other Committee Member, Mrs Clare Barber, Chair of the Environment and Infrastructure Policy Review Committee has recused herself from the PAC's Covid Genomics Inquiry, as she is a political Member of the Department of Health and Social Care and will therefore not participate in the first half of this session.

Can I ask everyone please to ensure that their mobile phone is on silent, so it does not interrupt proceedings.

There are two aspects to this morning's session. The first part is being held as part of the Committee's Inquiry into the use of genomic sequencing in response to a pandemic in the Isle of Man, and the second part is in relation to its Inquiry into the Isle of Man Steam Packet Company and the border protocols during the pandemic.

This morning, we welcome Dr Henrietta Ewart, Director of Public Health in the Isle of Man Government Cabinet Office.

EVIDENCE OF
Dr Henrietta Ewart, Director of Public Health,
Cabinet Office

Q54. The Chairman: Welcome, Dr Ewart.

Just to start off on the issue of genomics, I think it is fair to say there have been some pretty fundamental differences between yourself and Dr Glover with regard to the –

Dr Ewart: No! I have had no, well, absolutely minimal contact at all with Dr Glover. I need to make that *very* clear.

Q55. The Chairman: That is fine. I was going to say in terms of the use of genomic testing and the utility of genomic testing, in which I think we have seen some quite different approaches.

Dr Ewart: She has never been able to share how that utility would happen.

I absolutely agree with the extraordinary interesting nature of what is found from genomics and the fact that it provides further evidence to set aside the epidemiology that we get through the immediate contact tracing. What I have not had demonstrated to me, either through Dr Glover or through any published papers, or through the experts we speak to across, is that it is essential for the immediate response to cases, clusters or outbreaks. And indeed, it is not used in that way across.

Q56. The Chairman: I think that possibly highlights the difference in that the evidence that we have had in the past is that the Public Health approach is very much one of that satellite view, looking at where the clusters are, the variants that are coming into the UK and that macro satellite view picture; as opposed to Dr Glover's approach, which is very much about looking at the individual case under the microscope and saying that is exactly what this particular case is and where that sits in the family tree.

Dr Ewart: Yes. In fact, the issue there is: can she demonstrate that knowing that – and it is very interesting, I do not dispute that at all – but can she demonstrate that knowing that actually leads us to do something different in real time. The Public Health perspective is that, actually, it does not, because it does not replace or even really, in real time, fine-tune your response.

Q57. The Chairman: Because when we moved from – I am not quite sure what the variant was before the Kent variant, if it had a name, but that was –

Dr Ewart: It was B.1.117, as opposed to B.1.7 which is the Kent variant.

Can I assume that you are all very familiar with the Genomics UK Consortium website?

The Chairman: Yes, we have –

Dr Ewart: So you will be familiar with that wonderful graphic they have got, which shows how the variants have changed and spread.

The Chairman: The family tree. Yes.

Dr Ewart: That really does show you, and it *is* interesting and at that level it is useful, but for a jobbing on-the-ground Public Health health protection person, that does not change our immediate response.

Q58. The Chairman: I was just trying to see if it had a better name than that. So we will call it the 'original' variant versus the 'Kent' variant –

Dr Ewart: Yes, but we have to be careful there, though –

The Chairman: Just for this exercise –

Dr Ewart: Because there is a huge difference. The Kent variant came from nothing in September –

The Chairman: That is my point –

Dr Ewart: It now accounts for over 99% countrywide. None of the previous variants did that. The one that I have named, theB.1.117, that got up to about 75%.

Q59. The Chairman: Yes, that is kind of my point. That is where I am headed, anyway, inasmuch as what happened was that we had this original variant, in quotes, *(Interjection by Dr Ewart)* which was very much around droplets and that was more the way that it was transmitted. The Kent variant was far more transmissible, and it seems that when this came up, that did change the approach, it did change the risks – (***Dr Ewart:*** No.) Well, it did change the transmissibility!

Dr Ewart: Yes, it changes the transmissibility –

The Chairman: Which is a risk factor –

Dr Ewart: But that did not change the control measures, and SAGE actually looked into that in considerable detail and published a paper to that effect.

The Chairman: Mr Robertshaw, first.

Mr Robertshaw: Good morning.

