

## Rehabilitation after traumatic injury

### A.1/A.2 Identification and assessment of rehabilitation needs after traumatic injury

*NICE guideline < tbc >*

*Evidence review underpinning recommendations 1.1.1, 1.1.2, 1.1.12, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.6, 1.2.8, 1.2.10, 1.2.11, 1.2.25, 1.4.6, 1.4.7, 1.4.8, 1.4.9, 1.4.10, 1.8.2 and 1.8.11 in the NICE guideline*

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*Draft for Consultation*

*These evidence reviews were developed by the National Guideline Alliance which is part of the Royal College of Obstetricians and Gynaecologists*



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1 **Summary of review questions covered**  
2 **in this report**

3 This evidence report contains information on 4 reviews, 2 of which were quantitative  
4 and 2 of which were qualitative:

5 A.1a What should be included in initial rehabilitation needs identification and  
6 assessment for adults after traumatic injury?  
7

8 A.1b What should be included in initial rehabilitation needs identification and  
9 assessment for children and young people after traumatic injury?  
10

11 A.2a What are the views and preferences of adults who have used rehabilitation  
12 services after traumatic injury about assessment of their rehabilitation needs?  
13

14 A.2b What are the views and preferences of children and young people who have  
15 used rehabilitation services after traumatic injury about assessment of their  
16 rehabilitation needs?

# 1 Identification and assessment of 2 rehabilitation needs after traumatic 3 injury

## 4 Review question

5 This evidence report contains information on 4 reviews, relating to the assessment of  
6 rehabilitation needs. 2 of the reviews were quantitative and 2 were qualitative:

7 A.1a What should be included in initial rehabilitation needs identification and  
8 assessment for adults after traumatic injury?  
9

10 A.1b What should be included in initial rehabilitation needs identification and  
11 assessment for children and young people after traumatic injury?  
12

13 A.2a What are the views and preferences of adults who have used rehabilitation  
14 services after traumatic injury about assessment of their rehabilitation needs?  
15

16 A.2b What are the views and preferences of children and young people who have  
17 used rehabilitation services after traumatic injury about assessment of their  
18 rehabilitation needs?

## 19 Introduction

20 Traumatic injury often results in people living with disability that results in a reduced  
21 quality of life. An essential part of good trauma care is to maximise access to  
22 rehabilitation to assist physical and psychological recovery after injury.

23 A proportion of people will have complex needs necessitating inpatient rehabilitation  
24 from a multidisciplinary team with expertise. Some people will need ongoing support,  
25 rehabilitation and re-enablement once they are discharged home.

26 People in major trauma centres with an injury severity score of 9 or more, should be  
27 assessed by a consultant in Rehabilitation medicine within 3 calendar days and have  
28 a rehabilitation prescription formulated. The specialist team including nurses should  
29 complete their assessment and recommendations for early phase rehabilitation. The  
30 rehabilitation prescription is used to document the rehabilitation needs of patients  
31 and identify how their needs should be addressed. It should describe physical,  
32 functional, vocational, educational, cognitive, psychological and social rehabilitation  
33 needs of a patient.

34 The prescription was designed an extension of a discharge/transfer summary and  
35 should include ongoing health and social care plans so that everyone is working from  
36 one document, which is regularly reviewed and updated. However, the Rehabilitation  
37 prescription has been found to be poorly implemented and in two thirds of centres the  
38 prescription has not been passed on to patients (NCASRI Report 2016). There are  
39 also concerns that the rehabilitation prescriptions are not been has not  
40 been adequately monitored or followed up after discharge. Only the major trauma  
41 centres have been incentivised to formulate a rehabilitation prescription, so those  
42 being admitted straight to trauma units, or who have Injury severity scores of less  
43 than 9 will not get a rehabilitation prescription.

1 Access to a Consultant in Rehabilitation varies across England, and there is less  
2 likely to be provision within a trauma unit, even in a peripatetic model. There is no  
3 recommended levels for specialist staffing AHP and specialist nurses within trauma  
4 units, nor standardisation for psychology provision.

5 The objectives of the quantitative reviews were to examine what should be included  
6 in initial rehabilitation needs identification and assessment in people after traumatic  
7 injury. These questions focused on the initial holistic assessment of any rehabilitation  
8 needs. We therefore did not look at specific validated tools, as the use of these are  
9 for the second level of assessment by different specialists of any needs identified in  
10 the initial holistic needs assessment/screening (which was not the focus of these  
11 questions.

12 The objectives of the qualitative reviews were to identify the views and preferences of  
13 people after traumatic injury that resulted in complex rehabilitation needs who have  
14 used rehabilitation services about assessment of their rehabilitation needs.

## 15 Summary of the protocol

16 Please see Table 1 and Table 2 for a summary of the Population, Intervention,  
17 Comparison and Outcome (PICO) characteristics of the quantitative reviews in the  
18 adult and children and young people populations, respectively. Please see Table 3  
19 and Table 4 for a summary of the Population, Phenomenon of interest and Context  
20 (PPC) characteristics of the qualitative reviews in the adult and children and young  
21 people populations, respectively.

22 **Table 1: Summary of the adult quantitative protocol (PICO table)**

<b>Population</b>	Adults (aged 18 years or above) with traumatic injury that required admission to hospital, including those with traumatic brain injury, sight loss and hearing loss  Exclusion: <ul style="list-style-type: none"> <li>• Adults with traumatic injury who are admitted to the ICU</li> </ul>
<b>Intervention</b>	Screening approaches and assessment methods and aids for initial holistic assessment of physical and non-physical rehabilitation needs (e.g., MDT or single discipline assessment; basic/holistic checklists or tools)
<b>Comparison</b>	Each other
<b>Outcomes</b>	<p><b>Critical</b></p> <ul style="list-style-type: none"> <li>• Changes in activity of daily living (Barthel ADL index, COPM, EADL-Test, Katz, OARS, PAT, PSMS)</li> <li>• Length of hospital stay</li> <li>• Overall quality of life (EURO-QoL 5D 3L, SF-36, SF-12, SF-6D)</li> </ul> <p><b>Important</b></p> <ul style="list-style-type: none"> <li>• Return to work or education</li> <li>• Discharge destination</li> <li>• Unplanned readmission</li> <li>• Rehabilitation complexity (e.g., Rehabilitation Complexity Scale; PCAT; Northwick Park; Mayo Portland Inventory; SASNOS)</li> </ul>

23 *ADL: Activities of daily living; COPM: Canadian occupational performance measure; EADL: Erlangen*  
24 *Activities of Daily Living test; EURO-QoL 5D 3L: EuroQol 5 dimensions and 3 levels; ICU: Intensive*  
25 *care unit; MDT: Multidisciplinary team; OARS: Older Americans resources and services; PAT:*  
26 *Performance ADL; PSMS: Physical self-maintenance scale; SASNOS: St. Andrews-Swansea*

1 Neurobehavioural Outcome Scale; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey;  
2 SF-6D: 6-dimension short-form

3 **Table 2: Summary of the children and young people quantitative protocol**  
4 **(PICO table)**

<b>Population</b>	Children and young people (aged below 18 years) with traumatic injury that required admission to hospital, including those with traumatic brain injury, sight loss and hearing loss  Exclusion: <ul style="list-style-type: none"> <li>• Children and young people with traumatic injuries who do not require admission to hospital</li> <li>• Children and young people with traumatic injury who are admitted to the PICU</li> </ul>
<b>Intervention</b>	Screening approaches and assessment methods for initial holistic assessment of physical and non-physical rehabilitation needs (e.g., MDT or single discipline assessment; basic/holistic checklists or tools)
<b>Comparison</b>	Each other
<b>Outcomes</b>	<p><b>Critical</b></p> <ul style="list-style-type: none"> <li>• Changes in activity of daily living (Barthel ADL index, COPM, EADL-Test, GAS, FIMFAM, Katz, OARS, PAT, PSMS)</li> <li>• Length of hospital stay</li> <li>• Overall quality of life (EURO-QoL 5D 3L, SF-36, SF-12, SF-6D, SFMA; CHQ-CF80, CHQ-PF-50, PEDS-QL, EQ-5D-Y)</li> <li>• Sleep</li> </ul> <p><b>Important</b></p> <ul style="list-style-type: none"> <li>• Return to nursery, work or education</li> <li>• Discharge destination</li> <li>• Unplanned readmission</li> <li>• Rehabilitation complexity (e.g., Rehabilitation Complexity Scale; PCAT; Northwick Park; Mayo Portland Inventory; SASNOS)</li> </ul>

5 *ADL: Activities of daily living; CHQ-CF80: a self-report measure of child health questionnaires; CHQ-*  
6 *PF-50: a measure of child health questionnaires for parents; COPM: Canadian Occupational*  
7 *Performance Measure; EADL: EQ-5D-Y: an child-friendly EQ-5D version for measuring quality of life ;*  
8 *Erlangen Activities of Daily Living test; EURO-QoL 5D 3L: EuroQoL 5 dimensions and 3 levels; FIMFAM:*  
9 *Functional independence measure functional assessment measure; GAS: Goal attainment scale; MDT:*  
10 *Multidisciplinary team; OARS: Older Americans resources and services; PAT: Performance ADL Test;*  
11 *Peds-QL: Pediatric Quality of Life Inventory ;PHQ-9: Patient health questionnaire; PICU: Paediatric*  
12 *intensive care unit; PSMS: Physical self-maintenance scale; SASNOS: St. Andrews-Swansea*  
13 *Neurobehavioural Outcome Scale; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey;*  
14 *SF-6D: 6-dimension short-form; SFMA: Selective functional movement assessment.*

15 **Table 3: Summary of the adult qualitative protocol (PPC table)**

<b>Population</b>	Adults (aged 18 years or above) who have used rehabilitation services following traumatic injury that required admission to hospital and resulted in complex rehabilitation needs, including those with traumatic brain injury, sight loss and hearing loss  Exclusion: <ul style="list-style-type: none"> <li>• Adults with traumatic injuries who do not require admission to hospital</li> <li>• Adults with traumatic injury who are admitted to the ICU</li> </ul>
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<b>Phenomenon of interest</b>	Views and preferences of the population about the initial and ongoing assessment of their rehabilitation needs regarded as important/not important
<b>Context</b>	All inpatient, outpatient and community settings in which rehabilitation services following traumatic injury are provided  Exclusion: <ul style="list-style-type: none"> <li>• Accident and emergency departments</li> <li>• Critical care units</li> <li>• Prisons</li> </ul>

1 *ICU: Intensive care unit*

2 **Table 4: Summary of the children and young people qualitative protocol (PPC**  
3 **table)**

<b>Population</b>	Children and young people (aged below 18 years) who have used rehabilitation services following traumatic injury that required admission to hospital and resulted in complex rehabilitation needs, including those with traumatic brain injury, sight loss and hearing loss and their families  Exclusion: <ul style="list-style-type: none"> <li>• Children and young people with traumatic injuries who do not require admission to hospital</li> <li>• Children and young people with traumatic injury who are admitted to the PICU</li> </ul>
<b>Phenomenon of interest</b>	Views and preferences of the population about the initial and ongoing assessment of their rehabilitation needs regarded as important/not important
<b>Context</b>	All inpatient, outpatient and community settings in which rehabilitation services following traumatic injury are provided  Exclusion: <ul style="list-style-type: none"> <li>• Accident and emergency departments</li> <li>• Critical care units</li> <li>• Prisons</li> </ul>

4 *PICU: Paediatric intensive care unit*

5 For further details see the review protocols in appendix A.

## 6 **Methods and process**

7 This evidence review was developed using the methods and process described in  
8 [Developing NICE guidelines: the manual](#). Methods specific to this review question  
9 are described in the review protocol in appendix A and in the methods chapter  
10 (Supplement 1).

11 Declarations of interest were recorded according to NICE's 2018 [conflicts of interest](#)  
12 [policy](#).

## 13 **Clinical evidence: Adult quantitative review**

### 14 **Included studies**

15 One retrospective comparative cohort study was identified for this review (Wagner  
16 2003). This study was carried out in the USA and compared the functional outcomes,

1 length of hospital stay and discharge destination 1) between patients who had and  
 2 who had not received a physical medicine and rehabilitation consultation while in an  
 3 acute hospital setting, and 2) between patients who had received such a consultation  
 4  $\geq 48$  or  $< 48$  hours after admission.

5 See the literature search strategy in appendix B and study selection flow chart in  
 6 appendix C.

## 7 Excluded studies

8 Studies not included in this review with reasons for their exclusions are provided in  
 9 appendix K.

## 10 Summary of clinical studies included in the evidence review

11 A summary of the studies that were included in this review are presented in Table 5.

12 **Table 5: Summary of included studies**

Study	Population	Intervention <sup>a</sup>	Comparison <sup>a</sup>	Outcomes
Wagner 2003  Retrospective cohort study  USA	N=1866 with non-fatal traumatic brain injury (Consultation: N = 520 [not reported how many received consultation within 48 hours of admission]; no consultation: N=1346  • Age in years [Mean (SD not reported)]: ○ Consultation= 48.5 ○ No consultation= 39.4  • Injury severity score ( $< 9/9-14/> 14$ ): ○ Consultation (%) = 6.9/25.4/67.7 ○ No consultation (%) = 56.6/28.1/15.3  • Glasgow coma scale (9-15/3-8): ○ Consultation (%) = 62.7/34.2 ○ No consultation (%) = 86.4/6.7	1) Physical medicine and rehabilitation consultation  2) Physical medicine and rehabilitation consultation $< 48$ hours of admission	1) No consultation  2) Physical medicine and rehabilitation consultation $\geq 48$ hours of admission	• Critical ○ Activities of daily living (at acute hospital discharge) ○ Length of acute hospital stay  • Important ○ Discharge destination (at discharge)

13 N: Number; SD: Standard deviation

14 (a) For full details about the intervention/comparison, please see the evidence tables in Appendix D

1 See the full evidence tables in appendix D. No meta-analyses was conducted (and  
2 so there are no forest plots in appendix E).

### 3 **Results and quality assessment of clinical outcomes included in the** 4 **evidence review**

#### 5 **Summary of the evidence**

6 No meta-analyses were performed as only 1 study was included. Of the pre-defined  
7 outcomes, evidence was found for activities of daily living, length of acute hospital  
8 stay, and discharge destination. There was no evidence for the following outcomes:  
9 overall quality of life, return to work or education, unplanned readmission and  
10 rehabilitation complexity.

