
Technical Review of 45 and Up Study papers – **Guidelines for Authors**

What is a Technical Review?

Technical review is a requirement for all papers reporting analyses of 45 and Up Study data. Papers include but are not limited to **abstracts for conference presentations, posters, manuscripts and reports**. Investigators agree to this requirement when signing a Research Activity Agreement with the Sax Institute to receive or be given access to Study data.

What is the purpose of the Technical Review?

The purpose of technical review is to ensure that technical aspects of the submitted work as they relate to the 45 and Up Study are accurate and consistent. This relates to the description of the 45 and Up Study, the Study variables, the Study stakeholders (including data custodians, Study Partners and third party data linkage facilities), and the scope of the reported analysis (relative to the approved project). It is **not peer-review or statistical review**.

What do I need to do?

Investigators initiate technical review by submitting to the 45 and Up Study Coordinating Centre (Coordinating Centre) by way of email to: 45andUp.research@saxinstitute.org.au the following:

- **Final draft** of the paper in the format ready for submission
- Associated 45 and Up Study **project number**
- Completed Plain Language Summary (**Form 1**) for paper and reports (not necessary for abstracts)
- Completed Author Checklist (**Form 2**).

Plain Language Summary (Form 1): To promote the work of researchers using 45 and Up Study data, the Sax Institute will use this information together with published papers to assist in the development of user-friendly knowledge translation resources. This information may be disseminated via the Sax Institute's platforms, which include website, social media, and 45 and Up Study updates.

Author Checklist (Form 2): This includes the key requirements authors are expected to adhere to. More detailed information about each requirement is provided in Table 1.

What is involved in a Technical Review?

When a paper is submitted to the Coordinating Centre, it is assigned a TechID. Reviews are generally undertaken in the order of receipt by the Coordinating Centre. The process for review is visualised at Figure 1.

If **issues are identified** at technical review that require significant changes to the items covered by technical review (e.g. scope of reported analysis, Study variables etc.) then the paper may be required to be submitted for further technical review. This will require resubmission of the paper with tracked changes.

If **issues are identified but deemed minor**, the Coordinating Centre may request changes to be made prior to publication but not require further technical review.

If there are **no issues** raised by the reviewer, no further action is required of the researcher.

If the paper or abstract uses **MBS** or **PBS data**, it will need to be reviewed by both the Coordinating Centre and by Services Australia (formerly the Department of Human Services and Medicare Australia). Papers will be submitted to Services Australia by the Coordinating Centre on behalf of researchers.

How long does a Technical Review take?

