To: `5.1.2e` `5.1.2e` [`5.1.2e` @rivm.nl]
From: `5.1.2e` `5.1.2e`
Sent: Wed 3/31/2021 8:03:06 PM
Subject: RE: spoed adviesaanvraag
Received: Wed 3/31/2021 8:03:08 PM

ModellingresultsCOVID19vaccination_version1.1_20210331_v2.docx

Hi `5.1.2e`

Attached is the updated report with the new set of simulations using the VE estimates from Vasileiou et al. I want to flag the paragraph discussing the new results (bottom of page 32) because there is a reversal in which scenario results in the fewest hospitalisations. However, this is due to strict measures needing to be re-imposed under the basis scenario, but not the deferred 2nd dose scenario. The relevant paragraph is below. I tried to be very clear, so please let me know if it's not clear.

We performed a sensitivity analysis using the vaccine effectiveness estimate for the Pfizer vaccine from Vasileiou et al [10]. When using this estimate we observe a 4.2% increase in hospital admissions between 1 April 2021 and 31 August 2021 when the second dose is deferred compared to the basis scenario (Figure 23 (left)). This is due to a difference in control measures between the two scenarios. In the basis scenario, cases surpass the threshold to re-impose stricter measures in the third week of June due to a sharp rise following the relaxation of measures (Figure 23 (right)). This then causes cases to drop quickly. When the second dose is deferred, cases rise more slowly throughout June and into July, but do not pass the threshold requiring stricter measures be re-imposed. Because of the requirement of another period of strict interventions at the end of June under the basis scenario, fewer hospitalisations occur. However, the scenario that both minimises hospitalisations while not requiring stricter measures be re-imposed is deferring the second dose.

Best,
`5.1.2e`

From: `5.1.2e` `5.1.2e` < `5.1.2e` @rivm.nl>
Sent: woensdag 31 maart 2021 16:32
To: `5.1.2e` `5.1.2e` < `5.1.2e` @rivm.nl>
Subject: RE: spoed adviesaanvraag

Hi `5.1.2e`
Thanks! A few comments.
-In talking to `5.1.2e` and `5.1.2e` from the health council, it was clear that they were interested in the Vasileio paper because it show a declining trend in the VE after the first dose. To acknowledge that it would be good to include the paper in the references and, if possible, repeat the simulation with slightly lower values for the VE after first dose (essentially taking the reported values for VE by Vasileio and assuming they also hold for VE against infection). Is this doable?
-When giving the 24.77% reduction (which might also be reported as 25%, given all uncertainties) it would be good to mention that this difference arises in the summer and not during the peak prevalence in the hospital. As the model does not include seasonality, and if it did the difference between the two scenario's in summer might not result in such a large relative difference.
-I didn't get the figure 23. Perhaps I misunderstood.
Excellent work at such a short notice!
Best
`5.1.2e`

From: `5.1.2e` `5.1.2e` < `5.1.2e` @rivm.nl>
Sent: woensdag 31 maart 2021 13:31
To: `5.1.2e` `5.1.2e` < `5.1.2e` @rivm.nl>
Subject: RE: spoed adviesaanvraag

Hi `5.1.2e`

Here is the updated modelling report (attached here and saved on the R drive). The main result is that there is a 24.77% reduction in hospital admissions when the second dose is deferred compared to the basis scenario. The new part is on pages 32 and 33. I'll try to add the additional benefit of AZ on hospitalisations because I suspect that will increase the difference. However, even without that, this is a good result.

Best,

[5.1.2e]

From: [5.1.2e] [5.1.2e] < [5.1.2e] @rivm.nl>
Sent: vrijdag 26 maart 2021 17:48
To: [5.1.2e] [5.1.2e] < [5.1.2e] @rivm.nl>
Subject: RE: spoed adviesaanvraag

Enjoy your weekend!
Best

[5.1.2e]

From: [5.1.2e] [5.1.2e] < [5.1.2e] @rivm.nl>
Sent: vrijdag 26 maart 2021 17:47
To: [5.1.2e] [5.1.2e] < [5.1.2e] @rivm.nl>
Subject: Re: spoed adviesaanvraag

Hi [5.1.2e]

Yes, I think we can do this by next week.

Fijne weekend!

