

Message

**From:** Ben Warner [nobody@invalid.invalid]  
**Sent:** 22/01/2021 10:40:44  
**To:** [redacted] NR @hmtreasury.gov.uk; McLean, Angela SCS (CSA-Personal) [angela.mclean113@mod.gov.uk]; [redacted] NR @no10.gov.uk; Ben Cropper [ben.cropper@cabinetoffice.gov.uk]  
**CC:** Alexander Wilson [alexander.wilson@cabinetoffice.gov.uk]; Cumming, Fergus [fergus.cumming@dhsc.gov.uk]; Gardiner, Clare [clare.gardiner@dhsc.gov.uk]; SPI-M [spi-m@dhsc.gov.uk]; Harrison, Rob - CO (OFF-SEN) [rob.harrison@cabinetoffice.gov.uk]; [redacted] NR @no10.gov.uk [redacted] NR @hmtreasury.gov.uk  
**Subject:** Re: Draft email on modelling

Hi [redacted] NR

Thank you, understanding the models/maths behind this document would be very helpful.

Obviously the specifics will mean the exact numbers will change, but the methodology won't.

Regards,  
Ben

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**From:** [redacted] NR @hmtreasury.gov.uk  
**Date:** Friday, 22 January 2021 at 10:33  
**To:** Ben Warner <BWarner@no10.gov.uk>, "McLean, Angela SCS (CSA-Personal)" <Angela.Mclean113@mod.gov.uk>, [redacted] NR @no10.gov.uk, Ben Cropper <ben.cropper@cabinetoffice.gov.uk>  
**Cc:** Alexander Wilson <alexander.wilson@cabinetoffice.gov.uk>, "Cumming, Fergus" <Fergus.Cumming@dhsc.gov.uk>, "Gardiner, Clare" <Clare.Gardiner@dhsc.gov.uk>, SPI-M <SPI-M@dhsc.gov.uk>, "rob.harrison" <rob.harrison@cabinetoffice.gov.uk>, [redacted] NR @no10.gov.uk, [redacted] NR @hmtreasury.gov.uk  
**Subject:** RE: Draft email on modelling

Ah, sorry, I misunderstood.

This document is the latest public document on economic and social consequences: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/944823/Analysis\\_of\\_the\\_health\\_economic\\_and\\_social\\_effects\\_of\\_COVID-19\\_and\\_the\\_approach\\_to\\_tiering\\_FINAL\\_accessible\\_v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/944823/Analysis_of_the_health_economic_and_social_effects_of_COVID-19_and_the_approach_to_tiering_FINAL_accessible_v2.pdf)

We of course know more now. I'd be happy to talk through that with interested parties. [redacted] NR cc'd, can set something up. I would however caution that assessing the economic impact is complex and not straight forward. It will be difficult to assess without a carefully described set of scenarios for NPIs and the health consequences that accompany it.

[redacted] NR

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**From:** Ben Warner <BWarner@no10.gov.uk>  
**Sent:** 22 January 2021 10:24  
**To:** McLean, Angela SCS (CSA-Personal) <Angela.Mclean113@mod.gov.uk>; [redacted] NR @no10.gov.uk; Ben Cropper <ben.cropper@cabinetoffice.gov.uk>  
**Cc:** Alexander Wilson <alexander.wilson@cabinetoffice.gov.uk>; [redacted] NR - HMT

NR

@hmtreasury.gov.uk>; Cumming, Fergus <Fergus.Cumming@dhsc.gov.uk>; Gardiner, Clare <Clare.Gardiner@dhsc.gov.uk>; SPI-M <SPI-M@dhsc.gov.uk>; rob.harrison <rob.harrison@cabinetoffice.gov.uk>;

NR

@no10.gov.uk>

**Subject:** Re: Draft email on modelling

Sorry, I should have added for 'modelling the economic impacts of covid restrictions.'

