



## UK LLC Data Access Public Review Panel

**Friday 19<sup>th</sup> January 2024**

**12:30-13:30**

<b>Attendance</b>	
<b>Kirsteen Campbell (Chair)</b>	UK LLC Communications and Engagement Officer
<b>Stela McLachlan (Deputy Chair)</b>	UK LLC Research Manager
<b>Rebecca Whitehorn</b>	UK LLC Research and Communications Coordinator
<b>Four Public Panel Members attended</b>	UK LLC Data Access Public Review Panel
<b>Guest Speaker</b>	
<b>Annalan Navaratnam</b>	University of Cambridge

## AGENDA

<b>Agenda Number</b>	<b>Time</b>	<b>Presenter</b>	<b>Agenda Item</b>
1.	12.30	All	Introduction Updates
2.	12.40	Annalan Navaratnam	Presenting project, ref: llc_0030 on "Investigating the association of long-term air pollution exposure with risk and severity of SARS-CoV-2 infection"
3.	12.45	All	Questions from Data Access Committee following llc_0030
4.	13.00	Stela	Overview of 'TEDS' study application: "Quality checks, curation and methodological enhancement of the UK LLC Partner Studies using linked data" (previously approved).
5.	13:10		AOB

## MINUTES

<b>Agenda Number</b>	<b>Presenter</b>	<b>Agenda Item</b>
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1.	All	<p><b>Introductions</b></p> <p>The Panel was informed that one member will be stepping down from their position. Any comments for a thank you letter should be emailed to <a href="mailto:comms@ukllc.ac.uk">comms@ukllc.ac.uk</a>.</p>
2.	Annalan Navaratnam	<p><b>Presenting project, ref: llc_0030 on “Investigating the association of long-term air pollution exposure with risk and severity of SARS-CoV-2 infection”</b></p> <p>The Researcher provided a summary of the work proposed in the application.</p> <p>The researcher explained that the work will be published in open access journals and in prior, they will share results with UK LLC in the hopes they will be disseminated to LPS involved. The researcher will make time to meet with communications teams from the studies to discuss how best to relay information to study participants and the wider public. They will also share results with University of Cambridge Epidemiology Units communication team to ensure they can make this information as publicly available as possible and decide which media outlets to engage. This will also be in discussion with UK LLC Communications team.</p>
3.	All	<p><b>Questions from Data Access Public Review Panel following llc_0030</b></p> <p>The Panel highlighted the many ways that air flow can impact how an individual contracts COVID-19. It was also noted that during an area of low airflow such as in a city, there is increased air pollution. The Panel queried how the researcher could be sure pollution is not acting as a proxy for airflow. Could they be sure that airflow would be affecting the risk of infection, not air pollution itself.</p> <p>The Researcher advised that there are multiple factors affecting pollution concentration (not just airflow), such as humidity and rainfall. This is based on regression models that are currently being worked on, mapping those air pollution concentrations and taking an annual average. This will account for seasonal variation which then accounts for changes in airflow. In addition, because the researcher is using multiple Longitudinal Population Studies (LPS), a bigger geographical variation will be obtained. Airflow will differ between urban settings and the project will aim to account for this. This approach overcomes the limitations of using a single LPS which may experience unique airflow patterns.</p> <p>The Panel noted that travel in rural areas is likely to be via car but in urban areas public transport is more likely, and the risk of transmitting COVID-19 is much greater when travelling by public transport than by car. The Panel questioned how the researcher would control for this effect. The Researcher agreed that this is a well-known limitation for air pollution studies. They further explained that even travelling by car in urban settings, individuals are at higher risk</p>