#### 11 **Physical medicine + rehabilitation consultation**

12 One retrospective comparative cohort study (Wagner 2003) compared patients who  
13 had and who had not received a physical medicine and rehabilitation consultation  
14 while in an acute hospital setting and found:

- 15 • Unadjusted (for confounders) FIM measures of activities of daily living at  
16 acute hospital discharge were statistically significantly worse in the  
17 consultation group compared to the no consultation group in terms of  
18 locomotion, transfer, expression, feed and social. When these measures were  
19 adjusted (for age, physiotherapy consult, complications, injury severity score,  
20 gender, Glasgow coma scale, and length of stay) in the analyses they all  
21 remained significantly worse in the consultation group apart from feed, which  
22 was non-significant.
- 23 • Unadjusted and adjusted (for age, physiotherapy consult, complications,  
24 premorbid conditions, injury severity score, Glasgow coma scale, primary  
25 payor source, and discharge destination) length of acute hospital stay was  
26 significantly longer in the consultation group than in the no consultation group.
- 27 • Discharge destination: A significantly higher proportion of patients in the  
28 consultation group than in the no consultation group was discharged to either  
29 skilled nursing facilities, or an acute or a subacute rehabilitation program.

30 The same study also compared patients who had received the physical medicine and  
31 rehabilitation consultation  $\geq 48$  hours versus  $< 48$  hours of admission and found:

- 32 • Unadjusted and adjusted (for age, days to physiotherapy consult, gender,  
33 Glasgow coma scale, and length of stay) FIM locomotion and transfer  
34 measures of activities of daily living at acute hospital discharge were  
35 statistically significantly better in the group receiving consultation  $< 48$  hours  
36 compared to  $\geq 48$  hours after admission. The unadjusted and adjusted FIM  
37 expression, feed and social measured were not statistically significantly  
38 different between the 2 consultation groups.
- 39 • Adjusted (for age, complications, number of days until physiotherapy consult,  
40 injury severity score, Glasgow coma scale, and discharge destination) length  
41 of acute hospital stay was significantly shorter in the group receiving  
42 consultation  $< 48$  hours compared to  $\geq 48$  hours after admission
- 43 • Discharge destination did not appear to differ significantly between the 2  
44 consultation groups although it was not possible to ascertain that definitely,  
45 with the study only reported for this outcome "of those unable to be  
46 discharged home, earlier PM&R [physical medicine and rehabilitation]  
47 consultation was not associated with any differences in actual  
48 discharge disposition based on X2 analysis. Discharge destination did not

1 significantly impact either acute outcomes or LOS [length of acute hospital  
2 stay] in the multivariate analyses and, therefore, did not confound  
3 the relationship between early PM&R consultation and these  
4 endpoints studied." (p. 532).

5 For all the statistically significant differences it was unclear whether they were  
6 clinically important due to the manner in which the data were reported (the study  
7 mainly reported odds ratios without enough raw data to convert them to relative risks,  
8 or a standard adjusted coefficient). The evidence was very low or low quality for all  
9 the reported outcomes.

10 The quality of the evidence was assessed using GRADE. See the clinical evidence  
11 profiles in appendix F.

## 12 **Clinical evidence: Children and young people quantitative review**

### 13 **Included studies**

14 No studies were identified for inclusion.

15 See the literature search strategy in appendix B and study selection flow chart in  
16 appendix C.

### 17 **Excluded studies**

18 Studies not included in this review with reasons for their exclusions are provided in  
19 appendix K.

## 20 **Summary of clinical studies included in the evidence review**

21 No studies were included (so there are no full evidence tables in appendix D). No  
22 meta-analysis was conducted (and so there are no forest plots in appendix E).

## 23 **Results and quality assessment of clinical outcomes included in the 24 evidence review**

### 25 **Summary of the evidence**

26 No studies were identified which were applicable to this review question.  
27

## 28 **Clinical evidence: Adult qualitative review**

### 29 **Included studies**

30 Five qualitative studies were identified for this review (Beaton 2019, Guldager 2019,  
31 Jannings 2012, Lefebvre 2012, and Thrussell 2018).

32 The studies were carried out in the following countries: The UK (Thrussell 2018),  
33 New Zealand (Beaton 2019), Denmark (Guldager 2019), Australia (Jannings 2012),  
34 and France and Canada (Lefebvre 2012).

35 See the literature search strategy in appendix B and study selection flow chart in  
36 appendix C.

## 1 Excluded studies

- 2 Studies not included in this review with reasons for their exclusions are provided in  
3 appendix K.

## 4 Summary of clinical studies included in the evidence review

- 5 A summary of the studies that were included in this review are presented in Table 5.

## 6 Table 6: Summary of included studies

Study and aim of the study	Population	Methods	Themes
<p>Beaton 2019</p> <p><b>Aim of the study</b> “to investigate the experience of Waikato Hospital trauma patients and their whānau [extended family] as they transition from inpatient surgical services to community-based care.” (p. 16)</p>	<p>N=17:</p> <ul style="list-style-type: none"> <li>• 8 patients (5 females/3 males; aged 16-79 years) who had experienced blunt trauma</li> <li>• 8 patient-nominated key support people;</li> <li>• 1 patient-nominated health professional (occupational therapist).</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Recruitment period:</b> 2017</li> <li>• <b>Data collection &amp; analysis methods:</b> <ul style="list-style-type: none"> <li>○ Semi-structured in-depths interviews</li> <li>○ Thematic analysis.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Routine psychological screening in hospital</li> </ul>
<p>Guldager 2019</p> <p><b>Aim of the study</b> “To explore the experience of the rehabilitation process from the perspectives of relatives of patients with a traumatic brain injury. The aim of the study was, through a theoretical-empirical analysis, to identify relatives’ strategies and practices in the rehabilitation process as</p>	<p>N=11:</p> <ul style="list-style-type: none"> <li>• 11 relatives (8 females/3 males) of 9 patients with severe traumatic brain injury (TBI) with impaired consciousness (1 female/8 males); relatives and patients aged ≥18 years)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Recruitment period:</b> 2016-7</li> <li>• <b>Data collection &amp; analysis methods:</b> <ul style="list-style-type: none"> <li>○ Longitudinal study including 1) moderate participant observations of interdisciplinary status and planning meetings, and 2) subsequent qualitative semi-structured interviews.</li> <li>○ Analysis was undertaken using both an inductive and deductive approach using computer-assisted analysis, resulting in the construction of theoretical types</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Take into account relatives’ opinions</li> </ul>

Study and aim of the study	Population	Methods	Themes
evidenced in meetings with providers." (p. 289)			
Jannings 2012  <b>Aim of the study</b> "to explore the experiences and needs of persons with spinal cord injury (SCI) who can walk." (p. 1820)	N=12: <ul style="list-style-type: none"> <li>12 patient participants (7 males/5 females; aged 23-71 years) who had sustained an incomplete spinal cord injury (SCI), either traumatic (n=7) or non-traumatic (n=5), 1-16 years previously</li> </ul>	<ul style="list-style-type: none"> <li><b>Recruitment period:</b> 2010</li> <li><b>Data collection &amp; analysis methods:</b> <ul style="list-style-type: none"> <li>Semi-structured in-depths interviews</li> <li>Inductive thematic analysis.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Routine psychological screening in hospital</li> <li>Access to/provision of longer term specialised follow up</li> </ul>
Lefebvre 2012  <b>Aim of the study</b> "to explore the needs of individuals with TBIs and their loved ones throughout the continuum of care and services." (p. 197)	N=90: <ul style="list-style-type: none"> <li>56 patients with TBI (70% males; 35% aged 18-29 years)</li> <li>34 loved ones (59% female; 62% related to patients)</li> </ul>	<ul style="list-style-type: none"> <li><b>Recruitment period:</b> 2007-8</li> <li><b>Data collection &amp; analysis methods:</b> <ul style="list-style-type: none"> <li>Discussion groups</li> <li>Thematic content analysis.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Access to/provision of longer term specialised follow up</li> </ul>
Thrussell 2018  <b>Aim of the study</b> "To investigate women's experience of sexuality after spinal cord injury (SCI) with a focus on rehabilitation and managing practical impact." (p. 1084)	N=27: <ul style="list-style-type: none"> <li>27 women (aged 21-72 years); 12/27 had non-traumatic SCI and 15/27 had traumatic SCI; 12/27 had paraplegia, 9/27 had tetraplegia.</li> </ul>	<ul style="list-style-type: none"> <li><b>Recruitment period:</b> Not reported</li> <li><b>Data collection &amp; analysis methods:</b> <ul style="list-style-type: none"> <li>Semi-structured in-depths interviews</li> <li>Thematic analysis.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Access to/provision of longer term specialised follow up</li> </ul>

1 N: Number; p: page; TBI: SCI: Spinal cord injury; Traumatic brain injury

2 See the full evidence tables in appendix D. No meta-analysis was conducted (and so  
3 there are no forest plots in appendix E).

## 1 Results and quality assessment of clinical outcomes included in the 2 evidence review

### 3 Summary of the evidence

4 The following 3 themes were identified in the included studies:

5 1. Routine psychological screening in hospital: Two studies (Beaton 2019, Jannings  
6 2012) identified this theme as patients felt that the emphasis was on their physical  
7 rather than psychological needs whilst in hospital and that they would benefit from  
8 routine psychological screening whilst still in hospital. This evidence was of very low  
9 quality.

10 2. Take into account relatives' opinions: One study (Guldager 2019) identified this  
11 theme as relatives who spent a lot of time with the patient were keen to share their  
12 observations about the patient with the health care staff and have those taken into  
13 account in terms of rehabilitation plans. This evidence was of very low quality.

14 3. Access to/provision of longer term specialised follow up: Three studies (Jannings  
15 2012, Lefebvre 2012, Thrussell 2018) identified this theme as patients expressed  
16 their need/requests for opportunities to discuss their ongoing health  
17 care/rehabilitation needs with specialists both when and after leaving hospital, either  
18 through patient- or health care professional-initiated contact. This evidence was of  
19 low quality.

20 The quality of the evidence was assessed using CERQual. See the clinical evidence  
21 profiles in appendix F.

22

## 23 Clinical evidence: Children and young people qualitative review

### 24 Included studies

25 One qualitative study was identified for this review (Wharewera-Mika 2016). This  
26 study was carried out in New Zealand (Wharewera-Mika 2016).

27 See the literature search strategy in appendix B and study selection flow chart in  
28 appendix C.

### 29 Excluded studies

30 Studies not included in this review with reasons for their exclusions are provided in  
31 appendix K.

## 32 Summary of clinical studies included in the evidence review

33 A summary of the studies that were included in this review are presented in Table 5.

### 34 Table 7: Summary of included studies

Study and aim of the study	Population	Methods	Themes
Wharewera-Mika 2016	N=21: • 21 caregivers of children who had suffered an	<ul style="list-style-type: none"> <li>• <b>Recruitment period:</b> Not reported</li> <li>• <b>Data collection &amp;</b></li> </ul>	<ul style="list-style-type: none"> <li>• Take into account caregivers' opinions</li> <li>• Discuss the child's needs</li> </ul>

Study and aim of the study	Population	Methods	Themes
<b>Aim of the study</b> " to explore the experiences of caregivers of a child following serious head injury before the age of 2 years." (p. 270)	accidental or non-accidental head injury under the age of 2 years (16 females/5 males).	<b>analysis methods:</b> <ul style="list-style-type: none"> <li>○ Semi-structured interviews</li> <li>○ Thematic analysis.</li> </ul>	

1 *N: Number*

2 See the full evidence tables in appendix D. No meta-analysis was conducted (and so  
3 there are no forest plots in appendix E).

#### 4 **Results and quality assessment of clinical outcomes included in the** 5 **evidence review**

##### 6 **Summary of the evidence**

7 The following 2 themes were identified in the included study:

8 1. Take into account caregivers' opinions: One study (Wharewera-Mika 2016)  
9 identified this theme as caregivers wanted to be asked about how they wanted to  
10 address their child's needs. This evidence was of low quality.

11 2. Discuss the child's needs: One study (Wharewera-Mika 2016) identified this theme  
12 'as caregivers felt that their child's needs can be addressed if they are discussed.  
13 This evidence was of low quality.

14 The quality of the evidence was assessed using CERQual. See the clinical evidence  
15 profiles in appendix F.

16

#### 17 **Economic evidence: Adult and children and young people quantitative** 18 **reviews**

##### 19 **Included studies**

20 A systematic review of the economic literature was conducted but no economic  
21 studies were identified which were applicable to these review questions. A single  
22 economic search was undertaken for adult, and children and young people reviews.  
23 Please see the study selection flow chart in appendix G.

##### 24 **Excluded studies**

25 Studies not included in these reviews with reasons for their exclusions are provided  
26 in appendix K.

##### 27 **Summary of studies included in the economic evidence review**

28 No economic evidence was identified which was applicable to these review  
29 questions.

## 1 **Economic model**

2 No economic modelling was undertaken for these reviews because the committee  
3 agreed that other topics were higher priorities for economic evaluation.

## 4 **Economic evidence: Adult and children and young people qualitative 5 reviews**

### 6 **Included studies**

7 In the development of these qualitative reviews, targeted searches for evidence on  
8 cost-effectiveness were undertaken. The committee was asked to consider whether a  
9 recommendation represented a substantial change in practice and would result in  
10 significant resource impact and if so targeted searches around that area were  
11 undertaken. The committee identified rehabilitation prescription as potentially  
12 resulting in a significant resource impact. Consequently, targeted searches were  
13 undertaken to identify any existing economic studies on rehabilitation prescription.

14 See the literature search strategy in appendix B and study selection flow chart in  
15 appendix C.

### 16 **Excluded studies**

17 Studies not included in these reviews with reasons for their exclusions are provided  
18 in appendix K.

## 19 **Summary of studies included in the evidence review**

20 No economic studies were identified which were applicable to these review  
21 questions.

## 22 **The committee's discussion of the evidence** 23 **Interpreting the evidence**

### 24 ***The outcomes that matter most***

#### 25 **Quantitative reviews**

26 When selecting the critical and important outcomes, the committee agreed that the  
27 outcomes needed to be sufficiently generalisable to adequately capture patient-  
28 important outcomes for the whole adult and child and young people populations,  
29 respectively, which they recognised are quite large and very heterogeneous.

