

## RESEARCH PROPOSAL SUBMISSION FORM

BY SUBMITTING THIS FORM, I AGREE TO HAVE MY RESEARCH PROPOSAL ASSESSED BY THE IMSANZ-RN STEERING COMMITTEE FOR ENDORSEMENT, IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OUTLINED IN THE TERMS OF REFERENCE DOCUMENT. I ALSO CONSENT TO MY NAME AND CONTACT DETAILS BEING PUBLISHED ON THE RESEARCH MEMBERSHIP DIRECTORY OF IMSANZ-RN WEBSITE.

### STUDY SYNOPSIS (Maximum 1500 words)

<b>TITLE</b>	Priority Setting Partnership for Research in Delirium Prevention and Care in Adults
<b>PRINCIPAL INVESTIGATOR, AFFILIATIONS AND CONTACT DETAILS</b>	<ul style="list-style-type: none"><li>• Dr Alison Mudge, Clinical Lead Eat Walk Engage, Royal Brisbane and Women's Hospital Email: <a href="mailto:Alison.Mudge@health.qld.gov.au">Alison.Mudge@health.qld.gov.au</a></li><li>• Prof Meera Agar, Director, IMPACCT, University of Technology Sydney Email: <a href="mailto:meera.agar@uts.edu.au">meera.agar@uts.edu.au</a></li></ul>
<b>ASSOCIATE INVESTIGATORS AND AFFILIATIONS</b>	<ul style="list-style-type: none"><li>• Ms Kimberley Campbell, Research Assistant, IMPACCT, University of Technology Sydney</li><li>• Dr Layla Edwards, Postdoctoral Fellow, IMPACCT, University of Technology Sydney</li><li>• Mrs Lesley McGee, Consumer representative, Eat Walk Engage, Royal Brisbane and Women's Hospital</li><li>• Ms Alice Pashley, Postdoctoral Fellow, Centre for Ageing Research and Translation, Faculty of Health, University of Canberra</li><li>• Ms Liliana Botero Zapata, Senior Project Officer Internal Medicine Research Unit, Royal Brisbane and Women's Hospital</li></ul>
<b>IS THIS STUDY CURRENTLY A MULTICENTRE STUDY? (I.E. INVOLVEMENT OF MORE THAN ONE HEALTH SERVICES OR JURISDICTION)</b>	YES

<b>ARE YOU LOOKING FOR OPPORTUNITIES FOR MULTICENTRE COLLABORATION?</b>	YES
<b>IF 'YES' TO QUESTION ABOVE, CAN INTERESTED COLLABORATORS CONTACT YOU DIRECTLY?</b>	YES
<b>BACKGROUND</b>	<p>Delirium is a prevalent, neuropsychiatric syndrome characterised by the acute onset of deficits in attention and other aspects of cognition<sup>1</sup>. It affects up to 25% of adult inpatients, either as a pre-existing syndrome or a hospital acquired complication<sup>1, 2</sup>. People experiencing delirium often have altered arousal, from reduced responsiveness to hypervigilance and agitation, and they may experience hallucinations, all of which can interfere with their self-care and clinical care. A single episode of delirium is associated significant adverse outcomes, such as patient, carer, and clinician distress; prolonged hospital stays; greater hospital acquired complications (e.g. falls, pneumonia, and functional decline); and higher hospital and post-hospital care needs<sup>1, 3, 4</sup>. It is also associated with higher mortality and is a major risk factor for future dementia diagnosis<sup>5</sup>. The cost of delirium is estimated to be AUD\$8.8 billion annually<sup>6</sup>.</p> <p>This study follows the James Lind Alliance (JLA) Priority Setting Partnership (PSP) process<sup>7</sup>. The JLA is a non-profit making initiative based at the University of Southampton, bringing patients, carers, and clinicians together in a partnership using transparent, systematic, and comprehensive methods. These PSPs identify and prioritise the evidence uncertainties, or 'unanswered questions', that they agree are the most important for research in their topic area. The scope of the PSP will be on delirium prevention and care in adult in the community and in the healthcare setting within Australia and New Zealand.</p>
<b>RESEARCH QUESTION/HYPOTHESIS</b>	The aim of the delirium PSP is to identify and prioritise the unanswered questions about delirium from patient, carer and clinical perspectives that are the most important for research to address.