		<p>of air pollution due to ventilation of the car and surrounding environment. A person in the middle of traffic, is at a slightly higher risk than a person walking a different route.</p> <p>The Panel queried how the researcher would ensure their view and enthusiasm on the topic does not lead to ‘cherry picking’ of analyses and results. The researcher advised that this is one benefit of using UK LLC; it has multiple LPS. The plan is to analyse all available LPS and stratify by level of air pollution available in addition to other factors. Outputs for each LPS will be reported. This will account for any potential biases in data collection as well as any differences between the different LPS that can affect the results.</p> <p>The Panel queried the impacts of aspects of family and lifestyle, for example, commuting to work, family members working away impact of blended families, school attendance, social distancing, isolation and uptake of vaccines. How will such factors be accounted for when looking at data. The Researcher advised that experts have not managed to unpack that level of data so currently use proxies. Whilst these may not be the best fit, they represent the best approach currently available; For example, looking at a period where vaccination was not available but COVID-19 testing was. LPS identified a bias in urban settings. Where air pollution and COVID-19 testing was higher in the early stages of the pandemic, testing was higher thus, as was infection. Depending on data availability, the Researcher will attempt to look at the second wave of the COVID-19 pandemic. During this period, testing was widely available, but vaccine uptake was primarily available through trials. Lifestyle is another limitation; the use of residential addresses does not take factors such as commuting into account. This will be stipulated as a limitation.</p> <p>The Panel queried whether the researcher would involve charities or patient groups which support patients with medical conditions that increase the risk of COVID-19 infection or flu infection rates in their dissemination plans. Concerns were raised around the potential of negative stories in the media. The Researcher advised they would liaise with UK LLC Communications team when results are available before they are published. They will work out the best/clear messaging to communicate risks. This project will additionally stimulate research into other respiratory viruses such as flu and RSV. The results will try to account for those who are high risk or immune-suppressed or chronic medical conditions that put them at high risk. This research approach looks at risk in the general population rather than specific sub-groups to prevent fear among those specific groups.</p>
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		<p>The Panel stated that there may be seasonal trends in air pollution for COVID-19 infection and noted that in the application, the aim is to look at long term exposure to air pollution and the time frame will be average for five-year annual concentration. The Researcher was asked how they would account for this seasonality factor in their analysis. The Researcher clarified that annual estimates will be used, and that these account for the seasonal variation in that geographical location over one year. A sensitivity analysis of running a five-year average and a one-year average was proposed, as this would enable testing of the assumption that pollution concentrations have remained steady. If large differences in results are obtained, this will be stated as a limitation.</p> <p>The Panel stated that it would value seeing key messages from results, such as lay summary of results. Sometimes, it can be clear to one audience but not to another. The Researcher reiterated that they would work with UK LLC Communications team. The Researcher stated that one reason they had not considered specific audiences is that the research is not specific to one audience, rather the whole population.</p>
		<p><b>To be taken to the Linked-data Panel</b></p> <p><b>Panel Summary key points:</b></p> <ul style="list-style-type: none"> <li>• Concerns over of Public and Patient Involvement and Engagement (PPIE) plans and dissemination of results.</li> <li>• Concerns were raised over the possibility of media producing negative stories for patients and public living in high pollution areas.</li> </ul> <p><b>Panel Recommendation:</b></p> <ul style="list-style-type: none"> <li>• The panel recommended PPIE at the dissemination stage as the results of the study could change health care for high-risk groups living in areas of high pollution or location</li> </ul>
4.	All	<p><b>Overview of ‘TEDS’ study application: “Quality checks, curation and methodological enhancement of the UK LLC Partner Studies using linked data” (previously approved).</b></p> <p>The Panel Chair advised that TEDS has now been informing their participants that the study will partner with UK LLC. TEDS will be applying to access its own data. This application will be assigned an application number and be added to the Data Use Register.</p> <p>Approval has previously been given for all studies to access their own data.</p>

		<p><b>To be taken to the Linked-data Panel</b></p> <p><b>Panel Summary key points:</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul> <p><b>Panel Recommendation:</b></p> <ul style="list-style-type: none"> <li>• The panel did not express concerns over this project.</li> </ul>
5.	Stela	<p><b>llc_0028 – Mini PhD programme</b></p> <p>Project llc_0028 has applied to add a Researcher PhD student to the project. The student will undertake a sub- project that falls under the overarching aims of the application that was approved originally.</p> <p><b>To be taken to the Linked-data Panel</b></p> <p><b>Panel Summary key points:</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul> <p><b>Panel Recommendation:</b></p> <ul style="list-style-type: none"> <li>• The panel did not express concerns over this project.</li> </ul>
<b>Feedback and Outcome</b>		
	All	<p><b>AOB</b></p> <p>The Panel Chair highlighted missing number in the Data Use Register. These occur when a researcher has not progressed with the project or when they leave an institution. The Panel was asked how best to represent this. UK LLC is developing a glossary of explanations detailing why researchers would not progress projects.</p>