

**PROSPERO International prospective register of systematic reviews**

**Review title and timescale**

1	<b>Review title</b> Systematic review of Aboriginal and Torres Strait Islander peoples' outcomes, experiences, and supportive care needs as-associated with cancer																																
2	<b>Original language title</b> English																																
3	<b>Anticipated or actual start date</b> 1 <sup>st</sup> December 2021																																
4	<b>Anticipated completion date</b> June 2023																																
5	<p><b>Stage of review at time of this submission</b> Indicate the stage of progress of the review by ticking the relevant boxes. Reviews that have progressed beyond the point of completing data extraction at the time of initial registration are not eligible for inclusion in PROSPERO. This field should be updated when any amendments are made to a published record.</p> <table border="1"> <tr> <td>The review has not yet started</td> <td></td> <td>*</td> <td></td> </tr> <tr> <td>Review stage</td> <td></td> <td>Started</td> <td>Completed</td> </tr> <tr> <td>Preliminary searches</td> <td></td> <td>*</td> <td></td> </tr> <tr> <td>Piloting of the study selection process</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Formal screening of search results against eligibility criteria</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Data extraction</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Risk of bias (quality) assessment</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Data analysis</td> <td></td> <td></td> <td></td> </tr> </table> <p>Provide any other relevant information about the stage of the review here.</p>	The review has not yet started		*		Review stage		Started	Completed	Preliminary searches		*		Piloting of the study selection process				Formal screening of search results against eligibility criteria				Data extraction				Risk of bias (quality) assessment				Data analysis			
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**Review team details**

6	<b>Named contact</b> Associate Professor John Gilroy																																												
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9	<b>Named contact phone number</b> 61400482697																																												
10	<b>Organisational affiliation of the review</b> The University of Sydney																																												
11	<p><b>Review team members and their organisational affiliations</b></p> <table border="1"> <thead> <tr> <th>Title</th> <th>First name</th> <th>Last name</th> <th>Affiliation</th> </tr> </thead> <tbody> <tr> <td>Associate Professor</td> <td>John</td> <td>Gilroy</td> <td>The University of Sydney</td> </tr> <tr> <td>Dr</td> <td>Mandy</td> <td>Henningham</td> <td>The University of Sydney</td> </tr> <tr> <td>Dr</td> <td>Tanya</td> <td>Buchanan</td> <td>Cancer Council Australia</td> </tr> <tr> <td>Ms</td> <td>Megan</td> <td>Varlow</td> <td>Cancer Council Australia</td> </tr> <tr> <td>Ms</td> <td>Drew</td> <td>Meehan</td> <td>Cancer Council Australia</td> </tr> <tr> <td>Ms</td> <td>Joanna</td> <td>McGlone</td> <td>Cancer Council Australia</td> </tr> <tr> <td>Ms</td> <td>Kate</td> <td>Whittaker</td> <td>Cancer Council Australia</td> </tr> <tr> <td>Ms</td> <td>Amanda</td> <td>McAtamney</td> <td>Cancer Council Australia</td> </tr> <tr> <td>Dr</td> <td>Bena</td> <td>Brown</td> <td>The University of Queensland</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Title	First name	Last name	Affiliation	Associate Professor	John	Gilroy	The University of Sydney	Dr	Mandy	Henningham	The University of Sydney	Dr	Tanya	Buchanan	Cancer Council Australia	Ms	Megan	Varlow	Cancer Council Australia	Ms	Drew	Meehan	Cancer Council Australia	Ms	Joanna	McGlone	Cancer Council Australia	Ms	Kate	Whittaker	Cancer Council Australia	Ms	Amanda	McAtamney	Cancer Council Australia	Dr	Bena	Brown	The University of Queensland				
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12	<b>Funding sources/sponsors</b> Cancer Council Australia		
13	<b>Conflicts of interest</b> None		
14	<b>Collaborators</b> n/a Give the name, affiliation and role of any individuals or organisations who are working on the review but who are not listed as review team members.		
	Title	First name	Last name
	MRS	Kanchana	Ekanayake
	Organisation details The University of Sydney		
<b>Review methods</b>			
15	<b>Review question(s)</b> 1. What is the quality of the cancer research involving Indigenous people from Australia? 2. What are the main findings and recommendations found in the research archive about cancer experiences in Aboriginal and Torres Strait Islander communities? 3. Identify how the research archive includes research driven by the Aboriginal and Torres Strait Islander community.		
16	<b>Searches</b> This review will consider all scientific studies that involve Aboriginal and Torres Strait Islander people living with cancer in Australia. Examples of electronic bibliographic databases include: <ul style="list-style-type: none"> <li>• Medline, Cinahl, Scopus, informit, ProQuest, Web of Science.</li> <li>• Citation tracking of the included studies will be conducted for other potentially eligible papers</li> <li>• A hand search will be undertaken that involved contacting key people in the research field and Google Scholar for grey literature.</li> </ul> Search dates are from the year 2000 to December 2021. Only publications written in English are included. This is the search string.		
17	<b>URL to search strategy</b> Here are some examples of reviews: 1. <a href="https://www.canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/risk-factors-lung-cancer-systematic-review">https://www.canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/risk-factors-lung-cancer-systematic-review</a> 2. <a href="https://www.canceraustralia.gov.au/covid-19/research-articles/review-articles">https://www.canceraustralia.gov.au/covid-19/research-articles/review-articles</a>		
18	<b>Condition or domain being studied</b> Aboriginal and Torres Strait Islander people report higher cancer incidence and mortality, and lower survival than non-Indigenous Australians, (AIHW 2019) largely reflected in preventable cancers. Between 2012 and		

