Systematic Review Included Studies

coding of selected studies for inclusion

* Required

1. **Database ID number** *

2. **Date coding completed for this paper** *

   Example: December 15, 2012

3. **Coding Person** *

   Mark only one oval.

   - Steve
   - Premilla

4. **Citation** *

Report Details

5. **Country of Publication**

6. **Study design** *

   Mark only one oval.

   - Retrospective analysis of a prospective longitudinal cohort study with community sample
   - Prospective longitudinal cohort study with inpatient sample
   - Prospective longitudinal cohort study with inpatient sample with separate control group
   - Other: please add detail in next question

7. **Study Design details**

8. **Funding Source** *
Mark only one oval.

- Government
- Private Company
- Not specified
- Other

9. **Funding details**

10. **Primary Research Question of this Study** *
Mark only one oval.

- Cognitive change identified on testing after discharge
- Dementia Risk following hospitalisation
- cognition changes in rehab after discharge from acute care

11. **Non-cognitive Primary Outcomes** *
Mark only one oval.

- function/performance/physical capability
- depression and/or anxiety
- quality of life
- mortality
- readmission
- other

12. **Description of non-cognitive outcomes**

Participants
intervention group characteristics

13. **Original sample utilised by this study if a secondary analysis**

14. **Original citation**

15. **Location of recruitment** *
Mark only one oval.

- USA or Canada
- Europe
- Asia
- South America

16. **Years of sample recruitment** *
Check all that apply.

- 1960-64
- 1965-69
- 1970-74
- 1975-79
- 1980-84
- 1985-89
- 1990-94
- 1995-99
- 2000-04
- 2005-09
- 2010-2014
- 2014-18
- not specified

17. **n of intervention group** *

18. **mean age**

19. **minimum age**

20. **maximum age**

21. **sex** *
Mark only one oval.
- mixed
- Female
- Male

22. **Cognition and neurological comorbidity (baseline cognition measure or history of stroke etc)** *
Mark only one oval.
- MMSE >20
- Described as non-demented or neurologically intact
- presence of some patients with primary CNS pathology (stroke, traumatic brain injury, subarachnoid haemorrhage etc)
- Not specified
- Other

23. **Describe selection criteria definition for baseline cognition**

24. **Measure of Functional capacity at baseline** *
Mark only one oval.
- Unimpaired
- Mildly impaired
- Moderately impaired
- Severely impaired
- not specified

25. **Description of functional capacity measure and score**

26. **Education** *
Mark only one oval.

- Less than Primary (<4 years)
- Primary (4-7 years)
- Middle School (8-10 years)
- High School (11-13 years)
- Tertiary (>13 years)
- Not specified

27. **Education years**

28. **Comorbidity**

29. **Other features of the sample or relevant inclusion/exclusion criteria**

Participants

control or comparison group characteristics

30. **Type of comparison group** *
Mark only one oval.

- separate control group recruited to compare with the intervention sample
- non-hospitalised comparison group part of overall study cohort
- within patient comparison with prehospitalisation measures
- no comparison group and no prehospitalisation measure (ie only 2 or more post admission measures)
- Other

31. **Description of comparison group**

32. **n of comparison group**

33. **mean age**

34. **maximum age**

35. **minimum age**

36. **sex** *
Mark only one oval.
- mixed
- Female
- Male

37. **Cognition and neurological comorbidity (baseline cognition measure or history of stroke etc)** *
Mark only one oval.
- MMSE >20
- Described as non-demented or neurologically intact
- presence of some patients with primary CNS pathology (stroke, traumatic brain injury, subarachnoid haemorrhage etc)
- Not specified
- Other

38. **Describe selection criteria definition for baseline cognition**

39. **Measure of Functional capacity at baseline** *
Mark only one oval.
- Unimpaired
- Mildly impaired
- Moderately impaired
- Severely impaired
- not specified

40. **Description of functional capacity measure and score**

41. **Education** *
Mark only one oval.

- ◯ Less than Primary (<4 years)
- ◯ Primary (4-7 years)
- ◯ Middle School (8-10 years)
- ◯ High School (11-13 years)
- ◯ Tertiary (>13 years)
- ◯ Not specified

42. **Education (years or if not available categories)**

43. **Comorbidity (pre-exisiting medical conditions or Charlson score or equivalent)**

44. **Other features of the sample or relevant inclusion/exclusion criteria**

Intervention

hospitalisation characteristics

45. **type of hospital** *
Mark only one oval.

- ◯ Tertiary or University Hospital
- ◯ Secondary or Regional
- ◯ several different hospitals (applicable tocommunity samples)
- ◯ veterans medical care centers
- ◯ not reported
- ◯ other

46. **Specify hospital name(s) and location if reported**

47. **primary diagnosis** *
Mark only one oval.

- medical with several primary diganoses (eg heart attack, angina, infection, pneumonia COPD etc, no surgical patients)
- medical one or few specific diagnoses only (please specify in next question)
- mixed medical and surgical (paper should explain if some patients have had a surgical condition)
- other
- not reported

48. **further details on primary diagnoses**

_____

49. **Length of stay (days)**

_____

50. **Critical Care admission also** *
Mark only one oval.