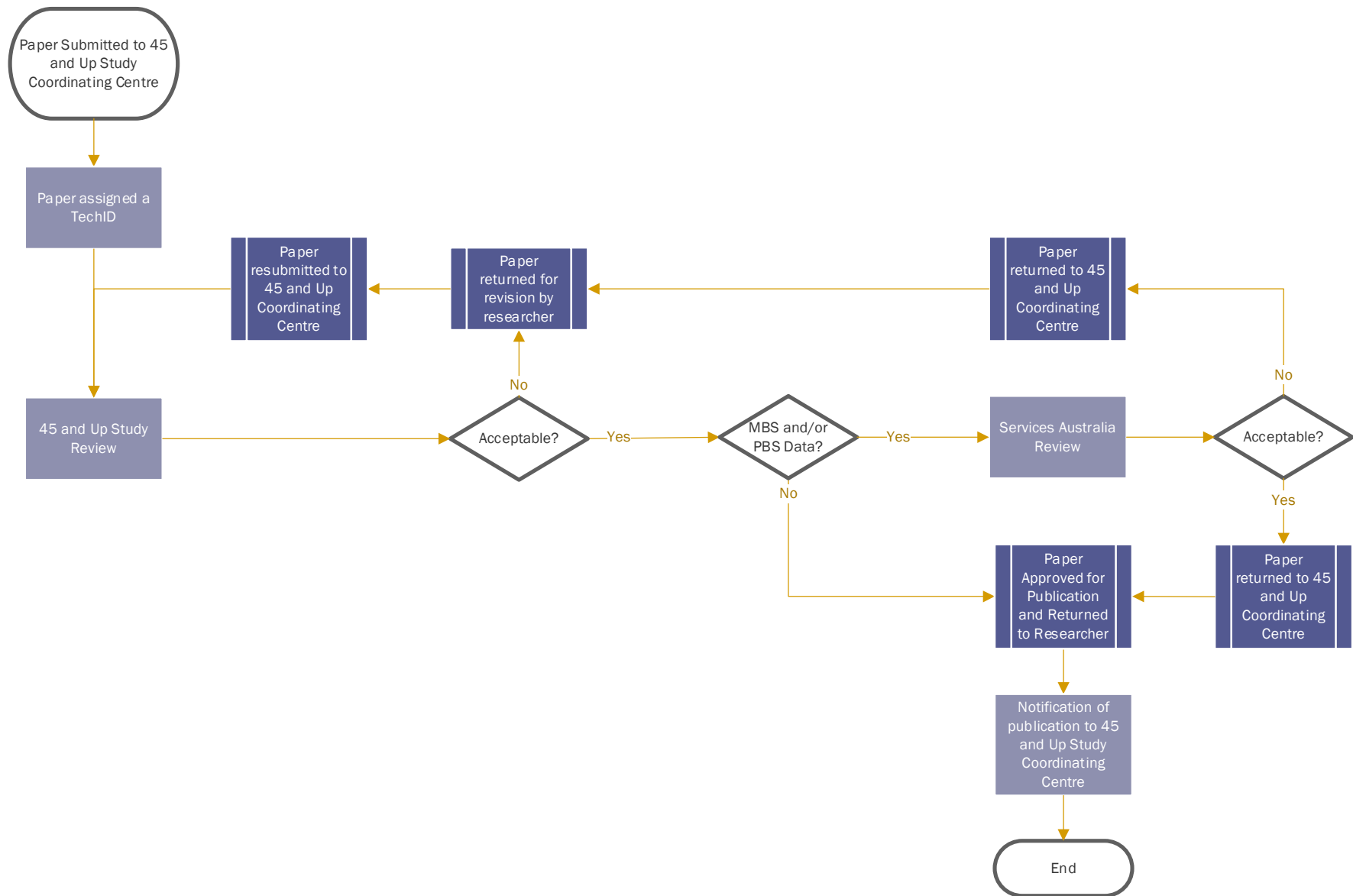
Timeframe:

Manuscript or Report	approximately 10 working days
Abstract or Poster	approximately 5 working days
Paper with MBS and/or PBS	allow an additional 3 to 4 weeks for Services Australia review

Note: Times are an **estimate only** and may vary depending on the number of incoming papers Services Australia's Ethics Review Committee meets approximately every two weeks (outside of Christmas and January). The turnaround time by Services Australia is usually between three to four weeks from submission. Note, these timeframes may vary and are outside 45 and Up Study Coordinating Centre control.

What do I need to do after Publication?

Researchers are required to notify the 45 and Up Study Coordinating Centre when a paper has been accepted for publication. Where possible researchers should provide the citation.



Form 1: Plain Language Summary for Papers (excluding abstracts and posters)

Project ID:

Provide a plain language summary of your research paper by answering the questions below:

What do people need to know about your research? (Short Summary in plain language. Avoid jargons and be as concise as possible; max 150 words)

What is this research about? (Aim/Goal of the study stated as concisely and simply as possible; max 150 words)

What did the researchers do? (Methods of the study stated as concisely and simply as possible; max 150 words)

What did the researchers find? (Results as concisely and simply as possible; max 150 words; max 150 words)

How can this research be used? (Discussion/Conclusions as concisely and simply as possible; max 150 words)