30 For both adults and children and young people, they therefore prioritised overall  
31 quality of life and activities of daily living as critical outcomes because the committee  
32 considered that one of the main aims of people with traumatic injury would be to  
33 achieve similar quality of life and activity of daily living level as before the injury.  
34 Length of hospital stay was also selected as a critical outcome because this is a  
35 commonly reported outcome and if people's rehabilitation needs were not adequately  
36 assessed the committee expected this to be reflected in longer hospital stays  
37 because people's rehabilitation care needs would then not be fully addressed.

38 The committee selected return to education or work as well as discharge destination  
39 as important outcomes as these outcomes measure the level of functional  
40 independence of the patient after traumatic injury. Unplanned readmission was

1 included as an important outcome because, similarly to length of hospital stay, if  
2 people's rehabilitation needs were not adequately assessed the committee expected  
3 this to be reflected in more unplanned readmission because people's rehabilitation  
4 care needs would then not be fully addressed when they were discharged.  
5 Rehabilitation complexity was also considered to be important because even though  
6 this outcome would not be a direct measure of the effectiveness of the rehabilitation  
7 needs assessment, the committee discussed that a more thorough assessment  
8 would result in more rehabilitation complexity being observed in that intervention  
9 group.

10 For children and young people, the committee extended the outcome of "return to  
11 education or work" to include nursery and training also and they included an  
12 additional critical outcome of sleep because especially in younger people it can be  
13 difficult to measure well-being and function adequately, but if young children are not  
14 functioning well, this is often reflected in poor sleep, so this outcome was considered  
15 another way to try to measure the effectiveness of the rehabilitation needs  
16 assessment method.

17 Of these outcomes, evidence was found for activities of daily living, length of acute  
18 hospital stay and discharge destination, but only in the adult population.

### 19 **Qualitative reviews**

20 These were qualitative reviews so the committee was unable to specify in advance  
21 the data that would be located. Instead they identified the following example main  
22 themes to guide the review and were aware that additional themes may have been  
23 identified:

- 24 • Continuity of care/same contact person/key worker
- 25 • Information at key points
- 26 • Communication

### 27 ***The quality of the evidence***

#### 28 **Quantitative reviews**

29 For adults, the evidence in the pairwise comparisons was assessed using the  
30 GRADE methodology. The quality of the evidence across all outcomes was very low  
31 or low and was downgraded because of risk of bias (e.g., due to risk of confounding  
32 and missing data), indirectness and imprecision in the effect estimates, due to small  
33 sample sizes. Indirectness of the evidence was as a result of the study date being  
34 older than the cut-off date proposed in the protocol. Moreover, the included study  
35 only covered 1 intervention. Taken together, this meant that the available results  
36 were uncertain and very limited and the guideline committee were therefore unable to  
37 use them to make recommendations. Instead they made recommendations based on  
38 their experience and expertise.

39 For children and young people, no evidence was identified which was applicable to  
40 this review question. All the recommendations were therefore based on the  
41 experience and expertise of the guideline committee.

#### 43 **Qualitative reviews**

44 For adults, when assessed using GRADE CERQual methodology all the evidence  
45 was found to be either low or very low quality. The evidence was consistently  
46 downgraded due to poor adequacy as none of the studies directly examined (as their

1 main aim) the phenomenon of interest. Other issues resulting in downgrading of the  
2 evidence pertained to indirectness and incoherence of theme. Moreover, the  
3 evidence only identified 3 themes and these themes did not cover many aspects of  
4 initial and ongoing assessment of rehabilitation needs that adults who have  
5 experienced traumatic injury may have views and preferences about. Taken together,  
6 this meant that the available results were unreliable and very limited and the  
7 guideline committee was therefore unable to use them to make recommendations.  
8 Instead they made recommendations based on their experience and expertise.

9 For children and young people, when assessed using GRADE CERQual  
10 methodology all the evidence was found to be low quality. The evidence was  
11 consistently downgraded due to poor adequacy as the study did not directly examine  
12 (as the main aim) the phenomenon of interest. Other issues resulting in downgrading  
13 of the evidence pertained to the applicability of the themes. Moreover, the evidence  
14 only identified 2 themes and these themes did not cover many aspects of initial and  
15 ongoing assessment of rehabilitation needs that children and young people who have  
16 experienced traumatic injury may have views and preferences about. Taken together,  
17 this meant that the available results were unreliable and very limited and the  
18 guideline committee were therefore unable to use them to make recommendations.  
19 Instead they made recommendations based on their experience and expertise.

## 20 **Benefits and harms**

21 When considering the quantitative evidence the committee agreed that it was of very  
22 low quality and limited by only reporting on 1 intervention of interest in adults, with no  
23 quantitative evidence found for children and young people. When considering the  
24 qualitative evidence the committee agreed that it was of low or very low quality and  
25 limited by only identifying 3 themes in adults and 2 themes in children and young  
26 people. The committee therefore did not use the evidence to make  
27 recommendations, which were instead all based on the expertise and experience of  
28 the committee, and most of the recommendations relate to all people, including  
29 children and young people.

30 The committee agreed that professionals need to be aware that the severity of the  
31 person's injury does not necessarily correlate with the complexity of their  
32 rehabilitation needs, so it is therefore necessary to assess the impact of the person's  
33 traumatic injury in an individualised and holistic manner at all the stages of their care  
34 pathway because injuries which have similar appearance may impact on people  
35 differently. The committee acknowledged the importance of assessing the person's  
36 rehabilitation needs as an integral part of their care pathway from admission because  
37 it is key to ascertaining the extent of their injury and determining what care is  
38 required. This assessment may involve discussions with the person and their family  
39 members or carers about findings from early rehabilitation assessments, or about  
40 their rehabilitation goals and the implications of those for treatment options, and may  
41 also involve a collaborative approach between rehabilitation specialists and acute  
42 care teams to discuss the relationship between acute medical and surgical  
43 interventions, and implications for rehabilitation after surgery or treatment. Moreover,  
44 the assessment should be multidisciplinary, performed by a team of healthcare  
45 professionals and other practitioners with expertise in rehabilitation after traumatic  
46 injury, involve the person and their family members or carers and include physical,  
47 cognitive and psychological functioning as well as specialist assessment for the  
48 following injuries: limb, nerve, spinal and chest because fully assessing people's  
49 rehabilitation needs in an individualised and holistic manner after traumatic injury will  
50 allow their care pathway and rehabilitation therapies to be tailored to their specific  
51 needs and thereby result in better outcomes. In addition to these points, the

1 committee wanted to highlight that it is important to consider whether the person is  
2 likely to have had a head injury when assessing their rehabilitation needs and if there  
3 is a possibility that the person has had a head injury, they need to be referred for  
4 specialist assessment with clinicians with an expertise in traumatic brain injury  
5 rehabilitation in order to ensure that their rehabilitation is optimised.

6 The committee agreed that the person's rehabilitation needs should be assessed as  
7 soon as possible after the traumatic injury at a stage of recovery when their clinical  
8 condition is stable, and measures have been taken to optimise the person's ability to  
9 engage in the assessment process, such as adequate pain management, resolution  
10 of infections, resolution of acute confusion, communication aids, drug or alcohol  
11 dependence withdrawal management, dentures and other orthodontic appliances,  
12 hearing aids and glasses, restarting long-term medications or managing their  
13 psychological wellbeing. This is because after injury, the person's physical and  
14 psychological state can limit their ability to engage in the assessment process which  
15 will render the assessment incomplete. Furthermore, it was acknowledged that some  
16 people aged 16 years or above require help to make these decisions due to their  
17 fluctuating mental capacity. The [NICE guideline on Decision making and mental  
18 capacity](#) can be used as a guide to ensure that people are supported to make  
19 decisions for themselves when they have the mental capacity to do so, and where  
20 they lack the mental capacity, decisions are made in their best interests.

21 The committee acknowledged that people can find it very frustrating to have to  
22 repeatedly answer the same questions when their care needs are being assessed,  
23 and discussed that this in itself makes the rehabilitation needs assessment process  
24 inefficient from a services perspective and, of course, less satisfactory from the  
25 person's perspective. They therefore agreed that it is important that as part of the  
26 rehabilitation needs assessment, the multidisciplinary team allow sufficient time to  
27 liaise with the clinical team managing any pre-existing long-term conditions that may  
28 affect rehabilitation, to complete the person's rehabilitation needs assessment as  
29 comprehensively as possible by ensuring that it includes a detailed and accurate  
30 analysis of the person's injuries, impairments, goals and likely rehabilitation needs.  
31 Sufficient time should also be allowed to discuss the findings together.

32 As part of the rehabilitation needs assessment early referral to specialist  
33 rehabilitation units may be considered and the committee agreed that validated tools  
34 should be used to determine the need for early referral to specialist rehabilitation  
35 units because these tools help in the early identification of people who require  
36 specialist trauma service and thereby prevent delay in rehabilitation. The committee  
37 also agreed that it is important to regularly reassess whether referral for specialised  
38 rehabilitation is still required and what other referrals might be needed in order to  
39 ensure that the person is offered the most appropriate care at the appropriate time.  
40 This will not only lead to improved outcomes for the person, but also to a more cost-  
41 effective rehabilitation service provision.

42 Before discharge, the person's needs should be reassessed and the rehabilitation  
43 plan should be reviewed to ensure that their needs are addressed alongside any  
44 long-term, existing health conditions or disabilities because this will reduce the risk of  
45 hospital readmission and improve the person's rehabilitation outcomes and  
46 experience.

47 In a number of cases, a person is likely to have continuing health and social care  
48 needs after discharge to home, and in order to ensure a successful transition home  
49 for them the committee agreed that the relevant healthcare professionals, social care  
50 practitioners and education practitioners (as appropriate) should be informed, and  
51 that the person's eligibility for funded social care support including for families and

1 carers should be established. Moreover, the NHS continuing healthcare checklist  
2 should also be used to establish the person's eligibility for a full continuing healthcare  
3 assessment before discharge and **for children and young people, their eligibility for**  
4 **funded support should be established through an education, health and social care**  
5 **plan.** The committee also agreed to refer to the [NICE guideline on transition between](#)  
6 [inpatient hospital settings and community or care home settings for adults with social](#)  
7 [care needs](#).

8 As part of the rehabilitation needs assessment, the committee also agreed that a  
9 safeguarding assessment for children and young people and vulnerable adults needs  
10 to be completed, taking into account any known or suspected non-accidental injury,  
11 because it is standard practice when dealing with this population and will ensure that  
12 the individuals are protected and provided safe and effective care. The committee  
13 referred to the NICE guidelines on [child abuse and neglect](#) and [child maltreatment](#) for  
14 further details about such assessments.

15 The committee agreed that if an older person with a traumatic injury is on a care  
16 pathway that does not routinely involve geriatrician support, referral to orthogeriatrics,  
17 or a surgical liaison or perioperative physician, as appropriate, may be beneficial  
18 because this specialist care may not be available within their existing care pathways  
19 (which may be generic) and this specialist input can help ensure that potential issues  
20 that are unique to older adults can be fully assessed and addressed to allow  
21 optimised progression towards patient goals and independence.

22 The committee recognised that fractures may be due to underlying osteoporosis in  
23 some adults and agreed that in order to prevent future osteoporotic fractures, adults  
24 with fragility fractures should be assessed for osteoporosis and bone protection in  
25 line with the [NICE guideline on osteoporosis](#). The committee also recommended that  
26 people who are admitted for rehabilitation due to a fall should be considered for a  
27 falls risk assessment, as this can help identify the reason for the fall (for example, a  
28 trip hazard in the home environment, postural drop in blood pressure or declining  
29 vision) and thereby help prevent future falls by allowing the cause to be addressed  
30 for example by further referrals which should be made as soon as possible to reduce  
31 delays. Healthcare professionals should also consult the [NICE guideline on falls in](#)  
32 [older people: assessing risk and prevention](#) for further information. Moreover, the  
33 committee recognised that adults over 65 may be at increased risk of traumatic injury  
34 due to falls, which means that in those who are at increased risk of experiencing falls,  
35 traumatic injury may recur if this increased risk is not identified and addressed. They  
36 therefore agreed that the risk of falls should be assessed in all adults over 65 in line  
37 with the recommendations on multifactorial risk assessment in the [NICE guideline on](#)  
38 [falls](#). Finally, the committee agreed that some people are at increased risk of future  
39 similar injuries due to the nature of the injury and agreed that information should be  
40 provided about, or people should be referred to, services that may help prevent  
41 future injury, such as falls prevention, safeguarding services, gang violence services,  
42 and condition-specific support organisations. In addition to reducing the risk of future  
43 injury, this will also increase the safety of the person in a cost-effective manner  
44 based on prevention.

45 Despite the paucity of evidence for these review questions, the committee decided  
46 not to make a research recommendation in this area. The committee discussed the  
47 lack of controversy in current clinical management and decided to prioritise other  
48 areas where new research evidence might be more valuable.

## 49 50 **Cost effectiveness and resource use**

1 There was no existing economic evidence for these reviews.

2 The committee discussed the use of validated outcome measures / tools as part of  
3 rehabilitation needs assessment and explained that generally, these are widely used  
4 and relatively quick to administer with a potential for a more appropriate and informed  
5 specialist trauma care. The committee was of a view that if such practice leads to  
6 timely identification of needs and appropriate care is initiated, improvements in  
7 outcomes will outweigh additional costs, even more so since inpatient rehabilitation is  
8 expensive.

9 The committee discussed a recommendation on specialist referrals where an injury  
10 does not correspond to an existing care pathway and that this might result in more  
11 referrals. However, the committee justified such practice based on a clinical need.  
12 Also, any delays in care will have a detrimental impact on an individual's recovery  
13 and may require more expensive care further down the line. Overall, this  
14 recommendation will be cost-saving.

15 The committee explained that completing a safeguarding assessment for children,  
16 young people and vulnerable adults after a traumatic injury is standard practice. The  
17 recommendation is in line with other NICE guidance and will not result in a resource  
18 impact.