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**From:** "McLean, Angela SCS (CSA-Personal)" <Angela.Mclean113@mod.gov.uk>

**Date:** Friday, 22 January 2021 at 10:22

**To:** Ben Warner <BWarner@no10.gov.uk>, NR @no10.gov.uk>, Ben Cropper <ben.cropper@cabinetoffice.gov.uk>

**Cc:** Alexander Wilson <alexander.wilson@cabinetoffice.gov.uk>, NR HMT" <NR @hmtreasury.gov.uk>, "Cumming, Fergus" <Fergus.Cumming@dhsc.gov.uk>, "Gardiner, Clare" <Clare.Gardiner@dhsc.gov.uk>, SPI-M <SPI-M@dhsc.gov.uk>, "rob.harrison" <rob.harrison@cabinetoffice.gov.uk>, NR @no10.gov.uk>

**Subject:** RE: Draft email on modelling

What is the "HMT methodology"?

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**From:** Ben Warner <BWarner@no10.gov.uk>

**Sent:** 22 January 2021 10:11

**To:** NR @no10.gov.uk>; Ben Cropper <ben.cropper@cabinetoffice.gov.uk>

**Cc:** Alexander Wilson <alexander.wilson@cabinetoffice.gov.uk>; NR HMT NR @hmtreasury.gov.uk>; Cumming, Fergus <Fergus.Cumming@dhsc.gov.uk>; Gardiner, Clare <Clare.Gardiner@dhsc.gov.uk>; McLean, Angela SCS (CSA-Personal) <Angela.Mclean113@mod.gov.uk>; SPI-M <SPI-M@dhsc.gov.uk>; rob.harrison <rob.harrison@cabinetoffice.gov.uk>; NR @no10.gov.uk>

**Subject:** Re: Draft email on modelling

NR – Can you help this up.

NR – Can you let NR know who is the best people to include from HMT.

Regards,  
Ben

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**From:** NR @no10.gov.uk>

**Date:** Friday, 22 January 2021 at 10:07

**To:** Ben Warner <BWarner@no10.gov.uk>, Ben Cropper <ben.cropper@cabinetoffice.gov.uk>

**Cc:** Alexander Wilson <alexander.wilson@cabinetoffice.gov.uk>, NR - HMT" <NR @hmtreasury.gov.uk>, "Cumming, Fergus" <Fergus.Cumming@dhsc.gov.uk>, "Gardiner, Clare" <Clare.Gardiner@dhsc.gov.uk>, "McLean, Angela SCS (CSA-Personal)" <angela.mclean113@mod.gov.uk>, SPI-M <SPI-M@dhsc.gov.uk>, "rob.harrison" <rob.harrison@cabinetoffice.gov.uk>

**Subject:** RE: Draft email on modelling

>Can we set up a session where we discuss the HMT methodology and how it is done as I don't understand it currently and I think if I did it might help discussions.

This seems useful ahead of SPI-M doing the work – make sure the right things are taken into account

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**From:** Ben Warner <[BWarner@no10.gov.uk](mailto:BWarner@no10.gov.uk)>  
**Sent:** 22 January 2021 09:51  
**To:** Ben Cropper <[ben.cropper@cabinetoffice.gov.uk](mailto:ben.cropper@cabinetoffice.gov.uk)>  
**Cc:** Alexander Wilson <[alexander.wilson@cabinetoffice.gov.uk](mailto:alexander.wilson@cabinetoffice.gov.uk)> [REDACTED] - HMT  
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**Subject:** Re: Draft email on modelling

Hi All,

I haven't got strong opinions on the exact language, I think the key is that a lay person easily understands the issue.

I don't think we should have SPI-M solve for the economy, but them understanding a little more can only help ensure that scenarios that are modelled are useful to decision makers.

[REDACTED] 100% on transparency over all parameters and assumptions used, I think this is crucial. Can we set up a session where we discuss the HMT methodology and how it is done as I don't understand it currently and I think if I did it might help discussions.

