1. CVs of Melanie and David
   * This will go in Q1.9.13 (Describe the person’s expertise relevant to the research activity) when we update REGIS.
   * A/Prof Davern is a public health and urban planning academic and Vice Chancellor’s Senior Research Fellow at RMIT University with extensive experience in developing and analysing large scale administrative health survey data including geocoded Victorian Population Health Survey data with supported ethical clearance from the Victorian Department of Health. As Co-Lead of a program of research investigating Health, Place & Society with Professor Hannah Badland, A/Prof Davern has also produced spatial measures of the built and natural environments linked to existing health data sets including the Australian Early Development Census and Longitudinal Study of Australian Children held by the Australian Institute of Family Studies.
   * Professor David Preen is the Chair in Public Health at the School of Population and Global Health, The University of Western Australia (UWA). He was the Director of the UWA Centre for Health Services Research from 2006-2016 and holds an honorary academic appointment at the Swansea University (UK). Prof Preen has been involved with conducting public health and health services research using whole-population linked administrative health data for over 15 years to study areas including: i) health of marginalised populations, ii) social determinants of health; iii) pharmaco-epidemiology, iv) hospital utilisation, and vi) methodological advances using data linkage.
2. the two papers David sent
   * As Derrick suggested we don’t put them in.  In the Alderton paper, the custodians provided 5% dummy data to AIFS for linkage; AIFS attached aggregated SA1 level data and returned it to the custodians; the researchers did not get data identifying which SA1 the participants were in. The other used aggregated data at the SA1 level.
3. Echoing the five safes framework in describing SURE secure data transaction.
4. Hao and Flavia will be taking the linked data course (and a short description of the course)
   * This will go in Q1.9.13 (Describe the person’s expertise relevant to the research activity) when we update REGIS:
   * “Research investigators Flavia and Hao will take the “Introductory and Advanced Analysis of Linked Health Data” summer school subjects for professional development, in order to gain experience in using linked data and better work with the data. The course is taught by Professor David Preen (named investigator on this HREC application) in Nov 2022. Details on the units, including the contact dates are available at https://www.uwa.edu.au/schools/population-global-health/Seasonal-School).
5. relevant interest (NCRIS has provided funding to ARDC who has allocated some of these funds to the project...)
   * This is merged in the new risk vs benefits statement
   * NCRIS has provided funding to ARDC who has allocated some of these funds to the project. AURIN and PHRN have also allocated some of their NCRIS cash funds to the project. One major goal of this project is to demonstrate how the two NCRIS facilities (AURIN and PHRN) could work together and get linked SA1 level health data, which would be difficult to obtain otherwise, for generating health indicators at a fine spatial granularity as its main added value.
6. argument for added value about precision medicine and the federal government’s goal to reduce green-house emissions by 43% by 2030
   * This is mentioned in the new risk vs benefits statement.
   * pilot case study enable multiply NCRIS to work together to get datasets that are otherwise difficult to get. To encourage …
   * The added value of this project contributes to better understanding of effects caused by heatwaves, which are Australia's deadliest natural hazard and the occurrence and severity of is predicted to increase through climate change, including effects such as extreme heat in densely built urban areas with low vegetation through the urban heat island effect in Australian cities and towns. It aligns with the federal government’s goal to reduce green-house emissions by 43% by 2030. It’s also important to understand the importance of heatwaves regarding environmental population health considering all aspects that might play a role, so they can address better with their policies. This project will provide us with a precision medicine approach to identify local areas of vulnerability to heat which could be used to mitigation interventions (e.g. local government planting more trees, or erecting shade cloths in areas with high heat vulnerability)”
7. Spatial smoothing, and present result by range/rank
   * The reporting of statistical data by small geographical areas needs to consider two key issues: (i) data privacy and (ii) statistical stability. Data privacy relates to the responsibility to protect the identity of individuals in their data, and ensure that this is not compromised by the release of that data for reporting purposes. Statistical stability relates to the inherent random fluctuation of statistics based on small numbers of cases; the smaller the numbers, the more they fluctuate, potentially leading to incorrect interpretation. These issues are particularly relevant when considering geographical data. To address both these issues for geographical data, we will use a specific statistical method known as “spatial smoothing”. While standard methods typically only adjust for age and sex in each area, spatial smoothing recognises the geographical structure of the data and includes data from the neighbouring geographical areas when calculating the spatial estimates. This additional data provides greater stability to the estimates. In addition, because the spatial estimates are modelled, rather than observed, spatial smoothing reduces any risk of identifiability for specific individuals. Smoothed estimates are designed to reflect the real differences in the underlying rate or risk between areas. For this study, the spatial smoothing will be adjusted for age, sex and comorbidities (determined from the principal and secondary discharge diagnosis fields).
   * ~~(need detail for range/rank method here)~~