19 The committee explained that assessment is an integral part of an individual's  
20 rehabilitation pathway and that the recommendations in this area reinforce standard  
21 practice and will not require additional resources. Similarly, the committee discussed  
22 that the multidisciplinary approach to assessment is inherent in this population and  
23 that the recommendations on this area reinforce standard practice and will not  
24 require additional resources.

## 25 **Recommendations supported by this evidence review**

26 This evidence review supports recommendations 1.1.1, 1.1.2, 1.1.12, 1.2.1, 1.2.2,  
27 1.2.3, 1.2.4, 1.2.6, 1.2.8, 1.2.10, 1.2.11, 1.2.25, 1.4.6, 1.4.7, 1.4.8, 1.4.9, 1.4.10,  
28 1.8.2 and 1.8.11 in the NICE guideline.

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# Appendices

## Appendix A – Review protocols

### Review protocol for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?

**Table 8: Review protocol for identification and assessment of rehabilitation needs in adults after traumatic injury**

Field	Content
PROSPERO registration number	CRD42019149310
Review title	Identification and assessment of rehabilitation needs after traumatic injury
Review question	What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?
Objective	To determine what should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury. This question focuses on the initial holistic assessment of any rehabilitation needs. We will therefore not look at specific validated tools, as the use of these will be for the second level of assessment by different specialists of any needs identified in the initial holistic needs assessment/screening (which is not the focus of this question).
Searches	<p>The following databases will be searched:</p> <ul style="list-style-type: none"> <li>• Cochrane Central Register of Controlled Trials (CENTRAL)</li> <li>• Cochrane Database of Systematic Reviews (CDSR)</li> <li>• Embase</li> <li>• MEDLINE</li> </ul> <p>Searches will be restricted by:</p> <ul style="list-style-type: none"> <li>• Date: 2000 onwards as there has been significant change in practice in 2010 and the guideline committee wanted to capture the evidence that lead to that so imposed a date limit going back 10 years prior to the change in practice</li> <li>• Human studies</li> </ul> <p>The full search strategies for MEDLINE database will be published in the final review.</p>
Condition or domain being studied	<p>Complex rehabilitation needs resulting from traumatic injury</p> <p>'Complex rehab needs' refers to 'multiple needs, and will always involve coordinated multidisciplinary input from 2 or more allied health professional disciplines, and also include the following:</p> <ul style="list-style-type: none"> <li>• Vocational or educational social support for the person to return to their previous functional level, including return to work, school or college</li> <li>• Emotional, psychological and psychosocial support</li> <li>• Equipment or adaptations</li> <li>• Ongoing recovery from injury that may change the person's rehabilitation needs (for example, restrictions of weight bearing, cast immobilisation in feature clinic)</li> <li>• Further surgery and readmissions to hospital</li> </ul>
Population	<p>Traumatic injury is defined as 'traumatic injury that requires admission to hospital at the time of injury.'</p> <p>Inclusion:</p>

Field	Content
	<p>Adults (aged 18 years or above) with traumatic injury that required admission to hospital, including those with traumatic brain injury, sight loss and hearing loss</p> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>Adults with traumatic injuries who do not require admission to hospital</li> <li>Adults with traumatic injury who are admitted to the ICU</li> </ul>
Intervention	Screening approaches and assessment methods and aids for initial holistic assessment of physical and non-physical rehabilitation needs (e.g., MDT or single discipline assessment; basic/holistic checklists or tools)
Comparator	Each other
Types of study to be included	<ul style="list-style-type: none"> <li>Systematic review of RCTs</li> <li>Randomised controlled trial</li> </ul> <p>If no RCT data are available for an intervention, evidence from the followings will be considered in order</p> <ul style="list-style-type: none"> <li>Cluster-randomised trial</li> <li>Systematic review of non-randomised studies</li> <li>Comparative prospective cohort studies with N<math>\geq</math>100 per treatment arm</li> <li>Comparative retrospective cohort studies with N<math>\geq</math>100 per treatment arm</li> </ul>
Other exclusion criteria	<p>Study design:</p> <ul style="list-style-type: none"> <li>Cross-over design</li> <li>Case-controls</li> <li>Cross-sectional</li> <li>Case series and case reports</li> <li>Audits</li> </ul> <p>Language:</p> <ul style="list-style-type: none"> <li>Non-English</li> </ul> <p>Publication status:</p> <ul style="list-style-type: none"> <li>Abstract only</li> </ul>
Context	<p>Settings - Inclusion: Hospital setting when patient is first admitted as a result of traumatic injury</p> <p>Exclusion: Accident and emergency departments Critical care units Prisons</p>
Primary outcomes (critical outcomes)	<p>Critical:</p> <ul style="list-style-type: none"> <li>Changes in activity of daily living (Barthel ADL index, COPM, EADL-Test, GAS, FIMFAM Katz, OARS, PAT, PSMS)</li> <li>Length of hospital stay</li> </ul>

Field	Content									
	<ul style="list-style-type: none"> <li>Overall quality of life (EURO-QoL 5D 3L, SF-36, SF-12, SF-6D, SFMA)</li> </ul> <p>Timeframe for the follow-up will be 0 to 18 months. This will be grouped into short-term (0 to 6 months) and long-term (&gt;6 to 18 months).</p>									
Secondary outcomes (important outcomes)	<p>Important:</p> <ul style="list-style-type: none"> <li>Return to work or education</li> <li>Discharge destination</li> <li>Unplanned readmission</li> <li>Rehabilitation complexity (e.g., Rehabilitation Complexity Scale; PCAT; Northwick Park; Mayo Portland Inventory; SASNOS)</li> </ul> <p>Timeframe for the follow-up will be 0 to 18 months. This will be grouped into short-term (0 to 6 months) and long-term (&gt;6 to 18 months).</p>									
Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into STAR and de-duplicated. 5% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4).									
Risk of bias (quality) assessment	Risk of bias will be assessed using the appropriate checklist as described in Developing NICE guidelines: the manual.									
Strategy for data synthesis	<p>NGA STAR software will be used for generating bibliographies/citations, study sifting and data extraction.</p> <p>If pairwise meta-analyses are undertaken, they will be performed using Cochrane Review Manager (RevMan).</p> <p>'GRADEpro' will be used to assess the quality of evidence for each outcome.</p>									
Analysis of sub-groups	<p>No subgroups were specified for this question for stratification of the data, but if there is heterogeneity, we will look at the following subgroups to try to identify the source of it:</p> <ul style="list-style-type: none"> <li>Upper limb / lower limb</li> <li>People with pre-existing physical and/or mental health conditions (including substance misuse), physical and learning disability</li> <li>Age below 65 years / age above 65 years</li> <li>Frail / not frail</li> <li>Vulnerable adults or those who require safeguarding</li> </ul> <p>We will also explore the rehabilitation interventions received as a source of heterogeneity, which will particularly apply to outcomes measured at longer follow-up</p>									
Type and method of review	Intervention									
Language	English									
Country	England									
Anticipated or actual start date	10/01/2019									
Anticipated completion date	24/11/2020									
Stage of review at time of this submission	<table border="1"> <thead> <tr> <th>Review stage</th> <th>Started</th> <th>Completed</th> </tr> </thead> <tbody> <tr> <td>Preliminary searches</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Piloting of the study selection process</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>	Review stage	Started	Completed	Preliminary searches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Piloting of the study selection process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Review stage	Started	Completed								
Preliminary searches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
Piloting of the study selection process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								

Field	Content
	Formal screening of search results against eligibility criteria <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Data extraction <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Risk of bias (quality) assessment <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Data analysis <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Named contact	National Guideline Alliance
Review team members	National Guideline Alliance
Funding sources/sponsor	This systematic review is being completed by the National Guideline Alliance which receives funding from NICE.
Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.
Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: <a href="https://www.nice.org.uk/guidance/indevelopment/gid-ng10105">https://www.nice.org.uk/guidance/indevelopment/gid-ng10105</a>
Other registration details	
Reference/URL for published protocol	<a href="https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42019149310">https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42019149310</a>
Dissemination plans	
Keywords	
Details of existing review of same topic by same authors	
Current review status	
Additional information	
Details of final publication	<a href="http://www.nice.org.uk">www.nice.org.uk</a>

ADL: Activities of daily living; CCTR: Cochrane Controlled Trials Register; CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; COPM: Canadian occupational performance measure; DARE: Database of Abstracts of Reviews of Effects; EADL: Erlangen Activities of Daily Living test; EURO-QoL 5D 3L: EuroQol 5 dimensions and 3; FIMFAM: Functional Independence Measure and Functional Assessment Measure; GAS: Goal attainment scale; levels; GRADE: Grading of Recommendations Assessment, Development and Evaluation; HTA: Health Technology Assessment; ICU: intensive care unit; MDT: Multidisciplinary team; NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; NIHR: National Institute for Health Research; OARS: Older Americans resources and services; PAT: Performance ADL; PSMS: Physical self-maintenance scale; RCT(s): randomised controlled trial(s); RoB: risk of bias; SASNOS: St. Andrews-Swansea Neurobehavioural Outcome Scale; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey; SF-6D: 6-dimension short-form; SFMA: Selective Functional Movement Assessment

## Review protocol for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?

**Table 9: Review protocol for identification and assessment of rehabilitation needs in children and young people after traumatic injury**

Field	Content
PROSPERO registration number	CRD42019149325
Review title	Identification and assessment of rehabilitation needs after traumatic injury
Review question	What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?
Objective	To determine what should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury. This question focuses on the initial holistic assessment of any rehabilitation needs. We will therefore not look at specific validated tools, as the use of these will be for the second level of assessment by different specialists of any needs identified in the initial holistic needs assessment/screening (which is not the focus of this question).
Searches	The following databases will be searched: <ul style="list-style-type: none"> <li>• Cochrane Central Register of Controlled Trials (CENTRAL)</li> <li>• Cochrane Database of Systematic Reviews (CDSR)</li> <li>• Embase</li> <li>• MEDLINE</li> </ul> Searches will be restricted by: <ul style="list-style-type: none"> <li>• Date: 2000 onwards as there has been significant change in practice in 2010 and the guideline committee wanted to capture the evidence that lead to that so imposed a date limit going back 10 years prior to the change in practice</li> <li>• Human studies</li> </ul> The full search strategies for MEDLINE database will be published in the final review.
Condition or domain being studied	Complex rehabilitation needs resulting from traumatic injury  ‘Complex rehab needs’ refers to ‘multiple needs, and will always involve coordinated multidisciplinary input from 2 or more allied health professional disciplines, and also include the following: <ul style="list-style-type: none"> <li>• Vocational or educational social support for the person to return to their previous functional level, including return to work, school or college</li> <li>• Emotional, psychological and psychosocial support</li> <li>• Equipment or adaptations</li> <li>• Ongoing recovery from injury that may change the person’s rehabilitation needs (for example, restrictions of weight bearing, cast immobilisation in feature clinic)</li> <li>• Further surgery and readmissions to hospital</li> </ul>
Population	Traumatic injury is defined as ‘traumatic injury that requires admission to hospital at the time of injury.’ Inclusion: Children and young people (aged below 18 years) with traumatic injury that required admission to hospital, including those with traumatic brain injury, sight loss and hearing loss  Exclusion: <ul style="list-style-type: none"> <li>• Children and young people with traumatic injuries who do not require admission to hospital</li> <li>• Children and young people with traumatic injury who are admitted to the PICU</li> </ul>
Intervention	Screening approaches and assessment methods for initial holistic assessment of physical and non-physical rehabilitation needs (e.g., MDT or single

Field	Content
	discipline assessment; basic/holistic checklists or tools)
Comparator	Each other
Types of study to be included	<ul style="list-style-type: none"> <li>• Systematic review of RCTs</li> <li>• Randomised controlled trial</li> </ul> <p>If no RCT data are available for an intervention, evidence from the followings will be considered in order</p> <ul style="list-style-type: none"> <li>• Cluster-randomised trial</li> <li>• Systematic review of non-randomised studies</li> <li>• Comparative prospective cohort studies with N≥100 per treatment arm</li> <li>• Comparative retrospective cohort studies with N≥100 per treatment arm</li> </ul>
Other exclusion criteria	<p>Study design:</p> <ul style="list-style-type: none"> <li>• Cross-over design</li> <li>• Case-controls</li> <li>• Cross-sectional</li> <li>• Case series and case reports</li> <li>• Audits</li> </ul> <p>Language:</p> <ul style="list-style-type: none"> <li>• Non-English</li> </ul> <p>Publication status:</p> <ul style="list-style-type: none"> <li>• Abstract only</li> </ul>
Context	<p>Settings - Inclusion:</p> <ul style="list-style-type: none"> <li>• Hospital setting when patient is first admitted as a result of traumatic injury</li> </ul> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>• Accident and emergency departments</li> <li>• Critical care units</li> <li>• Prisons</li> </ul>
Primary outcomes (critical outcomes)	<p>Critical:</p> <ul style="list-style-type: none"> <li>• Changes in activity of daily living (Barthel ADL index, COPM, Katz, EADL-Test, GAS, FIMFAM, OARS, PAT, PSMS)</li> <li>• Length of hospital stay</li> <li>• Overall quality of life (EURO-QoL 5D 3L, SF-36, SF-12, SF-6D, SFMA)</li> <li>• Sleep</li> </ul> <p>Timeframe for the follow-up will be 0 to 18 months. This will be grouped into short-term (0 to 6 months) and long-term (&gt;6 to 18 months).</p>
Secondary outcomes	Important:

