Healthwatch Hertfordshire Board Meeting
24th May 2022

SPEAKER SESSION

11. Graham Clarke, HUC Chair and was a member of DHSC's COVID Therapeutic Task force which provides its output to the Scientific Advisory Group for Emergencies (SAGE) committee - on the scientific evidence and the impact of the pandemic

Graham introduced himself and explained that he would talk about the background and emergence of Covid, the response and the future.

It was noted that the Department of Health and Social Care (DHSC) is a policy department, not a delivery department which is the NHS's role. It sits on top of a risk register and are encouraged not to have any more than ten big strategic risks included. These are put forward to politicians, ministers and the cabinet office and consolidated into England's risks. Two risks have remained for a long time: 1. Pandemic and 2. Antimicrobial resistance. Although pandemic was included in the risk register, and a known risk, assessing a pandemic is difficult as its impact and timing are unknown factors.

There is an existing infrastructure in place with organisations like NICE and SAGE. SAGE has approximately 100 people sitting on it and it has only met 9 times since 2009. It is assembled on a needs basis to provide scientific advice to prime minister and the cabinet office. Chris Whitty sits on this and is chaired by the government's chief scientist Patrick Vallance.

Viruses cannot replicate on their own. They do this by high jacking our cells by making our DNA make copies of the virus. This process is prone to errors whereby they sometimes fail to replicate or have minor changes – this is called a drift event. Every so often, if you are unlucky or you can get two viruses that fuse together in the replication process which creates something completely different – this is called a shift event. The shift events are very worrying as it results in both transmit, course disease and self- selected for multiply.

The science suggests that COVID-19 was not man-made. Finding out where it came from now is near impossible. We didn't know enough about the virus and by the time it emerged to be a global pandemic we had lost time and information in the early days that would have been helpful. Information from that starting position would have been good to be able to work out what to do with it.

Flu is an upper/lower respiratory infection. Lots of viruses spread through respiratory; airborne and through contact. Covid isn't like this and although it is respiratory borne it has spike proteins which can attach to cells in a variety of organs. Therefore the sorts of preventions, interventions and PPE required is different. As this was realised there was a scrabble for ventilators and the early days strategy was about buying time in the hope that people's own immune system would kick in. There was a priority to clear hospital beds of this becoming a big issue which was before the knowledge that the virus could be passed on pre-symptomatically and who would be worst affected. Approximately half the transmissions have been from the symptomatic and the other half non-symptomatic.

Without having a lot of data, the UK became a global R&D leader. The Government/DHSC put in place emergency response plans and set up various workstreams (scientific and clinical): PPE, Test and Trace, Vaccines etc. Test and Trace focussed on trying to contain Covid. PPE focussed on protection and securing supplies which was a giant effort. The vaccine task force came up with six different approaches to make a vaccine. The first two that came through: AstraZeneca and Pfizer both use completely new technologies that hadn't worked for vaccines so far so we were very lucky. This raises questions about regulators, safety efficacy and risk as historically vaccines are very hard to develop and takes years to develop. Questions that remain are: protection wanes over time – how fast does it

reduce, does it protect the whole population particularly in the immuno-compromised and the elderly, is there a danger that the virus will either drift or worse – shift into something that is more dangerous?

Covid and its expansion of work cost approximately 400billion – approximately spread in thirds between support to individuals, businesses and the NHS/test and trace etc.

Where are we now? PCR has been largely decommissioned now. We are in a more comfortable position but it still hasn't go away. There is now an inquiry to identify lessons learnt and long term implications. Implications include a massive backlog within the NHS, mental health, long covid. There are also some positives too – the science has served us well and enabled us not to have the mortality than we would have done, enabled new ways of working and new ways of doing things.

Q, How much did we learn from the international position and how do we get scientific knowledge out into the public so that there is wider understanding and evidence.
A. SAGE has five subcommittees and the behavioural science element has been really important. This subcommittee was very important and it considered what people believed in and what was tenable. It looked at what would people accept eg. whether people would socially distance, would people adhere to rules etc.
The clinical trials that were done cut across all the lines of how things used to be done eg. regulators used need to be told about the study design, population, clinical controls and done country by country. The UK led on a programme on recovery that used adaptive designs where the design of the study changed as it went along. Also there has been a lot of international registries where data is pooled. There was lots of innovation and collaboration going on.

Q. A lot of work was put into developing the risk stratification tool to try to support people who were terrified that it would be a particular issue for them. Then the vaccine became very widely available and this went by the wayside. Would it be good to re-look at this to use as we move toward a more endemic stage and whether we can learn from this in the future.
A. The UK had funded and pre-bought all six vaccines while still in development but this only deals with the UK, not the rest of the world – it is important that the rest of the world are also protected. The risk register is really important. The DHSC originally had two: short term and long term and they have now morphed together. Really important learning - a lot of the long term stuff and changes should not be forgotten. The public enquiry didn't cover mental health aspects enough and early on there was a recognition that this would have significant effects on peoples mental health.

Q. One of the biggest things that has gone away is the mandatory vaccination of care home staff. There was a slow backtracking and consultation.
A. The behavioural ethical piece is really important here. When there was poor vaccine coverage, poor PPR, inadequate testing you could see an argument that said that the way you protect people is the people that come in contact with them.

Steve thanked Graham on behalf of the Board.