- yes
- no
- not specified in paper

Outcome

cognition outcome measures

51. **cognition measure(s)** *
Mark only one oval.

- MMSE
- TICS
- DSM-IV Diagnosis of Dementia
- Neuropsychological battery with multiple tests
- Mental Status Questionnaire
- COG Scale
- Montreal Congnitive Assessment
- MCI risk
- Functional Independence Measure Cognitive items
- Cognitive Failure Questionnaire
- Other

52. **Further details of cognition measures**

53. **study also assessed delirium** *
Mark only one oval.

- Yes
- No
- Unsure

54. **type of cognition variable used for analysis** *
Mark only one oval.

- change in each cognition test score or scores over time within individuals in sample
- change in global composite z score over time within individuals in sample
- mean cognition decline in hospitalised group vs non-hospitalised group
- onset of dementia in hospitalised group vs non-hospitalised group
- categorical variables such as mild, moderate and severely impaired groups
- other

55. **Describe cognition variable**

56. **type of analysis** *

Mark only one oval.

- ◯ Logistic regression, estimating odds of dementia/MCI or other categorical indicator with an odds ratio
- ◯ Cox regression, estimating a hazard/risk of dementia/MCI or other categorical indicator with a hazard ratio
- ◯ Kaplan-Meier or Lifetables or Survival analysis – comparing time to dementia/MCI or other categorical indicator, between hospitalized versus non-hospitalized participants (using a log-rank or Wilcoxon test)
- ◯ Single group repeated measures analysis – examining within-patient change on a continuous measure of cognition (e.g., via post-pre comparison, longitudinal analysis, repeated measures ANOVA/MANOVA, mixed models, generalised estimating equations, paired samples t-test)
- ◯ Multi-group repeated measures analysis – comparing the change on a continuous measure of cognition, between hospitalized and non-hospitalised patients (e.g., repeated measures ANOVA/MANOVA, mixed models, or generalised estimating equations, or generalised linear models)
- ◯ Comparing a change score (final wave minus baseline) on a continuous measure of cognition between hospitalized and non-hospitalised patients through ANOVA or related procedure (e.g., ANOVA/MANOVA, t-test, or generalised linear model)
- ◯ Single multi-group comparison – comparing hospitalized and non-hospitalised patients on a continuous measure of cognition, but at a single point (e.g., final wave)
- ◯ other

57. **Follow-up duration** *

Mark only one oval.

- ◯ discharge to 3 months
- ◯ 3-6 months
- ◯ 6-12 months
- ◯ 1-5 years
- ◯ 5-10 years
- ◯ >10 years

58. **Frequency of cognition follow-up (time interval between measures or between discharge and measure)** *

Mark only one oval.

- ◯ variable (eg after one month and then after 6 months)
- ◯ 3 monthly
- ◯ 6 monthly
- ◯ yearly
- ◯ biennially
- ◯ triennially
- ◯ longer than 3 years

59. **extra details of follow-up timing**

60. **attrition %** *

61. **cognitive outcome** *
Mark only one oval.

- worse after hospitalisation
- better after hospitalisation
- inconclusive
- other

62. **outcome details including imaging or function outcomes of interest**

63. **covariates included in analysis** *
Check all that apply.

- [ ] age
- [ ] sex
- [ ] education
- [ ] comorbidities
- [ ] baseline cognition
- [ ] baseline function
- [ ] race
- [ ] depression
- [ ] dementia
- [ ] type of hospitalisation
- [ ] length of stay
- [ ] major surgery
- [ ] illness severity during admission
- [ ] critical care admission
- [ ] readmission
- [ ] number of hospitalisations
- [ ] delirium
- [ ] other

64. **subgroup analysis**
Mark only one oval.

- ◯ critical admissions vs non-critical admissions
- ◯ medical vs surgical admissions
- ◯ other

Risk of Bias

Ottawa Scale Items (score each * as 1)

65. **Selection: Representativeness of exposed cohort:**
Mark only one oval.

- ◯ truly representative *
- ◯ somewhat representative *
- ◯ selected group
- ◯ no description

66. **Selection: selection of non-exposed**
Mark only one oval.

- same community as exposed *
- different
- Option no description

67. **Selection: exposure source**
Mark only one oval.

- secure record *
- structured interview *
- written self report
- no description

68. **Selection: outcome definitely not present before exposure**
Mark only one oval.

- yes*
- no

69. **Comparability of cohorts**
Mark only one oval.

- control for most important factor *
- controls for additional factor * Statements of no differences between groups or that differences were not statistically significant are not sufficient

70. **Outcome: outcome assessment**
Mark only one oval.

- independent and blinded*
- record linkage*
- self report
- no description

71. **Outcome: Adequate length follow-up to identify outcome**
Mark only one oval.

- yes*
- no

72. **Outcome: Attrition**
Mark only one oval.

- ◯ complete*
- ◯ <15%*
- ◯ >15% and no description of lost cohort
- ◯ none