Dr Ewart: Good morning.

Q60. Mr Robertshaw: You referred to the level to which the UK uses genomic sequencing, but do you accept the fact that the UK intentionally works to a given level because it is working in such a huge environment, millions and millions of people, whereas it might be possible for the Isle of Man to delve down to the next level which would give more detail, bearing in mind there are so few of us?

Would you accept that –?

Dr Ewart: No, I do not accept that, because communicable disease control is based at local level. That might be a local community, for example, Leicester which is one that has very much been covered in the news. It might be a care home. It might be a renal dialysis unit. It might be a hospital provider trust. So it is always at local level that you are trying to do your control.

Q61. Mr Robertshaw: No, I think you have misunderstood my question, sorry. I will try again, my apologies.

It was a capacity issue in the UK, and that evidenced itself in a number of our papers that we have read so far, that the UK system quite understandably had a capacity issue to meet, because there was so much work to do. That was my point.

Dr Ewart: I think, no, I do not accept that either because it was not as if we all knew there was going to be capacity needed and it was not there. This has been an emerging event, obviously, since December 2019, when actually nobody knew what was going to be needed.

In terms of genomic sequencing, all credit has to be given to Prof. Sharon Peacock of Cambridge, who very early identified that this was going to be a function that was going to be useful, and actually created an amazing collaboration which you will be aware of from your knowledge of the website, so I will not recap it. But that was about somebody who said, 'I *think* this is going to be needed' not a kind of high-level, 'Oh, we know this is needed. It should be there.' This has all been step-by-step finding out what is needed as we respond to what is emerging.

Q62. Mr Robertshaw: So for clarity from my perspective, you consider that the UK system is drilling down into genomic sequencing as far as it can?

Dr Ewart: Oh, yes, it goes right down to phylotypes, to SNPs, and you will be familiar with that from the website, of course – single nucleotide polymorphisms.

Q63. Mr Robertshaw: So you are saying that the UK does not need to drill any further? That is the –

Dr Ewart: It cannot drill any further. The sequencing is going right down as far as it can do, down to individual SNPs, and those occur at a rate of one or two a month as the virus transmits.

The Chairman: Mrs Poole-Wilson.

Q64. Mrs Poole-Wilson: Thank you.

Just picking up on the issue of how sequencing information might feed into the response, which you said would not change the response. I suppose my question is: with the mitigation strategy that we now have in place, and some of the changes we have seen that have come into effect only this week, and I am thinking about high-risk contacts, for example. So we are now saying that it is the high-risk contact who should self-isolate, but not members of the household, if I have understood that correctly?

I suppose my question is: if we knew tomorrow that the next variant of concern had arrived in the Isle of Man, how quickly would we want to be able to change that approach?

Dr Ewart: I am not sure it is *that* that changes that approach. Obviously the variants of concern are important but with a lot of them we still do not understand exactly what impact they have. Transmissibility is one thing, but if that makes no difference to severity of illness, it is not going to knock over our health services, so that could take you to the argument which is actually that we should not be so interested in numbers any more. Because if people are just out there with it, like people are out there with flu or the common cold, it actually does not matter so much.

What we are really interested in is whether it can cause serious illness, which will knock over the Health and Care Services, and/or whether it can actually evade the vaccine and give us the sort of problem where huge numbers of the population might be infected. And if you have got huge numbers in the population – this is a bit analogous to pandemic flu – some of those will be serious and end up in hospital. But even those that do not, it takes out an awful lot of your workforce, so your other services and just daily life become threatened through that route.

So those are the things that are of interest, and it takes time to understand those things. That is not just about genomic sequencing. So the Indian variant under investigation at the moment, we do not know yet how concerned we should be about it, it has not yet been designated a variant of concern. It is suspicious because it looks as if it has two mutations that affect spike protein, and that is the protein that is used for the driving of immunity through the vaccines. So if it has altered that it could give us a problem, but we do not yet know. That kind of illustrates that the genomic sequencing, which is important in that, is not the end of the story, because you then have to investigate those variants further to see what impact they have on transmissibility, severity of illness and potential to evade the vaccines.