Form 2: Author Checklist

Paper or Report			Abstract			Detail
Requirements	Done	NA	Requirements	Done	NA	
General						
Final draft	<input type="checkbox"/>		Final draft	<input type="checkbox"/>		[Link]
In scope	<input type="checkbox"/>		In scope	<input type="checkbox"/>		[Link]
Study population and methods						
Methods paper referenced	<input type="checkbox"/>					[Link]
45 and Up Study is summarised and include:						
Study name	<input type="checkbox"/>		Study name	<input type="checkbox"/>		[Link]
Participation and timepoints	<input type="checkbox"/>		Participation and timepoints	<input type="checkbox"/>		[Link]
Sampling frame	<input type="checkbox"/>					[Link]
Response rate	<input type="checkbox"/>					[Link]
Participants in analysis						
Subset defined	<input type="checkbox"/>	<input type="checkbox"/>	Subset defined	<input type="checkbox"/>	<input type="checkbox"/>	[Link]
Subset number	<input type="checkbox"/>	<input type="checkbox"/>	Subset number	<input type="checkbox"/>	<input type="checkbox"/>	[Link]
Study variables						
Data items correct	<input type="checkbox"/>	<input type="checkbox"/>	Data items correct	<input type="checkbox"/>	<input type="checkbox"/>	[Link]
Question and response categories	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Derivation described	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Linked data						
MBS & PBS						
Correctly named	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Acknowledge Services Australia	<input type="checkbox"/>	<input type="checkbox"/>	Acknowledge Services Australia	<input type="checkbox"/>	<input type="checkbox"/>	[Link]
Acknowledge the Sax Institute	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Method correct	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Coversheet complete	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	[Link]

Centre for Health Record Linkage						
Acknowledge CHeReL	<input type="checkbox"/>	<input type="checkbox"/>	Acknowledge CHeReL	<input type="checkbox"/>	<input type="checkbox"/>	[Link]
Dataset names correct	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Reference website	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Method correct	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
SURE						
Acknowledge SURE	<input type="checkbox"/>	<input type="checkbox"/>	Acknowledge SURE	<input type="checkbox"/>	<input type="checkbox"/>	[Link]
Ethical approval						
45 and Up Study	<input type="checkbox"/>		Included in presentation	<input type="checkbox"/>		[Link]
Project specific	<input type="checkbox"/>					[Link]
CHeReL linkage	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
AH&MRC ethics	<input type="checkbox"/>	<input type="checkbox"/>				
Results						
Representativeness and generalisability	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Results confidential	<input type="checkbox"/>	<input type="checkbox"/>				[Link]
Acknowledgement						
Study Partners acknowledgement	<input type="checkbox"/>		Included in presentation	<input type="checkbox"/>		[Link]

Table 1: Technical requirements reporting findings from 45 and Up Study data

	Paper or Report	Abstract
General		
Final draft	Submission must be of the final draft of the paper in the format ready for submission and the associated 45 and Up Study project number. Earlier drafts will not be accepted.	Submission must be of the final draft of the abstract in the format ready for submission and the associated 45 and Up Study project number. Earlier drafts will not be accepted.
In scope	The paper must be in scope of the project to which it is linked in the submission. Assessment will be made by comparing the results mentioned in the Paper with the objectives of the project as described in the Project’s approved 45 and Up Study application. Lack of a clear relationship between the two will be taken as evidence that the paper is out of scope and may be grounds to not approve the paper and to request that the authors make a new project application or project amendment.	
Study population and methods		
Methods paper referenced	The 45 and Up Study methods must be accurately described. Researchers using Study data should have read the paper that reports the methods in detail and this paper should be cited - 45 and Up Study Collaborators. Cohort profile: The 45 and Up Study. International Journal of Epidemiology 2008; 37: 941 – 947.	
Study named	The phrase “The Sax Institute’s 45 and Up Study” and “Australia” must be included in the text (i.e. not	The phrase “45 and Up Study” must be included in the text (i.e. not just in a footnote) of the

