Wellcome Genome Campus | 1-14_scaling_up_in_pandemic_video_4_v3 (Original)

Can you tell me a bit more on the source of the samples and the different workflows that are implemented in Scotland or in the UK regarding the testing?

The lighthouses were built to handle the excess testing outside of critical needs by the NHS. They already had their own viral testing labs, and they could handle that work. But infection that happens in the community or for asymptomatic screening needed to have a much higher throughput. And that's the sort of testing that we do.

So we don't have a lot of control over the samples that come to us. This is a centralised effort. There's a logistics team that determines which test kits get sent to which labs. But in general, we get a mix on a daily basis of tests that come from home testing a person did themselves, tests that were taken at a regional test site. So something like the airport or other stadium, they would have supervised collection sites.

Then there's also specialty testing where if there's an event or an outbreak in an area, they could mobilise and have a semipermanent testing capability. And then there's also a proper mobile testing, which was essentially a van that would go around and
set up multiple testing locations to kind of go where people were, whether there's an outbreak or just to reach deeper into the
community. There were some specialised testing designed around use cases like care homes or hospital centres or other care
centres where they needed to have additional testing and could set up capabilities directed toward them.

And then there were a few other sort of just tactical approaches through the pandemic to handle sort of the dynamic nature. Oftentimes, there was outbreaks. But then there were also some experiments when they would blanket an entire city and try really increasing the rate of testing, even of asymptomatic testing, and then look at the outcomes to see what would happen.

And so they did this on some sporting events and those sorts of things also. Because not only were we reacting to someone with symptoms, we were trying to really serve the greater needs of the community and the government to help inform the next steps all the way through. So those are most of them. We also run the samples that are collected for surveys run by the Office of National Statistics.

So this is fairly unbiased sample set surveying viral transmission and rates of occurrence in the broader community. And individuals are tracked over time. And this is how we generate information about the R number and other important statistical measures as well as monitor for variants of concern and changing that may not.

We don't want to be biassed by self-selection of going to a testing site, for instance. And then we also have some studies that were run, sponsored studies that the UK government was interested in contributing to the testing being done. And those would be sort of collected, delivered, and the results would be collected and added to the study depending on what it was.