Q65. Mrs Poole-Wilson: I think everything that you have just explained is very clear and very helpful, and I think the question really in my mind is: when I look at our exit framework and we talk about Government response we have the expression:

> Ready to React: Understand variants of concern …

– which I understand is something that is happening beyond the Isle of Man shores and takes time; and then it says:

> … and develop rapid identification capabilities

So I suppose my next question is: when you are at the point when there is more understanding of a variant of concern, whether it is going to evade the vaccine, transmit more readily, or

whatever the issues with it are, would it be important at that stage for us to know as quickly as possible whether that variant had arrived in the Isle of Man to change our response rapidly, *and* get public recognition that it is important because we know what we are dealing with?

Dr Ewart: Yes. There are multiple strands to your question there, which are all great, so I am very happy to engage with them all, but you may have to remind me if I have not picked up on some of them.

First of all it is the 'would it change our approach'? Not necessarily. I think what we have to have for the foreseeable future is capability to understand what is coming across our border, because as a small Island that is what we are concerned about. We are not going to be generating new Isle of Man variants ourselves, because it takes *mass* uncontrolled transmission, and then it takes about 90 days of that uncontrolled transmission to drive the appearance of a variant. Of course, at that stage, it would just be a variant 'under investigation' not necessarily 'of concern'.

So there is the issue about we need to understand what we want to monitor at our border and whether that means we want for a long time to keep going with some form of border testing, even if that is not necessarily linked to a requirement for self-isolation. This is an area that troubles me greatly because there is no easy answer.

Obviously we want to open up our borders and in the past when all variants were equal, if you like, it was not unreasonable to do that based on saying, 'What are the levels of infection in our major countries of embarkation?' Which for us is the UK and in normal times a bit of Ireland as well. And then looking at those levels of infection there, looking at the number of passengers from those places coming over every week and then being able to do a quick calculation to say, based on the incidence and the numbers travelling, we would expect to see an imported case once every however long it might be.

If it looks like it is going to be once in a very long time, you might say, 'Well, hey, let's relax, let's not do border testing.' That is indeed *kind of* the argument that sits behind some of the traffic lights arrangements for deciding what you do for travellers coming from different places into your jurisdiction.

I think variants do throw an extra issue into that calculation and it is difficult to get a fully evidence-based approach to it and, as I say, it is one of the issues that does concern me. Obviously, one wants to say, 'Let's open the borders and for most embarkation countries let's let people come here without let or hindrance.' But that will include a risk of bringing in variants, which may be ones of concern.

If we do not test, we will not know; and we will not know unless or until somebody who has brought it over – and it might not even be them, it might be several steps down the line, as they have passed it on to other people, unless or until one of those presents as symptomatic and actually gets a swab and a PCR which we can then test for variants.

That brings me to the wider issue of testing for variants, which to date has largely depended on doing the whole genome sequencing, but obviously lab platform manufacturers are very resourceful, and it is possible to fine-tune the PCR platforms to include primers that will actually test for and give you a reading on known variants of concern. So it will not only give you the PCR result, it will say this one is Indian variant, this one is South African, this one is Brazilian, this one is Kent, which actually for our purposes would largely take out the need for whole genome sequencing.

The Chairman: Thank you.

Ms Edge.

Q66. Ms Edge: At the start, when the Chair was asking you questions, you did comment on a mix of variants in that first and second wave, and if you could just comment on that? But how do you envisage the rapid identification and border testing to work on the Island? Obviously you have advised as to how that should be. What testing is going to take place?

Dr Ewart: Yes, that is not my decision ultimately, and obviously there are issues to think about there. As you know, Guernsey last summer went for a first test offered at the point of disembarkation, so they set up testing stations at the Port and the Airport. That was at a considerable cost. I think, roughly around £4 million. So there are issues around that.

Obviously we went for the Grandstand system which has a capacity issue, and obviously that is something to think about as you open up the borders to bigger numbers. That is something I would give professional input to, but is not ultimately my decision.

Q67. Ms Edge: So for the exit strategy you have given input (***Dr Ewart:*** Yes.) from a professional point of view on that?

The Chairman: thank you.
Mr Robertshaw.

Q68. Mr Robertshaw: You were talking about PCR being capable of more detailed analysis. Do we have that on the Isle of Man at the moment; and, if not, how long would it take us to put it together? How quickly could that respond if we are trying to trace a variant of concern?

