Twitter Thread by Patrick K A Kearns

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It is trying when mathematicians declare condescendingly that there is no point doing things because their models tell them so. Well maybe some of the assumptions don't hold up. How did that work out for the no additional risk from large events and no point in border controls...

> Oh for crying out loud. I don't know anyone who thinks we can get R below 0.9 with this new variant. It's 22 virus generations to even get from 50,000 cases to 5,000 at R=0.9 - that's 4 months. TTI is a complete fantasy right now: spend the money on the vaccine rollout. https://t.co/MyeBt8tC1w
>
> — Oliver Johnson (@BristOliver) January 3, 2021

During wave 1 cases fell very fast, faster than I think most people were expecting. Particularly in Scotland. Rt was probably ~0.5 until we started easing off.

This was despite a constant leak of cases coming out of hospitals and LTC facilities as we were rationing PPE and are policies were nowhere near ideal. There was insistence from infection control that droplet protections were sufficient. We have all learned a lot since then.

Not to mention we have learned to avoid the shit show of actively importing cases into care homes. We've learned not to repeat that. Other sectors have learned too.

We've learned a lot and there's no reason we can't control this new variant. But we will not manage if we don't try and act with clarity of purpose.

We also learned from wave 1 not to abandon contact tracing and to test people as early as possible to prevent transmission chains. I.e. TTI. That still holds true. Let us not repeat the mistakes.

In fact, in March we got Rt down to that level with effectively no targeted support from TTI because we were only testing on admission (way too late). And we had so little testing capacity.

In addition, in March there was approximately zero prior immunity. Now there is a non-zero amount and that helps eat into some of the increase in transmissibility.

We have light at the end of the tunnel with vaccines and can target vaccines at those who cannot isolate (essential workers) with more scope to do this the less urgently we need to vaccinate the vulnerable. This helps psychologically and practically.

Practically, for example, having vaccinated workers in LTC and vaccinated people support the elderly is a game changer for isolation.

Rapid testing is another tool we now have that could help alongside TTI and vaccines. We have lots more at our disposal to work with.

Chasing down every case is still going to become *more* not less important. It is perfectly possible that if vaccine evading strains don't arise in the UK we will import them at some time. Will need TTI then. Goes without saying that this will also not be the last pandemic.

I suspect one reason why the TTI is constantly underestimated is that it is in practice just naturally much better at finding cases in high transmission events than no/low transmission cases. And maybe this is hard to model.

For very many human reasons that are just intuitively apparent to anyone who has trained in taking a history from a patient: you have a shared agenda to get to the most important information about the most important events. And you build a shared understanding of what those are.

Perhaps the cases missed are much much more likely to be in the 80% or so of people who don't infect someone else.

For all the obsession with overdispersion of SARS2 and HIT, I actually think this is where it makes the most difference. I think its why many mathematicians seem baffled or underenthused by the East Asian response... sure it works in practice, but it makes no sense in theory.

In addition, just because something doesn't solve the problem on it's own doesn't mean it doesn't help solve the problem.

I don't mean to single out @BristOliver for this rant, so sorry for that. I find your takes on the whole very interesting so hope you don't block me. This just really bugged me on the back of a recent chat with a friend who is a public health trainee.

She has been working very hard on TTI all year and feels drained, and, I think, underappreciated. And I feel strongly that we have not championed this essential work enough. So much so that, I'm told, it is now increasingly common that when contacting people they get vile abuse.

A bit less of this: "there's no point in doing that thing that has been the backbone of every competent outbreak response for over 150 years and that WHO insists is key and that all Covid-controlling countries have invested in" would be nice. (Paraphrasing no-one in particular.)

Even if only out of respect for all the people working their asses off to get it done in incredibly difficult circumstances.