	<p>2016, Aboriginal and Torres Strait Islander people were 43% more likely to die from cancer than their counterparts (Cancer Australia 2019).</p> <p>Factors influencing higher cancer mortality among Aboriginal and Torres Strait Islander people may include higher prevalence of risk factors and presence of comorbidities, more advanced cancer at diagnosis and less participation in national cancer screening program and variations in treatment receipt (Tervonen et al. 2016; Tervonen et al. 2017). Additionally, the social, economic, and cultural environments of Aboriginal and Torres Strait Islander people influence outcomes. Personal beliefs, fears and attitudes about cancer, lower cancer symptoms awareness, poor health literacy, discrimination based on race or socioeconomic status, communication difficulties and geographic isolation are potential reasons (DiGiacomo et al. 2012). There is limited understanding on the quality and findings of cancer research regarding Aboriginal and Torres Strait Islander people.</p>																		
19	<p><b>Participants/population</b> Aboriginal and Torres Strait Islander</p>																		
20	<p><b>Intervention(s), exposure(s)</b> The focus is on the cancer research regarding Aboriginal and Torres Strait Islander people in Australia.</p>																		
21	<p><b>Comparator(s)/control</b> N/A</p>																		
22	<p><b>Types of study to be included</b> Grey and scientific publications will be included in this study. The following databases will be searched. Identified publications must have an abstract or report summary. In addition, the publications must have background, methodology, results, and a discussion section relating to the study.</p> <p>Table 1: Criteria for scientific and grey literature</p> <table border="1" data-bbox="165 1137 1377 2083"> <thead> <tr> <th data-bbox="165 1137 571 1171"></th> <th data-bbox="571 1137 975 1171">Included</th> <th data-bbox="975 1137 1377 1171">Excluded</th> </tr> </thead> <tbody> <tr> <td data-bbox="165 1171 571 1514">Scientific Literature</td> <td data-bbox="571 1171 975 1238">Published in a peer reviewed journal</td> <td data-bbox="975 1171 1377 1238">An opinion piece, viewpoint, perspective or invited comment</td> </tr> <tr> <td data-bbox="165 1238 571 1413"></td> <td data-bbox="571 1238 975 1413">Documents the results of an investigation and/ or secondary analysis of data reporting the aim of investigation, method, findings and conclusions</td> <td data-bbox="975 1238 1377 1413">Research that is not about cancer</td> </tr> <tr> <td data-bbox="165 1413 571 1514"></td> <td data-bbox="571 1413 975 1514">A full paper or report that meets criteria (i) and (ii)</td> <td data-bbox="975 1413 1377 1514">Not easily accessible ‘via the internet or electronically via library subscriptions</td> </tr> <tr> <td data-bbox="165 1514 571 1816">Grey Literature</td> <td data-bbox="571 1514 975 1816">Available on a website, or by request, as an organisational document available from non-government organisations, , government documents, Australia research centres, theses and research that is published either by website</td> <td data-bbox="975 1514 1377 1816">Opinion piece, viewpoint, guides and resources for clients, carers, perspectives or invited comment</td> </tr> <tr> <td data-bbox="165 1816 571 2083"></td> <td data-bbox="571 1816 975 2083">Reports the ‘results of investigating a particular topic/ topics using data either from original sources or as secondary analysis of existing data. Such documents need to include the aim of the investigation, the method used, the findings and</td> <td data-bbox="975 1816 1377 2083">Research which is primarily medical, surgical, clinical or pharmacological</td> </tr> </tbody> </table>		Included	Excluded	Scientific Literature	Published in a peer reviewed journal	An opinion piece, viewpoint, perspective or invited comment		Documents the results of an investigation and/ or secondary analysis of data reporting the aim of investigation, method, findings and conclusions	Research that is not about cancer		A full paper or report that meets criteria (i) and (ii)	Not easily accessible ‘via the internet or electronically via library subscriptions	Grey Literature	Available on a website, or by request, as an organisational document available from non-government organisations, , government documents, Australia research centres, theses and research that is published either by website	Opinion piece, viewpoint, guides and resources for clients, carers, perspectives or invited comment		Reports the ‘results of investigating a particular topic/ topics using data either from original sources or as secondary analysis of existing data. Such documents need to include the aim of the investigation, the method used, the findings and	Research which is primarily medical, surgical, clinical or pharmacological
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	conclusions and/ or recommendation	
	A full paper or brief report the meets criteria (i) and (ii)	A descriptive article of one case study. Not accessible on a public website in a reasonable period of time using the above described search strategy. Media presentations and presentations on research