Field	Content									
(important outcomes)	<ul style="list-style-type: none"> <li>Return to nursery, work or education</li> <li>Discharge destination</li> <li>Unplanned readmission</li> <li>Rehabilitation complexity (e.g., Rehabilitation Complexity Scale; PCAT; Northwick Park; Mayo Portland Inventory; SASNOS)</li> </ul>									
Data extraction (selection and coding)	<p>Timeframe for the follow-up will be 0 to 18 months. This will be grouped into short-term (0 to 6 months) and long-term (&gt;6 to 18 months).</p> <p>All references identified by the searches and from other sources will be uploaded into STAR and de-duplicated. 5% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4).</p>									
Risk of bias (quality) assessment	Risk of bias will be assessed using the appropriate checklist as described in Developing NICE guidelines: the manual.									
Strategy for data synthesis	<p>NGA STAR software will be used for generating bibliographies/citations, study sifting and data extraction.</p> <p>If pairwise meta-analyses are undertaken, they will be performed using Cochrane Review Manager (RevMan).</p> <p>'GRADEpro' will be used to assess the quality of evidence for each outcome.</p>									
Analysis of sub-groups	<p>The following subgroups were specified for this question for stratification of the data:</p> <ul style="list-style-type: none"> <li>Children and young people who are suspected of sustaining non-accidental injuries versus accidental injuries</li> <li>Children and young people with parents known to social services versus not known</li> <li>Children and young people with young (&lt; 20 years at birth of child) parents versus not young (≥ 20 years at birth of child)</li> <li>Children and young people with parents from deprived backgrounds versus not deprived backgrounds</li> <li>Children and young people with parents who have mental health issues versus none</li> </ul> <p>If there is any further unexplained heterogeneity, we will look at the following subgroups to try to identify the source of it:</p> <ul style="list-style-type: none"> <li>Upper limb / lower limb</li> <li>Children and young people with pre-existing physical and/or mental health conditions (including substance misuse), physical and learning disability versus no pre-existing conditions</li> <li>Children and young people whose parents are very involved in their rehabilitation/recovery (e.g., by staying overnight in hospital) versus not involved</li> <li>Age (0-3 versus 4-7 versus 8-12 versus 13-17)</li> </ul> <p>We will also explore the rehabilitation interventions received as a source of heterogeneity, which will particularly apply to outcomes measured at longer follow-up</p>									
Type and method of review	Intervention									
Language	English									
Country	England									
Anticipated or actual start date	10/01/2019									
Anticipated completion date	24/11/2020									
Stage of review at time of this submission	<table border="1"> <thead> <tr> <th>Review stage</th> <th>Started</th> <th>Completed</th> </tr> </thead> <tbody> <tr> <td>Preliminary searches</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Piloting of the study selection</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>	Review stage	Started	Completed	Preliminary searches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Piloting of the study selection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Review stage	Started	Completed								
Preliminary searches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
Piloting of the study selection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								

Field	Content
	<p>process</p> <p>Formal screening of search results against eligibility criteria <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p> <p>Data extraction <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p> <p>Risk of bias (quality) assessment <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p> <p>Data analysis <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p>
Named contact	National Guideline Alliance
Review team members	National Guideline Alliance
Funding sources/sponsor	This systematic review is being completed by the National Guideline Alliance which receives funding from NICE.
Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.
Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: <a href="https://www.nice.org.uk/guidance/indevelopment/gid-ng10105">https://www.nice.org.uk/guidance/indevelopment/gid-ng10105</a>
Other registration details	
Reference/URL for published protocol	<a href="https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=149325">https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=149325</a>
Dissemination plans	
Keywords	
Details of existing review of same topic by same authors	
Current review status	
Additional information	
Details of final publication	<a href="http://www.nice.org.uk">www.nice.org.uk</a>

ADL: Activities of daily living; CCTR: Cochrane Controlled Trials Register; CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; COPM: Canadian occupational performance measure; DARE: Database of Abstracts of Reviews of Effects; EADL: Erlangen Activities of Daily Living test; EURO-QoL 5D 3L: EuroQoL 5 dimensions and 3; FIMFAM: Functional Independence Measure and Functional Assessment Measure; GAS: Goal attainment scale; levels; GRADE: Grading of Recommendations Assessment, Development and Evaluation; HTA: Health Technology Assessment; ICU: intensive care unit; MDT: Multidisciplinary team; N: Number; NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; NIHR: National Institute for Health Research; OARS: Older Americans resources and services; PAT: Performance ADL; PCAT: Patient categorisation tool; PSMS: Physical self-maintenance scale; RCT(s): randomised controlled trial(s); RoB: risk of bias; SASNOS: St. Andrews-Swansea Neurobehavioural Outcome Scale; SF-12: 12 item short-form survey; SF-36: 36 item short-form survey; SF-6D: 6-dimension short-form; SFMA: Selective Functional Movement Assessment

## Review protocol for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?

**Table 10: Review protocol for identification and assessment of rehabilitation needs after traumatic injury in adults**

Field	Content
PROSPERO registration number	CRD42019149308
Review title	Identification and assessment of rehabilitation needs after traumatic injury
Review question	What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs
Objective	To identify the views and preferences of adults who have used rehabilitation services after traumatic injury that resulted in complex rehabilitation needs, about assessment of their rehabilitation needs
Searches	<p>The following databases will be searched:</p> <ul style="list-style-type: none"> <li>• Cochrane Central Register of Controlled Trials (CENTRAL)</li> <li>• Cochrane Database of Systematic Reviews (CDSR)</li> <li>• Embase</li> <li>• MEDLINE</li> </ul> <p>Searches will be restricted by:</p> <ul style="list-style-type: none"> <li>• Date: The committee is of the opinion that 2010 is a reasonable cut-off date due to the practice changes in rehabilitation services introduced by the establishment of major trauma centres in 2012. Data about adults/CYPs' views of rehabilitation services which predate these changes would be less relevant to current practice and less useful to the committee as a basis for drafting recommendations</li> <li>• Country: The committee wished to prioritise views about rehabilitation services which most closely reflect the UK practice context. They therefore agreed to include studies from high income European countries according to the World Bank (<a href="https://datahelpdesk.worldbank.org/knowledgebase/articles/906519">https://datahelpdesk.worldbank.org/knowledgebase/articles/906519</a>; i.e., Andorra, Austria, Belgium, Channel Islands, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Hungary, Iceland, Ireland, Isle of Man, Italy, Latvia, Lichtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and UK), Canada, Australia and New Zealand, which would be sufficiently transferable. Priority will be given to UK studies, however data from studies conducted in other high-income countries will be added if new themes arise that are not captured in the UK evidence.</li> <li>• Human studies</li> </ul> <p>The full search strategies for MEDLINE database will be published in the final review.</p>
Condition or domain being studied	<p>Complex rehabilitation needs resulting from traumatic injury</p> <p>'Complex rehab needs' refers to 'multiple needs, and will always involve coordinated multidisciplinary input from 2 or more allied health professional disciplines, and also include the following:</p> <ul style="list-style-type: none"> <li>• Vocational or educational social support for the person to return to their previous functional level, including return to work, school or college</li> <li>• Emotional, psychological and psychosocial support</li> <li>• Equipment or adaptations</li> <li>• Ongoing recovery from injury that may change the person's rehabilitation needs (for example, restrictions of weight bearing, cast immobilisation in feature clinic)</li> <li>• Further surgery and readmissions to hospital</li> </ul>
Population	<p>Traumatic injury is defined as 'traumatic injury that requires admission to hospital at the time of injury.'</p> <p>Inclusion:</p>

Field	Content
	<p>Adults (aged 18 years or above) who have used rehabilitation services following traumatic injury that required admission to hospital and resulted in complex rehabilitation needs, including those with traumatic brain injury, sight loss and hearing loss</p> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>• Adults with traumatic injuries who do not require admission to hospital</li> <li>• Adults with traumatic injury who are admitted to the ICU</li> </ul>
Phenomenon of interest	<p>Views and preferences of the population about the initial and ongoing assessment of their rehabilitation needs regarded as important/not important</p> <p>Themes will be identified from the literature, but may include:</p> <ul style="list-style-type: none"> <li>• Continuity of care/ same contact person/key worker</li> <li>• Information at key points</li> <li>• Communication</li> </ul>
Comparator/Reference standard/Confounding factors	Not applicable
Types of study to be included	<ul style="list-style-type: none"> <li>• Systematic reviews of qualitative studies</li> <li>• Qualitative studies (for example, interviews, focus groups, observations)</li> </ul>
Other exclusion criteria	<p>Study design:</p> <ul style="list-style-type: none"> <li>• Purely quantitative studies (including surveys with only descriptive quantitative data)</li> </ul> <p>Language:</p> <ul style="list-style-type: none"> <li>• Non-English</li> </ul> <p>Publication status:</p> <ul style="list-style-type: none"> <li>• Abstract only</li> </ul>
Context	<p>Settings -</p> <p>Inclusion:</p> <ul style="list-style-type: none"> <li>• All inpatient, outpatient and community settings in which rehabilitation services following traumatic injury are provided</li> </ul> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>• Accident and emergency departments</li> <li>• Critical care units</li> <li>• Prisons</li> </ul>
Primary outcomes (critical outcomes)	Not applicable
Secondary outcomes (important outcomes)	Not applicable
Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into STAR and de-duplicated. 5% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to extract

Field	Content																					
Risk of bias (quality) assessment	data from studies (see Developing NICE guidelines: the manual section 6.4). Risk of bias will be assessed using the CASP qualitative checklist as described in Developing NICE guidelines: the manual.																					
Strategy for data synthesis	NGA STAR software will be used for generating bibliographies/citations, study sifting and data extraction. Studies will be reviewed chronologically from most recent first to oldest. Thematic analysis of the data will be conducted and findings presented. The quality of the evidence will be assessed using GRADE-CERQual for each theme.																					
Analysis of sub-groups	No subgroups were specified for this question for stratification of the data, however the committee is aware that the review covers a heterogeneous population, and if there is incoherence in the findings, potential sources of it will be explored and include: <ul style="list-style-type: none"> <li>• Upper limb / lower limb</li> <li>• People with pre-existing physical and/or mental health conditions (including substance misuse), physical and learning disability</li> <li>• Age below 65 years / age above 65 years</li> <li>• Frail / not frail</li> <li>• Vulnerable adults or those who require safeguarding</li> </ul>																					
Type and method of review	Qualitative																					
Language	English																					
Country	England																					
Anticipated or actual start date	xx/xx/2019																					
Anticipated completion date	xx/xx/2020																					
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Field	Content
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Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: <a href="https://www.nice.org.uk/guidance/indevelopment/gid-ng10105">https://www.nice.org.uk/guidance/indevelopment/gid-ng10105</a>
Other registration details	
Reference/URL for published protocol	<a href="https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42019149308">https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42019149308</a>
Dissemination plans	
Keywords	
Details of existing review of same topic by same authors	
Current review status	
Additional information	
Details of final publication	<a href="http://www.nice.org.uk">www.nice.org.uk</a>

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## Review protocol for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?

**Table 11: Review protocol for identification and assessment of rehabilitation needs after traumatic injury in children and young people**

Field	Content
PROSPERO registration number	CRD42019150645
Review title	Identification and assessment of rehabilitation needs after traumatic injury
Review question	What are the views and preferences of children and young peoples who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs
Objective	To identify the views and preferences of children and young people who have used rehabilitation services after traumatic injury that resulted in complex rehabilitation needs, about assessment of their rehabilitation needs
Searches	<p>The following databases will be searched:</p> <ul style="list-style-type: none"> <li>• Cochrane Central Register of Controlled Trials (CENTRAL)</li> <li>• Cochrane Database of Systematic Reviews (CDSR)</li> <li>• Embase</li> <li>• MEDLINE</li> </ul> <p>Searches will be restricted by:</p> <ul style="list-style-type: none"> <li>• Date: The committee is of the opinion that 2010 is a reasonable cut-off date due to the practice changes in rehabilitation services introduced by the establishment of major trauma centres in 2012. Data about adults/CYPs' views of rehabilitation services which predate these changes would</li> </ul>

Field	Content
	<p>be less relevant to current practice and less useful to the committee as a basis for drafting recommendations</p> <ul style="list-style-type: none"> <li>Country: The committee wished to prioritise views about rehabilitation services which most closely reflect the UK practice context. They therefore agreed to include studies from high income European countries according to the World Bank (<a href="https://datahelpdesk.worldbank.org/knowledgebase/articles/906519">https://datahelpdesk.worldbank.org/knowledgebase/articles/906519</a>; i.e., Andorra, Austria, Belgium, Channel Islands, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Hungary, Iceland, Ireland, Isle of Man, Italy, Latvia, Lichtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Norway, Poland, Portugal, San Marino, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and UK), Canada, Australia and New Zealand, which would be sufficiently transferable. Priority will be given to UK studies, however data from studies conducted in other high-income countries will be added if new themes arise that are not captured in the UK evidence.</li> <li>Human studies</li> </ul> <p>The full search strategies for MEDLINE database will be published in the final review.</p>
Condition or domain being studied	<p>Complex rehabilitation needs resulting from traumatic injury</p> <p>'Complex rehab needs' refers to 'multiple needs, and will always involve coordinated multidisciplinary input from 2 or more allied health professional disciplines, and also include the following:</p> <ul style="list-style-type: none"> <li>Vocational or educational social support for the person to return to their previous functional level, including return to work, school or college</li> <li>Emotional, psychological and psychosocial support</li> <li>Equipment or adaptations</li> <li>Ongoing recovery from injury that may change the person's rehabilitation needs (for example, restrictions of weight bearing, cast immobilisation in feature clinic)</li> <li>Further surgery and readmissions to hospital</li> </ul> <p>Traumatic injury is defined as 'traumatic injury that requires admission to hospital at the time of injury.'</p>
Population	<p>Inclusion:</p> <ul style="list-style-type: none"> <li>Children and young people (aged below 18 years) who have used rehabilitation services following traumatic injury that required admission to hospital and resulted in complex rehabilitation needs, including those with traumatic brain injury, sight loss and hearing loss, and their families</li> </ul> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>Children and young people with traumatic injuries who do not require admission to hospital</li> <li>Children and young people with traumatic injury who are admitted to the PICU</li> </ul>
Phenomenon of interest	<p>Views and preferences of the population about the initial and ongoing assessment of their rehabilitation needs regarded as important/not important</p> <p>Themes will be identified from the literature, but may include:</p> <ul style="list-style-type: none"> <li>Continuity of care/ same contact person/key worker</li> <li>Information at key points</li> <li>Communication</li> </ul>
Comparator/Reference standard/Confounding factors	Not applicable
Types of study to be included	<ul style="list-style-type: none"> <li>Systematic reviews of qualitative studies</li> <li>Qualitative studies (for example, interviews, focus groups, observations)</li> </ul>