[5.1.2e]

From: [5.1.2e] [5.1.2e]
Sent: Friday, 26 March 2021 16:22:32
To: [5.1.2e] [5.1.2e]
Subject: RE: spoed adviesaanvraag

Hi [5.1.2e]
Great. Just spoke to [5.1.2e] from the health council. The question is: what is the effect of deferral of the second dose on hospitalization. Since the main effect of deferral is for Pfizer vaccinations, we can focus on Pfizer vaccinations in the 65-80 year old. The shot that would have been a second dose for one person in this age group becomes a first dose for someone else in this age group. There is a paper on VE of Pfizer for hospitalization in Scotland: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3789264 . VE shows a trend to become lower with time since first dose beyond say 30 days, so we have to choose the VE that corresponds to the average VE for the duration between first and second dose. I believe that at the time of that study the B.1.1.7 variant was already dominant in Scotland, so it might be relevant for the situation with this variant in NL as well.
I had promised we would have something at the end of next week. Is that possible?
Best
[5.1.2e]

From: [5.1.2e] [5.1.2e] < [5.1.2e] @rivm.nl>
Sent: vrijdag 26 maart 2021 13:28
To: [5.1.2e] [5.1.2e] < [5.1.2e] @rivm.nl>
Subject: Re: spoed adviesaanvraag

Hi [5.1.2e]

Ok, in that case. What we can do is include VE against hospitalisation in the model and then re-run the model using three distribution schedules: normal (basis), deferral of second dose for 3 months, and deferral of second dose until all first doses administered.

I've already asked 5.1.2e to get in touch with 5.1.2e to find out if these files can be generated for me.

Best,

5.1.2e

From: 5.1.2e 5.1.2e
Sent: Friday, 26 March 2021 13:18:26
To: 5.1.2e 5.1.2e
Subject: RE: spoed adviesaanvraag

Hi 5.1.2e

Sorry, was in a meeting all morning. The meeting with the health council is just about what we might do, no need to do it this afternoon.

-good that you mention the distribution schedules, that might be the most work

Best

5.1.2e

From: 5.1.2e 5.1.2e < 5.1.2e @rivm.nl>
Sent: vrijdag 26 maart 2021 09:58
To: 5.1.2e 5.1.2e < 5.1.2e @rivm.nl>
Subject: Re: spoed adviesaanvraag

Hi 5.1.2e

5.1.2e mentioned this yesterday at the Dwarversbrand meeting. In order for me to update the analysis, I'll need new distribution schedules with the second dose deferred. I can get in touch with 5.1.2e to see if he can get them from 5.1.2e and team (however, that may take some time as 5.1.2e isn't very responsive). Also, to say anything specifically about VE against hospitalisations, I'll need to update the model. I can do all this, but it's unlikely there will be results by this afternoon.

Let me know what you'd prefer. I have a meeting now, so won't be able to start with this until after 11.

Best,

5.1.2e

From: 5.1.2e 5.1.2e
Sent: Friday, 26 March 2021 09:05:58
To: 5.1.2e 5.1.2e
Subject: FW: spoed adviesaanvraag

Hi 5.1.2e

Well, just as one might think everything would be a bit less hectic a question from the health council. We will have a meeting this afternoon (to be planned) about the deferral of second doses, with a specific interest on the expected reduction of hospitalizations.

Do you think we can add anything more to what we already written down about deferral in this nice report that is now available online? We might need specific information on vaccine efficacy against hospitalization for 1 dose and 2 dose.

Best

5.1.2e

From: 5.1.2e , 5.1.2e . 5.1.2e 5.1.2e (5.1.2e) < 5.1.2e @gr.nl>
Sent: donderdag 25 maart 2021 17:46
To: 5.1.2e 5.1.2e < 5.1.2e @rivm.nl>
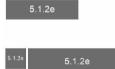**Subject:** spoed adviesaanvraag
Importance: High

Hi 5.1.2e

Misschien heb je meegekregen dat er een motie in de Kamer is aangenomen om de GR opnieuw om een spoedadvies te vragen over uitstel van de tweede dosis vaccin. Men is vooral geïnteresseerd in het effect daarvan op ziekenhuisopnames, met het idee (denk ik) dat als meer mensen sneller een dosis ontvangen dat dan de ziekenhuisopnames zullen afnemen en de maatschappij sneller open kan.

5.1.2e en ik zouden graag morgen met jou willen overleggen of modellering behulpzaam kan zijn in het beantwoorden van dit vraagstuk, en wat er in dit geval wel en niet zinvol, mogelijk en haalbaar is.

Zou je morgen in de gelegenheid zijn voor overleg?

Ik hoor het graag!

Groet,

5.1.2e

5.1.2e 5.1.2e

5.1.2e

Gezondheidsraad

tel. `5.1.2e`

bezoekadres: Korte Voorhout 7 – 2511 CW – Den Haag

`5.1.2e`

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