Scan assessment

<b>Selection Q</b>	<b>Inclusion</b>	<b>Exclusion</b>	<b>Exclusion code (assign to article)</b>
Is the study conducted in Australia?	Y Australia	N International	EC#1
Does the study focus on participants, and their families/carers, with a cancer diagnosis?	Y cancer	N non-cancer related.	EC#2
Is the participant sample Indigenous?	Y Indigenous	N non-Indigenous	EC#3
Does the paper focus on cancer outcomes (i.e. mortality, survival)	Y cancer outcomes	N no cancer outcomes	EC#4

<b>23</b>	<b>Context</b> Only Australian based research will be included
<b>24</b>	<b>Primary outcome(s)</b> The research is to assist Cancer Council Australia to establish its Reconciliation Action Plan and national strategic plan. This research will also assist researchers and research teams in cancer research.
<b>25</b>	<b>Secondary outcomes</b>
<b>26</b>	<b>Data extraction (selection and coding)</b>  Identified studies that meet the publication criteria will be grouped into one of the following categories: Qualitative, Quantitative randomised control, quantitative non-randomised, quantitative descriptive, mixed methods. These studies will then be assessed for methodological validity by three reviewers, prior to inclusion in the review. Publications are stored and sorted on Convidence database. Each phase will involve three researchers, led by the Chief investigator. Having three people helps alleviate conflict on a voting approach. The preliminary findings of each phase will be sent to the other investigators for validation and verification.  The MMAT version 2018 framework will be adopted for this systematic review. First developed in 2006, and revised in 2011, the MMAT was designed to appraise multiple mixed study research publications, that is studies that include qualitative, quantitative, and mixed method methodologies (Hong et al. 2018; Hong, Gonzalez-Reyes, and Pluye 2018; Hong and Pluye 2019; Pace et al. 2012; Pluye et al. 2009). The research methodology is appraised using a scoring system (yes, no, cannot tell). These data will be recorded on an excel spreadsheet.