Regards,  
Ben

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**From:** Ben Cropper <[ben.cropper@cabinetoffice.gov.uk](mailto:ben.cropper@cabinetoffice.gov.uk)>  
**Date:** Friday, 22 January 2021 at 09:32  
**To:** Ben Warner <[BWarner@no10.gov.uk](mailto:BWarner@no10.gov.uk)>  
**Cc:** Alexander Wilson <[alexander.wilson@cabinetoffice.gov.uk](mailto:alexander.wilson@cabinetoffice.gov.uk)>, [REDACTED] - HMT"  
[REDACTED] <[\[REDACTED\]@hmtreasury.gov.uk](mailto:[REDACTED]@hmtreasury.gov.uk)>, "Cumming, Fergus" <[Fergus.Cumming@dhsc.gov.uk](mailto:Fergus.Cumming@dhsc.gov.uk)>, "Gardiner, Clare" <[Clare.Gardiner@dhsc.gov.uk](mailto:Clare.Gardiner@dhsc.gov.uk)>, [REDACTED] <[\[REDACTED\]@no10.gov.uk](mailto:[REDACTED]@no10.gov.uk)>, "McLean, Angela SCS (CSA-Personal)" <[angela.mclean113@mod.gov.uk](mailto:angela.mclean113@mod.gov.uk)>, SPI-M <[SPI-M@dhsc.gov.uk](mailto:SPI-M@dhsc.gov.uk)>, "rob.harrison" <[rob.harrison@cabinetoffice.gov.uk](mailto:rob.harrison@cabinetoffice.gov.uk)>  
**Subject:** Re: Draft email on modelling

Thanks Rob and Ben,

I would agree with Ben that adding a bit of explanation as to why we are saying it's not the right tool now would be good. But I'd also add a line to say what job we think it was/is good for (eg for setting g out the broad directional impacts of changes to R and vaccine rollout out). The point is that as we move into needing to be more specific and make some sort of predictions, we need to move to a more sophisticated epi modelling suite. Luckily for us, we have that in abundance through Spi-M.

I'd also make a clearer statement that the question of which model to use is secondary to the issue of data and understanding of what the vaccines and new variant are doing. That's implicit in the lower conversation on what we need to do the modelling, but we need to impress upon people that there is no way to rush that and get credible modelling results. They will always be needing to take this decision somewhat on the dark - as has been the case throughout.

On the economy, I don't think we're asking Spi-M to solve for that side of the equation are we? So I wonder if we take forward a separate conversation on the economic impacts of a shared set of scenarios that tries to move forward on the impact analysis beyond our current gva stats, and also presents the fuller insight on things like uncertainty, stop-start



and the long/short run benefits. Again, uncertainty will abound but it feels like we should try to balance up that side of the analysis more to the is work program on the epi side.

Ben.

On Fri, 22 Jan 2021 at 09:14, Ben Warner <[BWarner@no10.gov.uk](mailto:BWarner@no10.gov.uk)> wrote:

Hi Rob,

Thank you for arranging last night's meeting, and for this draft.

I don't think that this clearly states why the toy model is inappropriate for using in this respect. I would suggest something that states it very clearly:

'Given the limited nature of the current toy model, developing it as described would lead to a results which are unrealistic, and therefore would mislead decision makers. For this reason, SPI-M chair, GCSA and CMO would not endorse further use of the toy model in this way.'

I think that the commission to SPI-M is too specific and it should look more like a 'mission order', where we emphasise the overall objective is, and the intent, but doesn't say exactly how to solve the problem. The only reason that whole population R was used in the analysis this week is because we couldn't do something else. Given SPI-M models, I don't think that we need to limit them to our restrictions.

I think that HMT giving SPI-M a set of heuristics around the economy might be useful to help inform modellers decisions.

For example, if we assume that change and uncertainty is bad for business then it might be better from both an economic and health perspective to jump and hold rather than move smoothly:

Lockdown – Very High – High – Medium – Low – Tier One [as the commission lays out]

Or

Lockdown – High – High – High – High - Tier One [i.e jump to a slightly lower level of restriction, but then maintain it longer]

Regards,

Ben

---

**From:** Rob Harrison <[rob.harrison@cabinetoffice.gov.uk](mailto:rob.harrison@cabinetoffice.gov.uk)>

**Date:** Friday, 22 January 2021 at 07:18

**To:** "Gardiner, Clare" <[Clare.Gardiner@dhsc.gov.uk](mailto:Clare.Gardiner@dhsc.gov.uk)>, "Cumming, Fergus" <[Fergus.Cumming@dhsc.gov.uk](mailto:Fergus.Cumming@dhsc.gov.uk)>,