	<p>just in a footnote) of the paper, usually the Methods, to identify the source of the data.</p> <p>e.g. “The Sax Institute’s 45 and Up Study is based in the population of the state of New South Wales (NSW), Australia.”</p>	<p>abstract, usually the Methods, to identify the source of the data.</p>
<p>Participation and timepoints</p>	<p>The number of 45 and Up Study participants (267,153) and the time points must be included in the paper.</p> <p>e.g. “A total of 267,153 participants joined the Study by completing a baseline questionnaire (between Jan 2006 and December 2009) and giving signed consent for follow-up and linkage of their information to routine health databases.”</p> <p>If other timepoints relevant to the paper they must be cited</p> <p>e.g.</p> <p>Follow-up 1: 2012-15</p> <p>SEEF: 2010</p> <p>Follow-up 2: 2018-21</p> <p><i>NOTE:</i> The complete sample size is subject to revision from time to time. Services Australia requires that the number of participants at recruitment (n=267,153) be referenced in all abstracts/papers for consistency.</p>	<p>The number of 45 and Up Study participants (267,153) and the time points must be included in the abstract.</p> <p><i>NOTE:</i> The complete sample size is subject to revision from time to time. Services Australia requires that the number of participants at recruitment (n=267,153) be referenced in all abstracts/papers for consistency</p> <p>If other timepoints relevant to the abstract they must be referenced.</p>
<p>Sampling frame</p>	<p>e.g. “Prospective participants were randomly sampled from Services Australia (formerly the Department of Human Services and Medicare Australia) enrolment database, which provides near complete coverage of the population. People 80+ years of age</p>	

	<p>and residents of rural and remote areas were oversampled.”</p> <p><i>NOTE:</i> Services Australia prefer to mention the department’s former name.</p>	
Response rate	e.g. “About 18% of those invited participated and participants included about 11% of the NSW population aged 45 years and over.”	

Participants in analysis

Subset defined	<p>The subset analysed or contacted must be precisely defined in terms of the variables and their values used in selecting it from all 45 and Up Study participants.</p> <p>e.g. “...800* women who reported having diabetes at both baseline and follow-up were engaged to complete a questionnaire between October and December 2017. 300 women (37.5%) completed the questionnaire.”</p> <p>Or “...of the 266,988 active participants available for analysis, 25,562* participants were identified as having both self-reported hypertension at either baseline or follow-up and a PBS record of a hypertensive medication between October and December 2017. These were included as the subset of interest in these analyses.”</p> <p>If an exclusive population is examined, for example in only one sex, this should be justified, except in obvious cases (e.g., prostate cancer)</p> <p>*figures are fictitious examples only and do not represent true subsets</p>	The subset must be briefly defined.
----------------	--	--

Sex and gender	Ensure correct use of the terms sex (when reporting biological factors) and gender (identity, psychosocial or cultural factors), and, unless inappropriate, report the sex and/or gender of study participants.	Ensure correct use of the terms sex (when reporting biological factors) and gender (identity, psychosocial or cultural factors), and, unless inappropriate, report the sex and/or gender of study participants.
Subset number	The sample size used for the analysis should be stated.	The sample size used for the analysis should be stated.

Study variables

Data items correct	All 45 and Up Study data items used in the analysis must be correctly described . The latest 45 and Up Study Data Book and Data Dictionary should be used as a guide for naming data items correctly (https://www.saxinstitute.org.au/our-work/45-up-study/data-book/)	All 45 and Up Study data items used in the analysis must be correctly described .
Question and response categories	For items of particular importance in the analysis , the questions used to elicit the information and their response categories or scale should be described exactly as they appear in the questionnaires - https://www.saxinstitute.org.au/our-work/45-up-study/questionnaires/ NOTE: This information can be presented in an appendix, table/figure, or footnote.	
Derivation described	Where a variable used is a derivative of one or more Study data items, the derivation should be fully described, or a reference given to where a full description can be found.	

