The risks of the project are:

The data used in this study are de-identified which means that risk of re-identification of these data is very low. We understand the need to minimise the potential for re-identification of data, and thus have stringent confidentiality and security protocols in place. In protecting the privacy of individuals, the following points are relevant to our research proposal:

(i) There will be no contact with members of the study cohort.

(ii) Names and addresses are not included in our datasets. Potentially re-identifiable fields full admission and separation dates are required for identifying hospital transfers and for accurate calculation of time to event for the outcomes analyses.

(iii) We have a highly experienced team of researchers covering various disciplines who are aware of issues of confidentiality and privacy through our numerous similar studies that have addressed these issues.

(iv) Data will be stored on the secure computer network at SURE facility. Access to the datasets is restricted to research team members who are named in the ethics application and have signed a confidentiality document

(v) All publications and presentations arising from this project will not contain any identifying information, and no individual, medical practice or hospital will be identified or identifiable in such material.

The benefits of the project are:

This project will develop new indicator data assets to improve our understanding of the health of urban populations and identify incidence patterns and key risk factors across the population. We will integrate health, socio-economic, environmental, climate and built environment datasets to provide a holistic spatially-explicit understanding of urban population health. These indicators will allow health, urban and social infrastructure planners and policy makers to develop targeted policies and actions, and the outcomes will be shared with the research community.

The proposed research is relevant to all Australians given the risk of adverse health outcomes associated with heat waves which are becoming more frequent with climate change.  The findings are expected to lead to improved understanding of urban planning and design options for positive public health outcomes, leading to improved urban planning and decision making. The research will also contribute assets to the research community that will help other researchers investigate similar phenomena in the built environment at every stage, from data integration and analysis methodologies.