**(SLIDE 1)**

Greetings Everyone. My name is Ian Hambleton – I’m Professor of Biostatistics at UWI.

So I’m a Health Researcher, and since the onset of COVID, along with public health colleagues, we’ve been providing COVID outbreak evidence for the region. And this is my 10-minute whirlwind through some of this evidence.

**(SLIDE 2)**

Our surveillance started in March 2020 with a modelling request from the Barbados government. It quickly expanded to cover the 20 CARICOM member states. And since April 2020 we’ve worked closely with CDEMA and CARPHA, producing country briefings and regional overviews each day – so around 650 reports per month. And we were just one part of a very active regional COVID response.

**(SLIDE 3)**

During the early stages of 2020 we produced growth charts to monitor outbreaks in each country – and these provided evidence for policies to encourage social distancing. **NEXT**. Let’s look at Barbados as an example.

**(SLIDE 4)**

Barbados had fast initial outbreak growth. **NEXT**. The Government responded with stringent lockdown measures over a 2-week period in early April - a curfew and partial lockdown followed by a full countrywide lockdown - and by mid-April 2020 movement around the country – that’s the blue bars – had dropped by 80% compared to pre-pandemic levels. So these lockdowns really worked, and they gave governments time to prepare for COVID’s inevitable arrival.

**(SLIDE 5)**

COVID of course did finally take hold across the Caribbean. And this week we’ve seen for example 800 confirmed cases and 56 confirmed deaths, and this now unfortunately is our endemic reality. COVID is here to stay. COVID cases have dropped from the sharp OMICRON peak of January 2022…but this regional chart hides huge variation across the region.

**(SLIDE 6)**

We have a complex pattern of outbreaks between the islands, and we perhaps need to do more to understand these between-country dynamics.

**(SLIDE 7)**

Now here is a heatmap of case rates across the Caribbean, and it’s a nice overview of outbreak size. **NEXT**. We can see for example the Omicron outbreak in Jan this year. **NEXT**. I want to highlight Haiti. It seems rather unlikely that Haiti has maintained a near zero COVID rate – and this hints at problems with data availability. **NEXT**. We see another example now as country case rates drop – and this again may just be due to reduced testing.

We're moving towards COVID as a long-term reality, and we need solutions for long term monitoring. **NEXT**. Excess mortality is a key metric used in many parts of the world – and its pretty simple - the number of deaths above a long-term average. And excess mortality can help us monitor the impact of a range of health emergencies – but excess mortality requires robust and responsive national health systems, and we’re not there yet.

**(SLIDE 8)**

So data availability and accessibility in the Caribbean remains limited. And this harms evidence-based decision-making whatever the emergency.

There are lots of examples of this problem, and I want to jump on a broader example using the SDGs.

The World Bank tracks the availability of data to monitor the SDGs.

And here is a graphic of SDG data availability. Each row is a world subregion, and the dots represent the percentage of the SDGs indictors for which data was reported in 2019 as a dark dot and in 2010 as a light dot.

**NEXT**. SDG data availability was at 34% for the Caribbean in 2019, down from 38% in 2010. This compares to 57 percent globally in 2019, up from 51% in 2010.

So the Caribbean is struggling a bit to report on many of the SDG.

**(SLIDE 9)**

**NEXT.** Even when data are available, there are other challenges. And let me jump back to our COVID surveillance to explore this.

Overall, data needed a lot of preparation with some guesswork as different countries provided data in different ways - and rarely gave a full description of these data. This was a problem globally, not just in the Caribbean, so we need global or at least regional standards for outbreak reporting.

**NEXT**. Data were transient - daily COVID portals regularly overwrote data from the previous day, so we needed to scrape data each day from country websites. So we need permanent data archives.

**NEXT**. Data elements were often provided in awkward file formats. So that's another area for standardisation.

**NEXT**. And COVID reporting rarely offered case definitions for the published metrics, and rarely discriminated between zero counts and missing data. So again, regional epi standards are so important.

So we came across lots of data challenges that at best increased our workload for regional surveillance. More importantly, it meant that we had to rely on guesswork to produce some surveillance, and it meant that some metrics for some countries were just not possible.

**(SLIDE 10)**

So data availability and data quality are not trivial problems. This is not a quick fix. And there’s no blame here, it’s linked very much to limited resources across our Small Island States. What can we do?

And partly on the back of our COVID work, we now have funding from the IDB to hopefully be one small part of the solution.

Our project is called CaribData, and I want to spend my last few minutes expanding on WHAT we’re planning. And these are the 4 themes running through our project.

Infrastructure. Training. Analytics & Communication. And Collaborative working

**(SLIDE 11)**

Broadly, using existing UWI infrastructure as our foundation - we’ll be building a set of resources to enable and champion Caribbean data sharing and data re-use

And I’m sticking to the same four themes:

* **NEXT**. We’ll be setting up an online infrastructure to enable easier data sharing and re-use,
* **NEXT**. We’ll be developing training programs and longer term mentoring to help increase the regional capacity for data handling and data analytics.
* **NEXT**. We’ll be performing centralized analytics along with a communication program to showcase existing data, champion data re-use, and to actively communicate the stories around the data we all produce.
* **NEXT**. And through workshops and conferencing, we want to start building more collaborations that could lead to more data use across disciplines – more data linkages.

**(SLIDE 12)**

The project is for 3 years in the first instance, but sustainability is key.

This sustainability is anchored on our University commitment to the region and its commitment to open-data and open-science. We want this ecosystem to increase the impact and usefulness of our own research, and at the same time we want to build lasting synergies with the wider community of data producers. Nothing’s certain of course, but we’re committed to making this a long-term solution.

Here are our current partners, and we are actively looking to expand the CaribData partnerships. Thanks very much.