Field	Content
Other exclusion criteria	<p>Study design:</p> <ul style="list-style-type: none"> <li>Purely quantitative studies (including surveys with only descriptive quantitative data)</li> </ul> <p>Language:</p> <ul style="list-style-type: none"> <li>Non-English</li> </ul> <p>Publication status:</p> <ul style="list-style-type: none"> <li>Abstract only</li> </ul>
Context	<p>Settings - Inclusion:</p> <ul style="list-style-type: none"> <li>All inpatient, outpatient and community settings in which rehabilitation services following traumatic injury are provided</li> </ul> <p>Exclusion:</p> <ul style="list-style-type: none"> <li>Accident and emergency departments</li> <li>Critical care units</li> <li>Prisons</li> </ul>
Primary outcomes (critical outcomes)	Not applicable
Secondary outcomes (important outcomes)	Not applicable
Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into STAR and de-duplicated. 5% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4).
Risk of bias (quality) assessment	Risk of bias will be assessed using the CASP qualitative checklist as described in Developing NICE guidelines: the manual.
Strategy for data synthesis	<p>NGA STAR software will be used for generating bibliographies/citations, study sifting and data extraction.</p> <p>Studies will be reviewed chronologically from most recent first to oldest.</p> <p>Thematic analysis of the data will be conducted and findings presented.</p> <p>The quality of the evidence will be assessed using GRADE-CERQual for each theme.</p>
Analysis of sub-groups	<p>The following subgroups were specified for this question for stratification of the data:</p> <ul style="list-style-type: none"> <li>Children and young people who are suspected of sustaining non-accidental injuries versus accidental injuries</li> <li>Children and young people with parents known to social services versus not known</li> <li>Children and young people with young (&lt; 20 years at birth of child) parents versus not young (<math>\geq</math> 20 years at birth of child)</li> <li>Children and young people with parents from deprived backgrounds versus not deprived backgrounds</li> <li>Children and young people with parents who have mental health issues versus none</li> </ul> <p>No further subgroups were specified for this question for stratification of the data, however the committee is aware that the review covers a</p>

Field	Content																					
	<p>heterogeneous population, and if there is further incoherence in the findings, additional potential sources of it will be explored and include:</p> <ul style="list-style-type: none"> <li>• Upper limb / lower limb</li> <li>• Children and young people with pre-existing physical and/or mental health conditions (including substance misuse), physical and learning disability versus no pre-existing conditions</li> <li>• Children and young people whose parents are very involved in their rehabilitation/recovery (e.g., by staying overnight in hospital) versus not involved</li> <li>• Age (0-3 versus 4-7 versus 8-12 versus 13-17)</li> </ul>																					
Type and method of review	Qualitative																					
Language	English																					
Country	England																					
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Other registration details																						
Reference/URL for published protocol	<a href="https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=150645">https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=150645</a>																					
Dissemination plans																						

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## Appendix B – Literature search strategies

### Literature search strategies for review questions:

**A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

**A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

*A combined search was conducted for both review questions.*

### Review question search strategies

#### Databases: Medline; Medline Epub Ahead of Print; and Medline In-Process & Other Non-Indexed Citations

Date of last search: 30/09/2019

#	Searches
1	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
2	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)))ti,ab.
3	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?))ti,ab.
4	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?))ti,ab.
5	(patient? adj5 trauma\$)ti,ab.
6	(patient? adj3 (burn? or burned or fractur\$))ti,ab.
7	wound\$ patient?ti,ab.
8	injur\$ patient?ti,ab.
9	accident\$ patient?ti,ab.
10	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ti.
11	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ab. /freq=2
12	exp MULTIPLE TRAUMA/
13	TRAUMATOLOGY/
14	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
15	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
16	(trauma\$ adj3 (severe or severely or major or multiple))ti,ab.
17	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple))ti,ab.
18	((physical\$ or body\$ or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$))ti,ab.
19	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
20	(polytrauma? or poly-trauma?)ti,ab.
21	traumatolog\$.ti,ab.
22	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/))
23	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$)ti.

#	Searches
24	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound\$ or trauma\$ or burn\$ or burned or fractur\$).ab. /freq=2
25	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn\$ or burned or fractur\$)).ti,ab.
26	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
27	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
28	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)).ti,ab.
29	*SPINAL CORD INJURIES/ or *SPINAL CORD COMPRESSION/
30	exp *THORACIC INJURIES/ or *ACUTE LUNG INJURY/
31	*PERIPHERAL NERVE INJURIES/ or exp *CRANIAL NERVE INJURIES/
32	exp *AMPUTATION/ or *AMPUTATION, TRAUMATIC/ or *AMPUTEES/ or *AMPUTATION STUMPS/ or *LIMB SALVAGE/
33	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
34	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
35	((Flail\$ or stove in) adj3 chest?).ti.
36	(rib? adj3 fractur\$).ti.
37	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
38	(amputat\$ or amputee?).ti.
39	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
40	*HEAD INJURIES, CLOSED/ or *HEAD INJURIES, PENETRATING/
41	(head adj3 injur\$).ti.
42	exp *BRAIN INJURIES/
43	(brain adj3 injur\$).ti.
44	or/1-43
45	exp REHABILITATION/ and "HEALTH SERVICES NEEDS AND DEMAND"/
46	exp REHABILITATION/ and NEEDS ASSESSMENT/
47	exp REHABILITATION/ and TRIAGE/
48	exp REHABILITATION/ and CRITICAL PATHWAYS/
49	exp REHABILITATION/ and PATIENT CARE PLANNING/
50	exp REHABILITATION/ and "REFERRAL AND CONSULTATION"/
51	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
52	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
53	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
54	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
55	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
56	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
57	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
58	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
59	or/45-58
60	44 and 59
61	"HEALTH SERVICES NEEDS AND DEMAND"/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
62	NEEDS ASSESSMENT/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
63	TRIAGE/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
64	CRITICAL PATHWAYS/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
65	PATIENT CARE PLANNING/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
66	"REFERRAL AND CONSULTATION"/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
67	or/60-66
68	limit 67 to english language
69	limit 68 to yr="2000 -Current"
70	LETTER/
71	EDITORIAL/
72	NEWS/

#	Searches
73	exp HISTORICAL ARTICLE/
74	ANECDOTES AS TOPIC/
75	COMMENT/
76	CASE REPORT/
77	(letter or comment*).ti.
78	or/70-77
79	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
80	78 not 79
81	ANIMALS/ not HUMANS/
82	exp ANIMALS, LABORATORY/
83	exp ANIMAL EXPERIMENTATION/
84	exp MODELS, ANIMAL/
85	exp RODENTIA/
86	(rat or rats or mouse or mice).ti.
87	or/80-86
88	69 not 87

## Databases: Embase; and Embase Classic

Date of last search: 30/09/2019

#	Searches
1	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
2	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)).ti,ab.
3	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
4	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
5	(patient? adj5 trauma\$.ti,ab.
6	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
7	wound\$ patient?.ti,ab.
8	injur\$ patient?.ti,ab.
9	accident\$ patient?.ti,ab.
10	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ti.
11	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ab. /freq=2
12	MULTIPLE TRAUMA/
13	TRAUMATOLOGY/
14	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
15	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
16	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
17	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
18	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
19	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
20	(polytrauma? or poly-trauma?).ti,ab.
21	traumatolog\$.ti,ab.
22	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and

#	Searches
	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/))
23	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
24	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
25	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
26	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
27	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
28	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
29	*SPINAL CORD INJURY/ or *SPINAL CORD COMPRESSION/
30	exp *THORAX INJURY/ or *ACUTE LUNG INJURY/ or exp *RIB FRACTURE/
31	exp *NERVE INJURY/
32	exp *AMPUTATION/ or *AMPUTEES/ or *LIMB SALVAGE/
33	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
34	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
35	((Flail\$ or stove in) adj3 chest?).ti.
36	(rib? adj3 fractur\$).ti.
37	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
38	(amputat\$ or amputee?).ti.
39	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
40	*HEAD INJURY/
41	(head adj3 injur\$).ti.
42	exp *BRAIN INJURY/
43	(brain adj3 injur\$).ti.
44	or/1-43
45	exp REHABILITATION/ and NEEDS ASSESSMENT/
46	exp REHABILITATION/ and CRITICAL PATHWAY/
47	exp REHABILITATION/ and PATIENT CARE PLANNING/
48	exp REHABILITATION/ and PATIENT REFERRAL/
49	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
50	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
51	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
52	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
53	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
54	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
55	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
56	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
57	or/45-56
58	44 and 57
59	NEEDS ASSESSMENT/ and exp INJURY/rh [Rehabilitation]
60	CRITICAL PATHWAY/ and exp INJURY/rh [Rehabilitation]
61	PATIENT CARE PLANNING/ and exp INJURY/rh [Rehabilitation]
62	PATIENT REFERRAL/ and exp INJURY/rh [Rehabilitation]
63	or/58-62
64	limit 63 to english language
65	limit 64 to yr="2000 -Current"

#	Searches
66	letter.pt. or LETTER/
67	note.pt.
68	editorial.pt.
69	CASE REPORT/ or CASE STUDY/
70	(letter or comment*).ti.
71	or/66-70
72	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
73	71 not 72
74	ANIMAL/ not HUMAN/
75	NONHUMAN/
76	exp ANIMAL EXPERIMENT/
77	exp EXPERIMENTAL ANIMAL/
78	ANIMAL MODEL/
79	exp RODENT/
80	(rat or rats or mouse or mice).ti.
81	or/73-80
82	65 not 81

## Databases: Cochrane Central Register of Controlled Trials; and Cochrane Database of Systematic Reviews;

Date of last search: 30/09/2019

#	Searches
#1	([mh "WOUNDS AND INJURIES"] not ([mh ^"ASPHYXIA"] or [mh ^"BATTERED CHILD SYNDROME"] or [mh "BIRTH INJURIES"] or [mh "BITES AND STINGS"] or [mh DROWNING] or [mh ^"EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"] or [mh ^FROSTBITE] or [mh "HEAT STRESS DISORDERS"] or [mh "RADIATION INJURIES"] or [mh ^RETROPNEUMOPERITONEUM] or [mh ^"SURGICAL WOUND"]]))
#2	([mh ^HOSPITALIZATION] or [mh ^"PATIENT ADMISSION"] or [mh ^"ADOLESCENT, HOSPITALIZED"] or [mh ^"CHILD, HOSPITALIZED"] or [mh HOSPITALS] or [mh "EMERGENCY SERVICE, HOSPITAL"] or [mh "INTENSIVE CARE UNITS"] or [mh ^"REHABILITATION CENTERS"])
#3	#1 and #2
#4	(hospitalised or hospitalized or hospitalistion* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*)):ti,ab
#5	#1 and #4
#6	((hospitalised or hospitalized or hospitalistion* or hospitalization*) near/10 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#7	((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*) near/5 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#8	(patient* near/5 trauma*):ti,ab
#9	(patient* near/3 (burn* or burned or fractur*)):ti,ab
#10	"wound* patient*":ti,ab
#11	"injur* patient*":ti,ab
#12	"accident* patient*":ti,ab
#13	trauma*:ti,ab
#14	#1 and #13
#15	[mh "MULTIPLE TRAUMA"]
#16	[mh ^TRAUMATOLOGY]
#17	(trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#18	((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#19	(trauma* near/3 (severe or severely or major or multiple)):ti,ab
#20	((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab
#21	((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#22	(acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab
#23	(polytrauma* or poly-trauma*):ti,ab
#24	traumatolog*:ti,ab
#25	([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"])
#26	#1 and #25
#27	(injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab
#28	#25 and #27
#29	(accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#30	(accident* near/3 (serious* or severe or severely or major)):ti,ab
#31	#2 and #25
#32	(hospitalised or hospitalized or hospitalistion* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or intensive care or ICU* or PICU* or NICU* or department* or centre* or center*)):ti,ab
#33	#25 and #32

#	Searches
#34	[mh ^"SPINAL CORD INJURIES"] or [mh ^"SPINAL CORD COMPRESSION"]
#35	[mh "THORACIC INJURIES"] or [mh ^"ACUTE LUNG INJURY"]
#36	[mh ^"PERIPHERAL NERVE INJURIES"] or [mh "CRANIAL NERVE INJURIES"]
#37	[mh AMPUTATION] or [mh ^"AMPUTATION, TRAUMATIC"] or [mh ^"AMPUTEES"] or [mh ^"AMPUTATION STUMPS"] or [mh ^"LIMB SALVAGE"]
#38	((spinal* or spine* or chest* or thoracic* or nerve*) near/3 injur*):ti
#39	((spinal* or spine*) near/3 cord* near/3 compress*):ti
#40	((Flail* or stove in) near/3 chest*):ti
#41	(rib* near/3 fractur*):ti
#42	((brachial or lumbosacral or lumbar or sacral or cervical or coccygeal) near/3 plexus near/3 injur*):ti
#43	(amputat* or amputee*):ti
#44	(limb* near/3 (loss or losing or lost or salvag* or re-construct* or reconstruct*)):ti
#45	[mh ^"HEAD INJURIES, CLOSED"] or [mh ^"HEAD INJURIES, PENETRATING"]
#46	(head near/3 injur*):ti
#47	[mh "BRAIN INJURIES"]
#48	(brain near/3 injur*):ti
#49	#3 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #26 or #28 or #29 or #30 or #31 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48
#50	[mh REHABILITATION] and [mh ^"HEALTH SERVICES NEEDS AND DEMAND"]
#51	[mh REHABILITATION] and [mh ^"NEEDS ASSESSMENT"]
#52	[mh REHABILITATION] and [mh ^"TRIAGE"]
#53	[mh REHABILITATION] and [mh ^"CRITICAL PATHWAYS"]
#54	[mh REHABILITATION] and [mh ^"PATIENT CARE PLANNING"]
#55	[mh REHABILITATION] and [mh ^"REFERRAL AND CONSULTATION"]
#56	((initial* or first or early or initiat* or holistic* or postacute* or "top level*") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 rehab*):ti,ab
#57	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 rehab*):ti,ab
#58	((initial* or first or early or initiat* or holistic* or postacute* or "top level*") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 need*):ti,ab
#59	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 need*):ti,ab
#60	((initial* or first or early or initiat* or holistic* or postacute* or "top level*") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (perceiv* or met or meet* or achiev* or realiz* or realis* or fulfil* or satisf* or unmet or unachiev* or unrealiz* or unrealis* or unfulfil*) near/5 need*):ti,ab
#61	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (perceiv* or met or meet* or achiev* or realiz* or realis* or fulfil* or satisf* or unmet or unachiev* or unrealiz* or unrealis* or unfulfil*) near/5 need*):ti,ab
#62	((initial* or first or early or initiat* or holistic* or postacute* or "top level*") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 (priorit* or importan* or expect*)):ti,ab
#63	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 (priorit* or importan* or expect*)):ti,ab
#64	#50 or #51 or #52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60 or #61 or #62 or #63
#65	#49 and #64
#66	[mh ^"HEALTH SERVICES NEEDS AND DEMAND"] and [mh ^"WOUNDS AND INJURIES"/rh]
#67	[mh ^"NEEDS ASSESSMENT"] and [mh ^"WOUNDS AND INJURIES"/rh]
#68	[mh ^"TRIAGE"] and [mh ^"WOUNDS AND INJURIES"/rh]
#69	[mh ^"CRITICAL PATHWAYS"] and [mh ^"WOUNDS AND INJURIES"/rh]
#70	[mh ^"PATIENT CARE PLANNING"] and [mh ^"WOUNDS AND INJURIES"/rh]
#71	[mh ^"REFERRAL AND CONSULTATION"] and [mh ^"WOUNDS AND INJURIES"/rh]
#72	#65 or #66 or #67 or #68 or #69 or #70 or #71
#73	#65 or #66 or #67 or #68 or #69 or #70 or #71 with Cochrane Library publication date Between Jan 2000 and Oct 2019, in Cochrane Reviews
#74	#65 or #66 or #67 or #68 or #69 or #70 or #71 with Publication Year from 2000 to 2019, in Trials