Dr Ewart: It is not yet on sale. It is currently going through the procedures to give it its CE mark, which is the mark that says it is fit for purpose and fit for marketing.

Our laboratory colleagues, Dr Rizwan Khan and Steve Doyle, who are respectively the consultant microbiologist and pathology manager, are already in discussion with the manufacturer and with Manx Care and DHSC to get that lined up when it becomes available to actually introduce. *(Interjection by Mr Robertshaw)* Then it would need local validation against samples so that they are clear that it is working in the laboratory context. Obviously people would need training on its use, but it would be done as fast as it could be done.

Q69. Mr Robertshaw: So have you got a guesstimate timeline on delivery?

Dr Ewart: No, it is outside my area of either competence or responsibility. So I would not like to comment on that, on behalf of colleagues.

Q70. Mr Robertshaw: Secondly, just going back to some comments you made about transmissibility. I got the impression – so correct me if I am wrong – that you were downgrading the importance of transmissibility a little bit there. Did I misunderstand you?

Dr Ewart: You misunderstood me.

Q71. Mr Robertshaw: Could you elaborate a little bit then on the importance of transmissibility?

Dr Ewart: Yes. Transmissibility is obviously of concern, and certainly one thing that we know from the literature and we have seen it ourselves on Island is, particularly with the Kent variant, just how quickly it goes through households, which is an issue. Obviously one of the good things that we are learning from the emerging data around vaccination is that the vaccines actually do seem to damp down transmissibility as well as severity of illness. That was not known from the initial clinical trials that were used to get marketing authorisation.

Q72. Mr Robertshaw: When did we first know, then, that that was the case? Because using a layman's common sense approach to this, by definition, it would seem to me – and I put this to you with every respect – that the successful variant is the one that is more capable of being transmissible anyway, otherwise it would not become the dominant –

Dr Ewart: That is exactly so, and that is exactly what you can see from the graphic –

Q73. Mr Robertshaw: So when did you first come to the view, then, that the successful variant was more transmissible?

Dr Ewart: Well, we came to that view as that data was being published across, which was largely the back end of the year and the beginning of this.

Q74. Mr Robertshaw: November and December time?

Dr Ewart: No, later than that. It was more December into January that they were really getting to grips with the increased transmissibility. From memory.

Q75. Mr Robertshaw: Good, thank you.

So very early doors this year, we were clear that transmissibility was a key player in the surging Kent variant. That is fine.

The other final question in this section I have got for you, please, is: what is the ideal turnaround time between identifying, shall we call it 'a variant of concern', and knowing what it is from our perspective on the Isle of Man, because you referred a little bit earlier to an area that troubled you and I think we fully understand that, it concerns us all.

How fast would we really want to turn this round if we could, knowing it –

Dr Ewart: That is not in our gift. We do not identify initial variants under investigation –

Q76. Mr Robertshaw: No, stop. Sorry.

We already know the variants exist because they have arrived in the UK and I think we all accept that. But it has arrived in the UK, we have identified here that if that got to us that is a concern. What is the ideal timeline between making a test and identifying that that particular variant has arrived on the Isle of Man so we can react fast to it? What would you see as the ideal turnaround time for that?

Dr Ewart: I do not think you can estimate it in that way. At least I would not even attempt to.

Obviously, as we have said, and this is absolutely illustrated by the Indian variant which is a huge issue of concern. They have got the perfect storm in India at the moment for driving the emergence of variants of all sorts, because it is just transmitting in such an uncontrolled way. Every month we will get a couple of SNP changes, every 90 days we will get a variant emerging over there.

So it is of huge concern and it is coming across. We have already got it coming across here. We know that, despite –

Q77. Mr Robertshaw: UK, here, not –?

Dr Ewart: Yes, sorry, the UK!

The Chairman: Important distinction!

Dr Ewart: Yes, I am forgetting our territorial distinction. It has come into the UK and we know that despite their border and travel restrictions it has got into Leicester, and we know that it has transmitted between individuals in Leicester who have not travelled themselves. So that *is* concerning.

Q78. Mr Robertshaw: So if it arrives on the Isle of Man and we do not do automatic border testing, one might reasonably assume that it could be a minimum of three, maximum of seven, eight, nine or 10 days before we saw it, and then if it took us another number of days before we knew what it was, that could be up to two weeks. You are comfortable with that, are you?

