**Operational definition**

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| **Domain** | **Description** |
| Subgroup analysis on components of the QoL domain | We conducted a subgroup analysis based on quality-of-life dimensions. Most studies assessed quality of life using dimensions such as physical functioning, bodily pain, role emotional, social functioning, vitality, mental health, and role physical. Our aim was to examine differences in effect sizes between individuals who experienced delirium and those who did not for each dimension, providing detailed information on the outcomes. |
| Subgroup analysis on specific psychiatric syndromes | Similarly, we analysed each psychiatric syndrome (sleep disturbance, depression, anxiety, and PTSD) to investigate differences in effect sizes between those who experienced delirium and those who did not, ensuring a comprehensive understanding of the outcomes. |
| Sensitivity analyses on adjusting models for covariates | We also conducted a sensitivity analysis based on whether studies controlled for potential confounders. Our main analysis combined effect sizes that were both adjusted and unadjusted for confounders, though we prioritized adjusted data when available. If a study did not report adjusted data, we included unadjusted data instead. To assess the robustness of our findings, we performed a sensitivity analysis by separately analysing adjusted and unadjusted data. |
| Sensitivity analysis on using baseline sample sizes in studies that did not report follow-up sample sizes | Additionally, we used follow-up sample sizes to calculate effect estimates whenever they were reported. However, if a study did not provide separate follow-up sample sizes for the delirium and no-delirium groups, we used baseline sample sizes instead. This may have influenced the results, so we conducted a sensitivity analysis comparing studies that reported only follow-up sample sizes with those that mixed follow-up and baseline sample sizes. The main analysis included both follow-up and baseline sample sizes combined. |
| Sensitivity analyses with and without frailty, fatigue, and/or falls | In our study, we considered frailty, fatigue, and/or falls as functional outcomes. The main analysis included these outcomes along with other functional measures such as ADL and IADL. While frailty, fatigue, and falls share some similarities with functional outcomes, they represent distinct conditions. To determine the robustness of our main findings, we conducted a sensitivity analysis with and without these outcomes. |

**Table 1. Cognition and functional outcomes data types and operationalisation**

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| Outcome | Study design | Data type | |
| Categorical/dichotomous | Continuous |
| Cognitive/functional change | Longitudinal | Decline vs no decline from the baseline | Change from the baseline to the follow-up timepoint |
| Cognitive/functional performance | Cross-sectional | Impairment vs no impairment below a threshold at follow-up time | Scores at follow-up timepoint |