## Health economics search strategies

### Databases: Medline; Medline EPub Ahead of Print; and Medline In-Process & Other Non-Indexed Citations

Date of last search: 28/11/2019

#	Searches
1	ECONOMICS/
2	VALUE OF LIFE/
3	exp "COSTS AND COST ANALYSIS"/
4	exp ECONOMICS, HOSPITAL/
5	exp ECONOMICS, MEDICAL/
6	exp RESOURCE ALLOCATION/
7	ECONOMICS, NURSING/
8	ECONOMICS, PHARMACEUTICAL/
9	exp "FEES AND CHARGES"/
10	exp BUDGETS/
11	budget*.ti,ab.
12	cost*.ti,ab.
13	(economic* or pharmaco?economic*).ti,ab.
14	(price* or pricing*).ti,ab.
15	(financ* or fee or fees or expenditure* or saving*).ti,ab.
16	(value adj2 (money or monetary)).ti,ab.
17	resourc* allocat*.ti,ab.
18	(fund or funds or funding* or funded).ti,ab.
19	(ration or rations or rationing* or rationed).ti,ab.
20	ec.fs.
21	or/1-20
22	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
23	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
24	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
25	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
26	(patient? adj5 trauma\$).ti,ab.
27	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
28	wound\$ patient?.ti,ab.
29	injur\$ patient?.ti,ab.
30	accident\$ patient?.ti,ab.
31	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ti.
32	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ab. /freq=2
33	exp MULTIPLE TRAUMA/
34	TRAUMATOLOGY/
35	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
36	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
37	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
38	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
39	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
40	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
41	(polytrauma? or poly-trauma?).ti,ab.
42	traumatolog\$.ti,ab.
43	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (exp ***WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION

#	Searches
	OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/))
44	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
45	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
46	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
47	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
48	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
49	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
50	*SPINAL CORD INJURIES/ or *SPINAL CORD COMPRESSION/
51	exp *THORACIC INJURIES/ or *ACUTE LUNG INJURY/
52	*PERIPHERAL NERVE INJURIES/ or exp *CRANIAL NERVE INJURIES/
53	exp *AMPUTATION/ or *AMPUTATION, TRAUMATIC/ or *AMPUTEES/ or *AMPUTATION STUMPS/ or *LIMB SALVAGE/
54	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
55	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
56	((Flail\$ or stove in) adj3 chest?).ti.
57	(rib? adj3 fractur\$).ti.
58	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
59	(amputat\$ or amputee?).ti.
60	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
61	*HEAD INJURIES, CLOSED/ or *HEAD INJURIES, PENETRATING/
62	(head adj3 injur\$).ti.
63	exp *BRAIN INJURIES/
64	(brain adj3 injur\$).ti.
65	or/22-64
66	exp REHABILITATION/ and "HEALTH SERVICES NEEDS AND DEMAND"/
67	exp REHABILITATION/ and NEEDS ASSESSMENT/
68	exp REHABILITATION/ and TRIAGE/
69	exp REHABILITATION/ and CRITICAL PATHWAYS/
70	exp REHABILITATION/ and PATIENT CARE PLANNING/
71	exp REHABILITATION/ and "REFERRAL AND CONSULTATION"/
72	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
73	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
74	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
75	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
76	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
77	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
78	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
79	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
80	or/66-79
81	65 and 80
82	"HEALTH SERVICES NEEDS AND DEMAND"/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
83	NEEDS ASSESSMENT/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
84	TRIAGE/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
85	CRITICAL PATHWAYS/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
86	PATIENT CARE PLANNING/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
87	"REFERRAL AND CONSULTATION"/ and exp "WOUNDS AND INJURIES"/rh [Rehabilitation]
88	or/81-87
89	limit 88 to english language

#	Searches
90	limit 89 to yr="2000 -Current"
91	LETTER/
92	EDITORIAL/
93	NEWS/
94	exp HISTORICAL ARTICLE/
95	ANECDOTES AS TOPIC/
96	COMMENT/
97	CASE REPORT/
98	(letter or comment*).ti.
99	or/91-98
100	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
101	99 not 100
102	ANIMALS/ not HUMANS/
103	exp ANIMALS, LABORATORY/
104	exp ANIMAL EXPERIMENTATION/
105	exp MODELS, ANIMAL/
106	exp RODENTIA/
107	(rat or rats or mouse or mice).ti.
108	or/101-107
109	90 not 108
110	21 and 109

## Databases: Embase; and Embase Classic

Date of last search: 28/11/2019

#	Searches
1	HEALTH ECONOMICS/
2	exp ECONOMIC EVALUATION/
3	exp HEALTH CARE COST/
4	exp FEE/
5	BUDGET/
6	FUNDING/
7	RESOURCE ALLOCATION/
8	budget*.ti,ab.
9	cost*.ti,ab.
10	(economic* or pharmaco?economic*).ti,ab.
11	(price* or pricing*).ti,ab.
12	(financ* or fee or fees or expenditure* or saving*).ti,ab.
13	(value adj2 (money or monetary)).ti,ab.
14	resourc* allocat*.ti,ab.
15	(fund or funds or funding* or funded).ti,ab.
16	(ration or rations or rationing* or rationed).ti,ab.
17	or/1-16
18	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
19	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)).ti,ab.
20	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
21	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
22	(patient? adj5 trauma\$.ti,ab.
23	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
24	wound\$ patient?.ti,ab.
25	injur\$ patient?.ti,ab.

#	Searches
26	accident\$ patient?.ti,ab.
27	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ti.
28	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ab. /freq=2
29	MULTIPLE TRAUMA/
30	TRAUMATOLOGY/
31	(trauma\$ adj5 (injur\$ or wound\$ or burn\$ or burned or fractur\$)).ti,ab.
32	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn\$ or burned or fractur\$)).ti,ab.
33	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
34	((injur\$ or wound\$ or burn\$ or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
35	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn\$ or burned or fractur\$)).ti,ab.
36	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn\$ or burned or fractur\$)).ti,ab.
37	(polytrauma? or poly-trauma?).ti,ab.
38	traumatolog\$.ti,ab.
39	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/))
40	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound\$ or trauma\$ or burn\$ or burned or fractur\$).ti.
41	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound\$ or trauma\$ or burn\$ or burned or fractur\$).ab. /freq=2
42	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn\$ or burned or fractur\$)).ti,ab.
43	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
44	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
45	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
46	*SPINAL CORD INJURY/ or *SPINAL CORD COMPRESSION/
47	exp *THORAX INJURY/ or *ACUTE LUNG INJURY/ or exp *RIB FRACTURE/
48	exp *NERVE INJURY/
49	exp *AMPUTATION/ or *AMPUTEES/ or *LIMB SALVAGE/
50	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
51	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
52	((Flail\$ or stove in) adj3 chest?).ti.
53	(rib? adj3 fractur\$).ti.
54	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
55	(amputat\$ or amputee?).ti.
56	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
57	*HEAD INJURY/
58	(head adj3 injur\$).ti.
59	exp *BRAIN INJURY/
60	(brain adj3 injur\$).ti.
61	or/18-60
62	exp REHABILITATION/ and NEEDS ASSESSMENT/
63	exp REHABILITATION/ and CRITICAL PATHWAY/
64	exp REHABILITATION/ and PATIENT CARE PLANNING/
65	exp REHABILITATION/ and PATIENT REFERRAL/
66	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
67	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 rehab\$).ti,ab.
68	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
69	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or

#	Searches
	user? or client?) adj5 need?).ti,ab.
70	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
71	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (perceiv\$ or met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$ or unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$) adj5 need?).ti,ab.
72	((initial\$ or first or early or initiat\$ or holistic\$ or postacute\$ or top level?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
73	((after\$ or post or follow\$) adj3 (acute or intensive care or ICU?) adj5 (triag\$ or assess\$ or test\$ or examin\$ or evaluat\$ or consult\$ or review\$ or identif\$ or investigat\$ or research\$ or meeting? or screen\$) adj10 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
74	or/62-73
75	61 and 74
76	NEEDS ASSESSMENT/ and exp INJURY/rh [Rehabilitation]
77	CRITICAL PATHWAY/ and exp INJURY/rh [Rehabilitation]
78	PATIENT CARE PLANNING/ and exp INJURY/rh [Rehabilitation]
79	PATIENT REFERRAL/ and exp INJURY/rh [Rehabilitation]
80	or/75-79
81	limit 80 to english language
82	limit 81 to yr="2000 -Current"
83	letter.pt. or LETTER/
84	note.pt.
85	editorial.pt.
86	CASE REPORT/ or CASE STUDY/
87	(letter or comment*).ti.
88	or/83-87
89	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
90	88 not 89
91	ANIMAL/ not HUMAN/
92	NONHUMAN/
93	exp ANIMAL EXPERIMENT/
94	exp EXPERIMENTAL ANIMAL/
95	ANIMAL MODEL/
96	exp RODENT/
97	(rat or rats or mouse or mice).ti.
98	or/90-97
99	82 not 98
100	17 and 99

## Database: Cochrane Central Register of Controlled Trials

Date of last search: 28/11/2019

#	Searches
#1	MeSH descriptor: [Economics] this term only
#2	MeSH descriptor: [Value of Life] this term only
#3	MeSH descriptor: [Costs and Cost Analysis] explode all trees
#4	MeSH descriptor: [Economics, Hospital] explode all trees
#5	MeSH descriptor: [Economics, Medical] explode all trees
#6	MeSH descriptor: [Resource Allocation] explode all trees
#7	MeSH descriptor: [Economics, Nursing] this term only
#8	MeSH descriptor: [Economics, Pharmaceutical] this term only
#9	MeSH descriptor: [Fees and Charges] explode all trees
#10	MeSH descriptor: [Budgets] explode all trees
#11	budget*:ti,ab
#12	cost*:ti,ab
#13	(economic* or pharmaco?economic*):ti,ab
#14	(price* or pricing*):ti,ab
#15	(financ* or fee or fees or expenditure* or saving*):ti,ab
#16	(value near/2 (money or monetary)):ti,ab
#17	resourc* allocat*:ti,ab
#18	(fund or funds or funding* or funded):ti,ab
#19	(ration or rations or rationing* or rationed) .ti,ab.
#20	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19

#	Searches
#21	([mh "WOUNDS AND INJURIES"] not ([mh ^ASPHYXIA] or [mh ^"BATTERED CHILD SYNDROME"] or [mh "BIRTH INJURIES"] or [mh "BITES AND STINGS"] or [mh DROWNING] or [mh ^"EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"] or [mh ^FROSTBITE] or [mh ^"HEAT STRESS DISORDERS"] or [mh "RADIATION INJURIES"] or [mh ^RETROPNEUMOPERITONEUM] or [mh ^"SURGICAL WOUND"]))
#22	([mh ^HOSPITALIZATION] or [mh ^"PATIENT ADMISSION"] or [mh ^"ADOLESCENT, HOSPITALIZED"] or [mh ^"CHILD, HOSPITALIZED"] or [mh HOSPITALS] or [mh "EMERGENCY SERVICE, HOSPITAL"] or [mh "INTENSIVE CARE UNITS"] or [mh ^"REHABILITATION CENTERS"])
#23	#21 and #22
#24	(hospitalised or hospitalized or hospitalistion* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*)):ti,ab
#25	#21 and #24
#26	((hospitalised or hospitalized or hospitalistion* or hospitalization*) near/10 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#27	((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*) near/5 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#28	(patient* near/5 trauma*):ti,ab
#29	(patient* near/3 (burn* or burned or fractur*)):ti,ab
#30	"wound* patient*":ti,ab
#31	"injur* patient*":ti,ab
#32	"accident* patient*":ti,ab
#33	trauma*:ti,ab
#34	#21 and #33
#35	[mh "MULTIPLE TRAUMA"]
#36	[mh ^TRAUMATOLOGY]
#37	(trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#38	((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#39	(trauma* near/3 (severe or severely or major or multiple)):ti,ab
#40	((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab
#41	((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#42	(acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab
#43	(polytrauma* or poly-trauma*):ti,ab
#44	traumatolog*:ti,ab
#45	([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"])
#46	#21 and #45
#47	(injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab
#48	#45 and #47
#49	(accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#50	(accident* near/3 (serious* or severe or severely or major)):ti,ab
#51	#22 and #45
#52	(hospitalised or hospitalized or hospitalistion* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or intensive care or ICU* or PICU* or NICU* or department* or centre* or center*)):ti,ab
#53	#45 and #52
#54	[mh ^"SPINAL CORD INJURIES"] or [mh ^"SPINAL CORD COMPRESSION"]
#55	[mh "THORACIC INJURIES"] or [mh ^"ACUTE LUNG INJURY"]
#56	[mh ^"PERIPHERAL NERVE INJURIES"] or [mh "CRANIAL NERVE INJURIES"]
#57	[mh AMPUTATION] or [mh ^"AMPUTATION, TRAUMATIC"] or [mh ^AMPUTEES] or [mh ^"AMPUTATION STUMPS"] or [mh ^"LIMB SALVAGE"]
#58	((spinal* or spine* or chest* or thoracic* or nerve*) near/3 injur*):ti
#59	((spinal* or spine*) near/3 cord* near/3 compress*):ti
#60	((Flail* or stove in) near/3 chest*):ti
#61	(rib* near/3 fractur*):ti
#62	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) near/3 plexus near/3 injur*):ti
#63	(amputat* or amputee*):ti
#64	(limb* near/3 (loss or losing or lost or salvag* or re-construct* or reconstruct*)):ti
#65	[mh ^"HEAD INJURIES, CLOSED"] or [mh ^"HEAD INJURIES, PENETRATING"]
#66	(head near/3 injur*):ti
#67	[mh "BRAIN INJURIES"]
#68	(brain near/3 injur*):ti
#69	#23 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #46 or #48 or #49 or #50 or #51 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60 or #61 or #62 or #63 or #64 or #65 or #66 or #67 or #68
#70	[mh REHABILITATION] and [mh ^"HEALTH SERVICES NEEDS AND DEMAND"]
#71	[mh REHABILITATION] and [mh ^"NEEDS ASSESSMENT"]
#72	[mh REHABILITATION] and [mh ^TRIAGE]
#73	[mh REHABILITATION] and [mh ^"CRITICAL PATHWAYS"]
#74	[mh REHABILITATION] and [mh ^"PATIENT CARE PLANNING"]
#75	[mh REHABILITATION] and [mh ^"REFERRAL AND CONSULTATION"]
#76	((initial* or first or early or initiat* or holistic* or postacute* or "top level*") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 rehab*):ti,ab

