Thank you again for your additional comments and edits, especially at this level of detail. We appreciate it!

Thank you for your thorough and thoughtful revision, in which you addressed many aspects from the previous review. Please see below for several additional minor comments to solidify some of the prior revisions and ensure cohesiveness. These comments are in order of the manuscript:

1. Abstract, line 14 - suggest removing 'and' after 'inpatient'

We’ve done this – here’s the new sentence:

*We obtained 2016-2020 daily counts of residential Zip Code Tabulation Area (ZCTA) level outpatient, emergency department, and inpatient visits made by DME using Kaiser Permanente Southern California members 45+.*

1. Abstract, methods line 19 and results lines 27-33 - following on my prior comment about use of more specific phrasing for the proximity metrics, it would be helpful to use more specific phrasing in the abstract as well to ensure clarity that these are residential proximity measures (e.g., not assessing the effect of evacuation itself)

We’ve edited both the methods section and the results:

Methods:

*We tested the association of immediate and lagged (up to 7 days) wildfire PM2.5 and residence near a fire or in an evacuation zone and healthcare visit frequency with negative binomial and difference-in-differences models.*

Results:

*There were 54 ZCTAs (9%) within 20 km of the Woolsey Fire boundary. We considered residents of these ZCTAs exposed to the fire. Despite the comparatively small size of the Getty Fire (~3 km2 vs ~400 km2), 98 ZCTAs (17%) met our exposure definition, as the Getty Fire was closer to population centers. We estimated that 20 and 21 ZCTAs overlapped with evacuation zones during the Woolsey and Getty fires, respectively. However, all ZCTAs overlapping with evacuation zones were also within 20km of the fire boundaries, meaning that the exposed ZCTAs were a subset of the wildfire proximate ZCTAs in both cases.*

1. Abstract, results, line 26 - suggested edit to '… one day after exposure and increased risk at 4-5 …'

We’ve edited this:

*Among 236,732 DME users, increased wildfire PM2.5 concentration (per 10 𝜇𝑔/𝑚3) was associated with reduced risk (RR = 0.96, 95% CI: 0.94, 0.99) of all-cause outpatient visits one day after exposure and increased risk on 4 of 5 subsequent days (RR range 1.03-1.12).*

1. Introduction, 4th paragraph - since you haven't yet stated the goal of the study here (like you do in the last paragraph of the intro), suggested edit to improve flow in this section: 'Proximity to wildfire or residence in an evacuation zone may not only cause visible smoke exposure or extreme wildfire-related air pollution, it may also involve possible evacuation, …'. I suggest removing reference to eFigure 3 and the last sentence of this paragarph, since these are more helpful in the methods and you do make reference to these there.

We think these are good suggestions and we’ve changed the paragraph to this:

*'Proximity to wildfire or residence in an evacuation zone may not only cause visible smoke exposure or extreme wildfire-related air pollution, it may also involve possible evacuation, community disruption, loss of access to community services and housing, power outages, and stress co-occurring with and resulting from these events.*

1. Introduction, 5th paragraph - several references are still showing an error

We apologize for this. In our word document, these references appear completely normal. We’ve reinserted them and we hope this helps. They look normal on the editorial manager PDF now.

1. Methods, wildfire PM2.5 - reference 41 points to National Interagency Fire Center; should this point to Aguilera et al., 2023?

Yes it should - it’s fixed.

1. eMethods 1 - please confirm whether the Aguilera et al. reference used here is correct (should it be 2023?). Also please do include the units on the RMSE here and double check the specific values cited with Aguilera 2023 (on quick look, the RMSE and R2 that are cited in eMethods 1 are not fully consistent with those in Table 1 of that paper).

Tarik, could you comment on this and potentially fix it?

1. eMethods 2 and 3 should be swapped, since the ZCTA groupings are cited before the proximity metrics approach in the main text

Thank you for pointing this out - we’ve changed the order.

9. eFigure 3 should also be moved up to be eFigure 1, since this is the first eFigure to be referenced

We’ve changed this as well.

10. Methods, outcome definition, line 32 - remove 'and' after 'admissions'

This is the new sentence:

*We obtained daily counts of all-cause outpatient visits, all-cause emergency department (ED) visits, and all-cause inpatient admissions, as well as ED visits and inpatient admissions specifically for circulatory or respiratory disease outcomes made by KPSC members 45 and older who rented DME.*

11. Analysis, proximity to wildfire and evacuation, 3rd paragraph - this paragraph does not indicate that models included control for non-wildfire PM2.5 (although this is indicated currently as part of Figure 3). Please confirm and update the main text as needed.

Yes, we did control for non-wildfire PM2.5, and we’ve updated the paragraph to reflect this:

*As in the wildfire PM2.5 models, we included offsets accounting for the population exposed and controlled for temperature with a penalized spline. We controlled for long-term seasonal trends not caused by exposure with a penalized spline term, as our data in these analyses were at the weekly level. We did not control for wildfire PM2.5 in model describing residence proximate to a fire or in an evacuation zone, as we considered this part of our multifaceted exposure rather than a confounder, but we did control for non-wildfire PM­2.5.*

12. Figure 3 - please check this figure; the results do not align with the description in the main text (I think the RR labels are mismatched?). In addition, please add a proper title to this figure (e.g., similar to eTable 1a)

Yes, these were mismatched – thank you for pointing this out. We’ve corrected this and added a title.

13. Finally, I do have one comment on your interpretation of the wildfire PM2.5 weekly RRs (Table 2) and subsequent discussion and conclusions. Tables 1 and 2 show elevated RRs for outpatient visits; these associations are currently interpreted as the main result for wildfire PM2.5, with a highlight of no association observed for ED visits or inpatient visits. Yet, in Table 2, while the effect estimates are not stable over both lag weeks, the 1-week lag RRs for inpatient visits (RR=1.08) and cardiorespiratory inpatient visits (RR=1.10) are both of similar or higher magnitude than that for outpatient visits (RR=1.04). The wider confidence intervals for the inpatient visits are likely because of fewer visit counts and thus less power than for outpatient visits. It seems that these results for inpatient visits are potentially also consistent with the Woolsey fire proximity results that show elevated inpatient visits.

Joan, what do you think of this? This is my response but I think we need more in the discussion:

I think we were hesitant to over-interpret unstable estimates. We’ve added a note of this in the discussion section to reflect what you’ve suggested here:

In the PM2.5 exposure results we now note:

*In additional analyses examining ED and inpatient visits, we also found elevated 1-week lag RRs for inpatient visits (RR=1.08) and cardiorespiratory inpatient visits (RR=1.10). Daily lag estimates were unstable, which could have been because of smaller sample sizes for inpatient and cardiorespiratory inpatient visits.*

And in the discussion we note:

*Using electronic health data describing 236,732 Kaiser Permanente DME-using patients from 2016-2020, we found that an increase in wildfire PM2.5 concentration was associated with brief (next-day) decreases in all-cause outpatient visits but increases in all-cause outpatient visits up to two weeks later in this population. Increases in wildfire PM2.5 were not associated with the frequency of daily ED or inpatient visits among DME users. However, in sensitivity analyses of 1-week lags, we did find elevated 1-week lag RRs for inpatient visits (RR=1.08) and cardiorespiratory inpatient visits (RR=1.10).*