	<p>Publications that have a specific focus on Aboriginal and Torres Strait Islander people were additionally screened using the Aboriginal and Torres Strait Islander Quality Appraisal Tool developed by the Centre for Excellence in Aboriginal Chronic Disease Knowledge Translation and Exchange. This tool appraises the quality of the research publications in how the research meet the values and ethics of working with Aboriginal and Torres Strait Islander communities. These data will be recorded on an excel spreadsheet.</p> <table border="1"> <thead> <tr> <th>Categories</th> <th>Data</th> </tr> </thead> <tbody> <tr> <td>The study design</td> <td>Explore the quality of the research questions/aims, its design, methodology, approach, and findings and conclusions. The MMAT model is a multi-method approach to appraising multiple types of research disciplines.</td> </tr> <tr> <td>Aboriginal and Torres Strait Islander conduct</td> <td>The aim is to ascertain if the research project followed the ethics and conduct relating to Indigenous research as per the Australian Government approved ethics guidelines for Indigenous research.</td> </tr> <tr> <td>Research findings/conclusions</td> <td>The findings of these research publications will be analysed using thematic analysis.</td> </tr> </tbody> </table> <p>A thematic synthesis of the publication will be undertaken to understand Aboriginal and Torres Strait Islander people's experiences of cancer. These data will be recorded on an excel spreadsheet.</p>	Categories	Data	The study design	Explore the quality of the research questions/aims, its design, methodology, approach, and findings and conclusions. The MMAT model is a multi-method approach to appraising multiple types of research disciplines.	Aboriginal and Torres Strait Islander conduct	The aim is to ascertain if the research project followed the ethics and conduct relating to Indigenous research as per the Australian Government approved ethics guidelines for Indigenous research.	Research findings/conclusions	The findings of these research publications will be analysed using thematic analysis.
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27	<p><b>Risk of bias (quality) assessment</b></p> <p>Three researchers will lead each phase of the research. Once agreement/disagreement is concluded the preliminary findings will be sent to all team members for verification and review. This model ensure that research phases have a verification phase.</p>								
28	<p><b>Strategy for data synthesis</b></p> <p>There is no preferred number of publications for this review. There is a three-part synthesis with this project.</p> <p>First: Data synthesis by research type (qualitative, quantitative, mixed-method). This review proposes to use the Mixed Methods Appraisal Tool developed by Hong et-al. The MMAT approach enables an appraisal of the quality of the research methodology with a scoring approach (yes, no, cannot tell).</p> <p>Second: including the additional CREATE review for Aboriginal and Torres Strait Islander focused studies ensure that this study culturally respectful for Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander research protocols. The CREATE was developed by Aboriginal and Torres Strait Islander scholars and Elders. The CREATE has been tested for efficacy and rigor over many years involving scholars and pilot tests. This appraisal establishes how well the research publication has respected cultural lore, protocols, and ethics in human-based research.</p> <p>Third: a thematic analysis of the publications will be conducted. Reviewers will go back-forth between full-test papers and the established themes.</p>								
29	<p><b>Analysis of subgroups or subsets</b></p> <p>There is no planned investigation of any specific subgroups. We are focused on Aboriginal and Torres Strait Islander people.</p>								
<b>Review general information</b>									
30	<p><b>Type and method of review</b></p> <p>Systematic review in the area of cancer research and programs.</p>								
31	<p><b>Language</b></p> <p>English</p>								
32	<p><b>Country</b></p> <p>Australia</p>								
33	<p><b>Other registration details</b></p>								
34	<p><b>Reference and/or URL for published protocol</b></p>								

35	<b>Dissemination plans</b> The findings will be published in open-access journals. The publications will also be cited and displayed on the Cancer Council website. CCA will plan a Knowledge to Action Plan, such as informing the development of the RAP.
36	<b>Keywords</b> Aboriginal and Torres Strait Islander; Cancer; chronic disease.
37	<b>Details of any existing review of the same topic by the same authors</b>
38	<b>Current review status</b> Not started.
39	<b>Any additional information</b>
40	<b>Details of final report/publication(s)</b> Published in open access journal.