Linked data

MBS & PBS

Correctly named	<p>MBS and PBS must be correctly named:</p> <p>MBS = Medicare Benefits Schedule</p> <p>PBS = Pharmaceutical Benefits Scheme</p>	<p>MBS and PBS must be correctly named:</p> <p>MBS = Medicare Benefits Schedule</p> <p>PBS = Pharmaceutical Benefits Scheme</p>
Acknowledge Services Australia	<p>Where the analysis includes the use of MBS and PBS data, Services Australia must be acknowledged for supply of the data.</p>	<p>Where the analysis includes the use of MBS and PBS data, Services Australia must be acknowledged for supply of the data.</p> <p><i>NOTE:</i> Services Australia can be acknowledged in a footnote if wording limit is too restrictive to incorporate into the text.</p>
Acknowledge the Sax Institute	<p>Linkage of the 45 and Up cohort data to the MBS and PBS data is facilitated by the Sax Institute using a unique identifier provided by Services Australia.</p>	
Method correct	<p>The method used to link records in the MBS and PBS is deterministic matching.</p> <p>Users of MBS and PBS data should ensure they are familiar with how these data are collected and the limitations of the data before planning their analyses.</p>	
Coversheet complete	<p>Services Australia requires authors complete a Publication Request Coversheet ahead of its review of the paper. The 45 and Up Study Coordinating Centre will email this form to you separately.</p>	<p>Services Australia requires authors complete a Publication Request Coversheet ahead of its review of the paper. The 45 and Up Study Coordinating Centre will email this form to you separately.</p>

Centre for Health Record Linkage (CHeReL)

<p>Acknowledge CHeReL</p>	<p>Where the research project includes data linkage undertaken through CHeReL, CHeReL must be acknowledged and a reference to the CHeReL website http://www.cherel.org.au/ should be included in the paper, either within the text or in the reference list. .</p> <p>Datasets linked by the CHeReL must be correctly named and the linkage described as per the CHeReL website http://www.cherel.org.au/</p>	<p>When data are linked through CHeReL the datasets linked by CHeReL must be mentioned in the abstract.</p> <p><i>NOTE:</i> CHeReL can be acknowledged in a footnote if wording limit is too restrictive to incorporate into the text.</p>
---------------------------	---	---

SURE

<p>Acknowledge SURE</p> <p><i>NOTE: This requirement is relevant for Projects with an agreement signed on or after 1 September 2019</i></p>	<p>When research includes any data linkage analysis, the Secure Unified Research Environment (SURE) must be acknowledged for provision of secure data access.</p>	<p>When research includes any data linkage analysis, the Secure Unified Research Environment (SURE) must be acknowledged for provision of secure data access.</p> <p><i>NOTE:</i> SURE can be acknowledged in a footnote if wording limit is too restrictive to incorporate into the text.</p>
---	--	---

Ethical approval

<p>45 and Up Study</p>	<p>Mention must be made of the ethical approvals for the 45 and Up Study.</p> <p>E.g. "The conduct of the 45 and Up Study was approved by the University of New South Wales Human Research Ethics Committee (HREC)."</p>	<p>It is acceptable to not mention the ethical approvals for the 45 and Up Study in the abstract however please ensure 45 and Up Study ethics approval is acknowledged in the conference presentation.</p>
<p>Project Specific</p>	<p>Mention must be made of the ethical approvals for the specific analyses,</p>	

	<p>linkage project or sub-study that gave rise to the paper.</p> <p>The specific project usually requires the approval of the researchers' home institution.</p>	
CHeReL linkage	<p>If data have been linked by the CHeReL, the NSW Population and Health Services Research Ethics Committee (PHSREC) must be mentioned.</p>	
AH&MRC	<p>Projects using Aboriginal status data and/or Aboriginal Study cohort members for the purpose of conducting research with a specific Aboriginal focus must mention the AH&MRC Ethics Committee</p>	