	<p>The objectives of the PSP are:</p> <ul style="list-style-type: none"> <li>• to engage a relevant and representative group of patients, carers and clinicians to identify uncertainties about delirium prevention and care</li> <li>• to agree by consensus a prioritised list of those uncertainties, for research</li> <li>• to publicise the results of the PSP and process</li> <li>• to take the results to research commissioning bodies to be considered for funding.</li> </ul>
<b>PRIMARY OUTCOME/PROCESS MEASURE</b>	Through a partnership between patients, carers, and clinicians, to identify and agree on the top 10 unanswered questions about delirium to prioritise future delirium research.
<b>SECONDARY OUTCOME/PROCESS MEASURES</b>	Not Applicable
<b>STUDY DESIGN (IF THE STUDY IS A CLINICAL TRIAL, PLEASE INCLUDE INFORMATION ON SAMPLE SIZE CALCULATION, RANDOMISATION, AND BLINDING)</b>	This study is participatory action research priority setting, ensuring that research end-users are included from the earliest phases of the research process. It uses an established and internationally recognised method through the James Lind Alliance, a non-profit organisation in the UK. Information is shared transparently with the public through information about the protocol, steering group and ultimate findings published on the JLA website <a href="#">Delirium (Australia and New Zealand)   NIHR JLA</a>
<b>INCLUSION CRITERIA</b>	<ul style="list-style-type: none"> <li>• Adults (aged <math>\geq 18</math> years), who have had delirium or who have cared for someone with delirium, e.g. family members or clinicians</li> <li>• people with health conditions that increase the risk of delirium (e.g. people living with frailty or dementia, cancer), and carers or their family members.</li> <li>• Participants must live in Australia or New Zealand</li> </ul>
<b>EXCLUSION CRITERIA</b>	<ul style="list-style-type: none"> <li>• People aged <math>&lt;18</math> years.</li> </ul>
<b>EXPECTED NUMBER OF PARTICIPANTS</b>	From previous JLA priority setting partnership studies, it is expected that 300-400 will be participating in the study.

<b>STUDY DURATION</b>	It is predicted that this study will be conducted over 20 months.
<b>ANALYSIS</b>	<ol style="list-style-type: none"> <li>1. Descriptive statistics will be conducted to analyse demographic data.</li> <li>2. Participants' question about delirium will be reviewed manually in an Excel spreadsheet and grouped into categories (e.g., prevention, causes, diagnosis, treatment, support, education, and awareness)</li> <li>3. The list of questions will be then refined and checked against existing evidence by two researchers (KC, PhD student, and LE, a post-doctoral researcher) to determine which questions have already been answered and which are "true" uncertainties.</li> <li>4. An interim priority setting will then be conducted by inviting clinicians and community members to complete another survey to prioritise the list of verified uncertainties by selecting the top 10 research questions they deem most important to address.</li> <li>5. Final prioritisation of the 10 delirium research questions will be determined through a one-day in-person or on-line workshop by 30 participants (consumers and clinicians). This process will be facilitated by a JLA adviser.</li> </ol>
<b>IMPORTANCE TO GENERAL MEDICINE</b>	<p>Delirium is a prevalent condition in internal medicine and poses a significant burden to both patients and the inpatient care system. Patients who experience delirium often have longer hospital stays and are at increased risk of complications such as falls, infections, and functional decline. These outcomes contribute to higher healthcare costs and greater use of hospital resources.</p> <p>Given its high prevalence in general medicine and its association with negative outcomes, research prioritisation in this area is essential. Identifying key evidence gaps will help improve the prevention and management of delirium, enhance the quality of care that is being delivered, and ultimately lead to better outcomes for this vulnerable patient group.</p>
<b>FUNDING</b>	This study is being funded by Royal Brisbane and Women's Hospital (SERTA grant) and the University of Technology Sydney.
<b>HAS CONSIDERATION BEEN GIVEN TO HOW THIS PROJECT MIGHT IMPROVE EQUITY IN INDIGENOUS OR VULNERABLE POPULATIONS? PLEASE PROVIDE EXPLANATION</b>	Yes, participant demographic data is being collected in this study. Indigenous groups, as well as patients and carers with lived experience, are key populations of interest. Survey responses are being reviewed weekly to monitor representation and to identify which groups we are hearing from. If response rates from these groups are low, we will actively seek their participation through targeted communication channels.
<b>CURRENT PROGRESS</b>	<p>Design and protocol development - <i>Completed</i>.</p> <p>Ethics application – <i>Completed</i> (HREC reference number <b>HREC/2024/MNHA/110598</b>)</p>

	Study in progress – <u>yes</u> .
<b>IMSANZ-RN OFFICE USE ONLY</b>	<b>ENDORSED NOT ENDORSED</b>

## References

1. Wilson JE, Mart MF, Cunningham C, et al. Delirium. *Nature Reviews Disease Primers* 2020; 6: 90.
2. Gibb K, Seeley A, Quinn T, et al. The consistent burden in published estimates of delirium occurrence in medical inpatients over four decades: a systematic review and meta-analysis study. *Age and ageing* 2020; 49: 352-360.
3. Mudge AM, McRae P, Hubbard RE, et al. Hospital-associated complications of older people: a proposed multicomponent outcome for acute care. *Journal of the American Geriatrics Society* 2019; 67: 352-356.
4. Inouye SK, Studenski S, Tinetti ME, et al. Geriatric Syndromes: Clinical, Research, and Policy Implications of a Core Geriatric Concept: (See Editorial Comments by Dr. William Hazzard on pp 794–796). *Journal of the American Geriatrics Society* 2007; 55: 780-791.
5. Gordon EH, Ward DD, Xiong H, et al. Delirium and incident dementia in hospital patients in New South Wales, Australia: retrospective cohort study. *bmj* 2024; 384.
6. Pezzullo L, Streatfeild J, Hickson J, et al. Economic impact of delirium in Australia: a cost of illness study. *BMJ open* 2019; 9: e027514.
7. Alliance JL. The James Lind Alliance Guidebook, <https://www.jla.nihr.ac.uk/jla-guidebook/>.