Dr Ewart: We may not see it if it comes on Island. That is the whole problem. If we have no border testing people are just coming and going, and if somebody comes in who has it and is asymptomatic, they will not know and they may pass it on. This is again where you get into your moorland fire. We might actually not see it at all, because some of those people might come over, they might not infect anybody else by good luck or happenstance, or they might infect a few other people who also remain asymptomatic and that transmission chain fizzles out.

Alternatively, it could go on creeping along and eventually come into contact with somebody who may be clinically vulnerable. They may have been vaccinated, but maybe the vaccine has not given them maximum protection, they get it, they get ill, they rock up to Noble's and they get tested at that point. Now, if we have got the PCR with the primers to identify the variants, when they get tested the result will show us (a) that they are positive, and (b) it will be able to show us what the variant is.

Q79. The Chairman: But, Dr Ewart, does that not underline the importance of sequencing all of our positive tests until those PCR primers are available?

Dr Ewart: Yes, which is what we *are* doing.

Q80. The Chairman: Yes, but again, that is adding an extra five to seven days into the testing regime before we know which variant the positive cases would be.

Dr Ewart: Yes. And I have to say again from the Public Health perspective that does not concern me because our identification and control measures will be the same, regardless.

Q81. The Chairman: Well, we know that in any situation in the community, though, at the moment you only have to look out the window to see there are people walking up and down without masks on. I think people would react very differently if they knew that that variant of concern was out on the streets of the Isle of Man and they would want to know that quite quickly.

I think, whilst you say from a Public Health perspective it would not change the effect from the Public Health advice, I think it would change the public view in the Isle of Man, and surely that is where that distinction comes in and why it would be more important to be able to turn this around quickly for that understanding?

Dr Ewart: Yes, and if it is felt that that is appropriate from a 'small p' political population reassurance perspective, that is fine and I would respect that. But from a Public Health health protection and infection prevention and control perspective I am saying, and continue to say, that our current protocols for identification, containment, contact tracing and isolation would still apply.

The Chairman: Ms Edge.

Q82. Ms Edge: So the current PCR you are saying is needing to be adapted to identify some of the new strains. But you are also saying that we cannot get those results back for 10 days. So we could have a real transmissible variant throughout the population within a 10-day period, because we are not doing the rapid identification?

Dr Ewart: We do not need genomics instantly because the control of the person and their contacts is the same, regardless. That is what you do and what you would continue to do –

Q83. Ms Edge: And do you think that was effective –?

Dr Ewart: PCR, we get the results back from Liverpool within five days to a week. Across, my colleagues in local authorities do not get them at all unless, as has just happened in Leicester, Public Health England realise there is an issue and work with the local public health authorities, because there may need to be a local action to control it. Fourteen days is the standard turn-round time for genomic sequencing across.

Q84. Ms Edge: Okay, so obviously we have seen the Kent variant and how that infected possibly a thousand of our population –

Dr Ewart: More than a thousand.

Q85. Ms Edge: More than.

So there is the Brazilian variant that could come into the Island, there is the Indian, and you are saying that 10 days is acceptable because you are isolating people.

Dr Ewart: I am not sure why you keep saying 10 days?

Q86. Ms Edge: Well, that is the term … You said previously it was 10 days, but you are now saying five days –

Dr Ewart: Five working days, which tends to work out to be about five days in a week.

Ms Edge: Okay, it would be about seven to 10?

Dr Ewart: Yes, five to seven.

Ms Edge: And you are comfortable that that is satisfactory for the Brazilian or Indian.

Dr Ewart: I am very comfortable, yes.

Q87. Mr Robertshaw: There is a difference is there, between yourself and the Medical Director in the sense that on 2nd January, the Medical Director wrote: 'Losing five days minimum is a risk when possibly dealing with a new variant.'

Would you agree or disagree with the Medical Director?

Dr Ewart: I would disagree. As far as I am aware, the Medical Director does not have any communicable disease control training.

The Chairman: Thank you.

Okay, I think that is a useful point to wrap up the talk about genomics.

The Committee concluded this part at 11.02 a.m.