Results

Representativeness and generalisability	<p>The participation rate of ~18% means that great care should be taken if generalising statistics to the general population. Nothing should be said about prevalence of characteristics or incidence of events without careful qualification around representativeness of 45 and Up Study participants corresponding to NSW or Australian populations of the same age range.</p> <p>The same level of qualification, however, is not necessary if generalising the parameters of an association between two 45 and Up Study variables or between one 45 and Up Study variable and a data item from a linked data set. The case for a higher level of generalisability of these parameters is made in the following paper based on 45 and Up Study data and could be cited when justifying such a</p>	<p>The participation rate of ~18% means that great care should be taken if generalising statistics to the general population. Nothing should be said about prevalence of characteristics or incidence of events without careful qualification around representativeness of 45 and Up Study participants corresponding to NSW or Australian populations of the same age range.</p> <p>The same level of qualification, however, is not necessary if generalising the parameters of an association between two 45 and Up Study variables or between one 45 and Up Study variable and a data item from a linked data set. The case for a higher level of</p>
---	---	---

	<p>generalisation: Mealing NM, Banks E, Jorm LR, Steel DG, Clements MS, Rogers KD. Investigation of relative risk estimates from studies of the same population with contrasting response rates and designs. BMC Med Res Methodol. 2010;10:26.</p>	<p>generalisability of these parameters is made in the following paper based on 45 and Up Study data and could be cited when justifying such a generalisation: Mealing NM, Banks E, Jorm LR, Steel DG, Clements MS, Rogers KD. Investigation of relative risk estimates from studies of the same population with contrasting response rates and designs. BMC Med Res Methodol. 2010;10:26.</p>
<p>Results are confidential</p>	<p>Results should be presented in ways that do not risk a participant or a small community of participants being identified and some information specific to them is disclosed to or inferred by a reader.</p> <p><i>Protecting individual participants</i></p> <p>Individual “cases” must not be described.</p> <p>Simple statistical descriptions (e.g. percentages or means) must be based on groups of at least five participants.</p> <p>It must not be possible to read or estimate individual subject’s values from other results (e.g. OR or RR) or graphical presentations of data.</p> <p>Cell values of less than 5 should be presented as ‘<5’. Secondary suppression of non-sensitive cells may be required.</p> <p>A rationale should be included with a technical review if integers less than 5 are to be used that articulates how there is no risk of identification.</p> <p><i>Protecting communities</i></p>	<p>Results should be presented in ways that do not risk a participant or a small community of participants being identified and some information specific to them is disclosed to or inferred by a reader.</p> <p><i>Protecting individual participants</i></p> <p>Individual “cases” must not be described.</p> <p>Simple statistical descriptions (e.g. percentages or means) must be based on groups of at least five participants.</p> <p>It must not be possible to read or estimate individual subject’s values from other results (e.g. OR or RR) or graphical presentations of data.</p> <p>Cell values of less than 5 should be presented as ‘<5’. Secondary suppression of non-sensitive cells may be required.</p> <p>A rationale should be included with a technical review if integers less than 5 are to be</p>

	<p>Small populace (<1,000 population), geographically small (e.g. SA1) or sensitive (Indigenous) communities should not be identified, either directly or indirectly.</p> <p>Statistics relating to individual small or sensitive communities should not be presented unless they are one of at least five such communities being described.</p>	<p>used that articulates how there is no risk of identification.</p> <p><i>Protecting communities</i></p> <p>Small populace (<1,000 population), geographically small (e.g. SA1) or sensitive (Indigenous) communities should not be identified, either directly or indirectly.</p> <p>Statistics relating to individual small or sensitive communities should not be presented unless they are one of at least five such communities being described.</p>
--	---	---

Study Partners

<p>Acknowledgement</p>	<p>Agreements with the 45 and Up Study's funding partners require appropriate acknowledgement of these partners on all publicly accessible outputs. Since partners may vary over time, the up-to-date text should be obtained from - https://www.saxinstitute.org.au/our-work/45-up-study/for-researchers/</p> <p>You can access the acknowledgement text under the 'Steps before publication' tab.</p>	<p>It is acceptable to not mention the 45 and Up Study's funding partners in the abstract, however please ensure 45 and Up Study funding partners are acknowledged in the conference presentation.</p>
------------------------	--	---