"McLean, Angela SCS (CSA-Personal)" <[angela.mclean113@mod.gov.uk](mailto:angela.mclean113@mod.gov.uk)>, SPI-M <[SPI-M@dhsc.gov.uk](mailto:SPI-M@dhsc.gov.uk)> NR

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<[ben.cropper@cabinetoffice.gov.uk](mailto:ben.cropper@cabinetoffice.gov.uk)>, Alexander Wilson <[alexander.wilson@cabinetoffice.gov.uk](mailto:alexander.wilson@cabinetoffice.gov.uk)>, NR

NR - HMT" <NR <[@hmtreasury.gov.uk](mailto:@hmtreasury.gov.uk)>

**Subject:** Draft email on modelling

Morning all. Thanks for your contributions last night. Plenty of healthy challenge, but I think we reached a sensible consensus position and viable way forward which we can reflect to policy colleagues as our collective view.

I propose the following summary of the conclusions last night's discussion and (with thanks to NR who has spoken to CX's office) a proposed commission to SPI-M. Very grateful for your comments by 0930 if possible. I'll then run past NR to check that they are content and that para 2 accurately reflects their views (unless Angela/Clare would prefer to them speak directly this morning).

Happy to take comments by email or phone: I&S Rob

BEGINS

Analytical colleagues from No 10, JBC, CTF, SPI-M and HMT met last night to discuss how best to address this question. This represents our consensus view.

It is theoretically possible, given time, to develop the toy model as described, but this would take it beyond the bounds for its acceptable use. SPI-M chair, GCSA and CMO would not endorse use of the toy model in this way.

However, one of the intended uses of the toy model was to help us articulate questions for SPI-M, who currently have two full epidemiological models (Imperial, Warwick) which could provide a more robust basis for decision-making. We propose the following commission:

*Analysis was presented to the PM and CX on Wednesday showing the impact on Covid patient hospital occupancy of an increase in R of varying magnitudes and at different points between late February and early March, simulating a single easing of NPIs.*

*At this meeting, the Chancellor asked if, to aid planning in the upcoming budget, the analysis could be extended over a longer time horizon to explore plausible paths for a sustainable pace of easing, modelling a stepped increase in R each month, while remaining below an agreed ceiling for Covid patient hospital occupancy. The modelling should consider the horizon over which a sequence of easements could sustainably reach a level consistent with Tier 1 restrictions (broadly consistent with the overall level of restrictions in September last year) without this ceiling being breached.*

*The Imperial and Warwick papers presented at Sage 77 provide a basis to address this question if updated with the current estimate of R and the latest data on vaccine roll-out. As with the two previous papers presented to SAGE, the work will need to draw on reasonable best-case, central case and worst case assumptions around vaccine roll-out, efficacy in preventing serious illness leading to hospitalisation (for first and second doses), and in blocking transmission.*

*The parameters used in each case should be set out in a table, identifying those which are most important and sensitive. One key parameter will be on the sustainable level of Covid patient hospital occupancy. The Warwick paper for Sage 77 made one assumption, but the modelling might usefully consider alternatives pending a ministerial discussion, informed by expert advice, on the sustainable maximum.*

To answer this question SPI-M would require the following:

- a) The best data available on projected vaccine deployment. We need the data flowing by Monday to inform SPI-M's next meeting on Wednesday, or we will lose a week.
- b) Greater confidence in the starting conditions, which we expect to improve over the next 1-2 weeks as the full impact of the lockdown, without the confounding effect of the festive period, is known. SPI-M's most recent estimate of R would provide a basis for work to start.
- c) Clarity on the level of hospital occupancy considered sustainable. This might require a ministerial discussion about risk appetite based on expert clinical input, but meanwhile the modelling could explore some different assumptions.

Subject to (a), which we expect to be resolved today (separate correspondence refers) SPI-M could present updated papers to SAGE next week, and iterate thereafter.

ENDS

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Ben Cropper (He/Him)  
Director Analysis  
Covid-19 Taskforce  
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