#	Searches
#77	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 rehab*):ti,ab
#78	((initial* or first or early or initiat* or holistic* or postacute* or "top level**") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 need*):ti,ab
#79	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 need*):ti,ab
#80	((initial* or first or early or initiat* or holistic* or postacute* or "top level**") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (perceiv* or met or meet* or achiev* or realiz* or realis* or fulfil* or satisf* or unmet or unachiev* or unrealiz* or unrealis* or unfulfil*) near/5 need*):ti,ab
#81	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (perceiv* or met or meet* or achiev* or realiz* or realis* or fulfil* or satisf* or unmet or unachiev* or unrealiz* or unrealis* or unfulfil*) near/5 need*):ti,ab
#82	((initial* or first or early or initiat* or holistic* or postacute* or "top level**") near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 (priorit* or importan* or expect*):ti,ab
#83	((after* or post or follow*) near/3 (acute or intensive care or ICU*) near/5 (triag* or assess* or test* or examin* or evaluat* or consult* or review* or identifi* or investigat* or research* or meeting* or screen*) near/10 (patient* or user* or client*) near/5 (priorit* or importan* or expect*):ti,ab
#84	#70 or #71 or #72 or #73 or #74 or #75 or #76 or #77 or #78 or #79 or #80 or #81 or #82 or #83
#85	#69 and #84
#86	[mh ^"HEALTH SERVICES NEEDS AND DEMAND"] and [mh ^"WOUNDS AND INJURIES"/rh]
#87	[mh ^"NEEDS ASSESSMENT"] and [mh ^"WOUNDS AND INJURIES"/rh]
#88	[mh ^"TRIAGE] and [mh ^"WOUNDS AND INJURIES"/rh]
#89	[mh ^"CRITICAL PATHWAYS"] and [mh ^"WOUNDS AND INJURIES"/rh]
#90	[mh ^"PATIENT CARE PLANNING"] and [mh ^"WOUNDS AND INJURIES"/rh]
#91	[mh ^"REFERRAL AND CONSULTATION"] and [mh ^"WOUNDS AND INJURIES"/rh]
#92	#85 or #86 or #87 or #88 or #89 or #90 or #91
#93	#85 or #86 or #87 or #88 or #89 or #90 or #91 with Publication Year from 2000 to 2019, in Trials
#94	#20 and #93

## Literature search strategies for review question:

**A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

**A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

*A combined search was conducted for both review questions which also included the review questions in reviews D3 and D4, as well as the qualitative review questions in reviews D1 and D2.*

## Review question search strategies

**Databases: Medline; Medline EPub Ahead of Print; and Medline In-Process & Other Non-Indexed Citations**

**Date of last search: 23/09/2019**

#	Searches
1	interview:.mp.
2	experience:.mp.
3	qualitative.tw.
4	or/1-3
5	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or

#	Searches
	exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
6	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)))ti,ab.
7	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?))ti,ab.
8	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?))ti,ab.
9	(patient? adj5 trauma\$)ti,ab.
10	(patient? adj3 (burn? or burned or fractur\$))ti,ab.
11	wound\$ patient?.ti,ab.
12	injur\$ patient?.ti,ab.
13	accident\$ patient?.ti,ab.
14	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ti.
15	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ab. /freq=2
16	exp MULTIPLE TRAUMA/
17	TRAUMATOLOGY/
18	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
19	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
20	(trauma\$ adj3 (severe or severely or major or multiple))ti,ab.
21	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple))ti,ab.
22	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$))ti,ab.
23	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
24	(polytrauma? or poly-trauma?)ti,ab.
25	traumatolog\$.ti,ab.
26	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/))
27	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
28	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
29	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$))ti,ab.
30	(accident? adj3 (serious\$ or severe or severely or major))ti,ab.
31	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
32	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)))ti,ab.
33	*SPINAL CORD INJURIES/ or *SPINAL CORD COMPRESSION/
34	exp *THORACIC INJURIES/ or *ACUTE LUNG INJURY/
35	*PERIPHERAL NERVE INJURIES/ or exp *CRANIAL NERVE INJURIES/
36	exp *AMPUTATION/ or *AMPUTATION, TRAUMATIC/ or *AMPUTEES/ or *AMPUTATION STUMPS/ or *LIMB SALVAGE/
37	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
38	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
39	((Flail\$ or stove in) adj3 chest?).ti.
40	(rib? adj3 fractur\$).ti.
41	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
42	(amputat\$ or amputee?).ti.
43	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
44	*HEAD INJURIES, CLOSED/ or *HEAD INJURIES, PENETRATING/
45	(head adj3 injur\$).ti.
46	exp *BRAIN INJURIES/
47	(brain adj3 injur\$).ti.

#	Searches
48	or/5-47
49	"HEALTH SERVICES NEEDS AND DEMAND"/
50	NEEDS ASSESSMENT/
51	((assess\$ or reassess\$ or evaluat\$ or measur\$ or explor\$ or identifi\$ or examin\$ or investigat\$ or research\$ or review\$ or consult\$ or test\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
52	((understand\$ or recognis\$ or recogniz\$ or aware\$ or address\$ or focus\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
53	(perceiv\$ adj3 need?).ti,ab.
54	(need? adj5 (met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$)).ti,ab.
55	(need? adj5 (unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$)).ti,ab.
56	(rehab\$ adj5 need?).ti,ab.
57	or/49-56
58	((assess\$ or reassess\$ or evaluat\$ or measur\$ or explor\$ or identifi\$ or examin\$ or investigat\$ or research\$ or review\$ or consult\$ or test\$) adj5 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
59	PATIENT-CENTERED CARE/
60	((patient or user?) adj3 center\$ adj3 care).ti,ab.
61	or/59-60
62	exp *"WOUNDS AND INJURIES"/rh [Rehabilitation]
63	patient\$.ab. /freq=4
64	48 and 57
65	48 and 58
66	48 and 61
67	62 and 63
68	or/64-67
69	limit 68 to english language
70	limit 69 to yr="2000 -Current"
71	4 and 70

## Databases: Embase; and Embase Classic

Date of last search: 23/09/2019

#	Searches
1	interview:.tw.
2	exp HEALTH CARE ORGANIZATION/
3	experiences.tw.
4	or/1-3
5	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
6	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)).ti,ab.
7	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
8	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
9	(patient? adj5 trauma\$).ti,ab.
10	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
11	wound\$ patient?.ti,ab.
12	injur\$ patient?.ti,ab.
13	accident\$ patient?.ti,ab.
14	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ti.
15	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or

#	Searches
	IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ab. /freq=2
16	MULTIPLE TRAUMA/
17	TRAUMATOLOGY/
18	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
19	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
20	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
21	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
22	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
23	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
24	(polytrauma? or poly-trauma?).ti,ab.
25	traumatolog\$.ti,ab.
26	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/))
27	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
28	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
29	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
30	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
31	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
32	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
33	*SPINAL CORD INJURY/ or *SPINAL CORD COMPRESSION/
34	exp *THORAX INJURY/ or *ACUTE LUNG INJURY/ or exp *RIB FRACTURE/
35	exp *NERVE INJURY/
36	exp *AMPUTATION/ or *AMPUTEES/ or *LIMB SALVAGE/
37	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
38	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
39	((Flail\$ or stove in) adj3 chest?).ti.
40	(rib? adj3 fractur\$).ti.
41	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
42	(amputat\$ or amputee?).ti.
43	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
44	*HEAD INJURY/
45	(head adj3 injur\$).ti.
46	exp *BRAIN INJURY/
47	(brain adj3 injur\$).ti.
48	or/5-47
49	NEEDS ASSESSMENT/
50	((assess\$ or reassess\$ or evaluat\$ or measur\$ or explor\$ or identifi\$ or examin\$ or investigat\$ or research\$ or review\$ or consult\$ or test\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
51	((understand\$ or recognis\$ or recogniz\$ or aware\$ or address\$ or focus\$) adj10 (patient? or user? or client?) adj5 need?).ti,ab.
52	(perceiv\$ adj3 need?).ti,ab.
53	(need? adj5 (met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$)).ti,ab.
54	(need? adj5 (unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$)).ti,ab.
55	(rehab\$ adj5 need?).ti,ab.
56	or/49-55
57	((assess\$ or reassess\$ or evaluat\$ or measur\$ or explor\$ or identifi\$ or examin\$ or investigat\$ or research\$ or review\$ or consult\$ or test\$) adj5 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
58	((patient or user?) adj3 center\$ adj3 care).ti,ab.
59	exp *INJURY/rh [Rehabilitation]
60	patient\$.ab. /freq=4
61	48 and 56
62	48 and 57
63	48 and 58
64	59 and 60
65	or/61-64
66	limit 65 to english language
67	limit 66 to yr="2000 -Current"

#	Searches
68	4 and 67

## Databases: PsycInfo

Date of last search: 23/09/2019

#	Searches
1	experiences.tw.
2	interview:.tw.
3	qualitative.tw.
4	or/1-3
5	(exp INJURIES/ not BIRTH INJURIES/) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED PATIENTS/ or HOSPITALS/ or exp INTENSIVE CARE/ or REHABILITATION CENTERS/)
6	(exp INJURIES/ not BIRTH INJURIES/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)))ti,ab.
7	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?))ti,ab.
8	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?))ti,ab.
9	(patient? adj5 trauma\$)ti,ab.
10	(patient? adj3 (burn? or burned or fractur\$))ti,ab.
11	wound\$ patient?.ti,ab.
12	injur\$ patient?.ti,ab.
13	accident\$ patient?.ti,ab.
14	(exp INJURIES/ not BIRTH INJURIES/) and trauma\$.ti,ab.
15	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
16	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
17	(trauma\$ adj3 (severe or severely or major or multiple))ti,ab.
18	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple))ti,ab.
19	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$))ti,ab.
20	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$))ti,ab.
21	(polytrauma? or poly-trauma?)ti,ab.
22	traumatolog\$.ti,ab.
23	exp ACCIDENTS/ and (exp INJURIES/ not BIRTH INJURIES/)
24	exp ACCIDENTS/ and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$)ti,ab.
25	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$))ti,ab.
26	(accident? adj3 (serious\$ or severe or severely or major))ti,ab.
27	exp ACCIDENTS/ and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED PATIENTS/ or HOSPITALS/ or exp INTENSIVE CARE/ or REHABILITATION CENTERS/)
28	exp ACCIDENTS/ and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)))ti,ab.
29	SPINAL CORD INJURIES/
30	AMPUTATION/
31	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$)ti.
32	((spinal\$ or spine?) adj3 cord? adj3 compress\$)ti.
33	((Flail\$ or stove in) adj3 chest?)ti.
34	(rib? adj3 fractur\$)ti.
35	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$)ti.
36	(amputat\$ or amputee?)ti.
37	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$))ti.
38	HEAD INJURIES/
39	(head adj3 injur\$)ti.
40	exp BRAIN INJURIES/
41	(brain adj3 injur\$)ti.
42	or/5-41
43	NEEDS ASSESSMENT/
44	((assess\$ or reassess\$ or evaluat\$ or measur\$ or explor\$ or identifi\$ or examin\$ or investigat\$ or research\$ or review\$ or consult\$ or test\$) adj10 (patient? or user? or client?) adj5 need?)ti,ab.
45	((understand\$ or recognis\$ or recogniz\$ or aware\$ or address\$ or focus\$) adj10 (patient? or user? or client?) adj5 need?)ti,ab.
46	(perceiv\$ adj3 need?)ti,ab.
47	(need? adj5 (met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$))ti,ab.
48	(need? adj5 (unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$))ti,ab.
49	(rehab\$ adj5 need?)ti,ab.
50	or/43-49
51	((assess\$ or reassess\$ or evaluat\$ or measur\$ or explor\$ or identifi\$ or examin\$ or investigat\$ or research\$ or review\$ or consult\$ or test\$) adj5 (patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$))ti,ab.
52	((patient? or user?) adj3 center\$ adj3 care)ti,ab.

#	Searches
53	42 and 50
54	42 and 51
55	42 and 52
56	or/53-55
57	limit 56 to english language
58	limit 57 to yr="2000 -Current"
59	4 and 58
60	limit 59 to ("0100 journal" or "0110 peer-reviewed journal" or "0120 non-peer-reviewed journal")

## Databases: Social Policy and Practice

Date of last search: 23/09/2019

#	Searches
1	interview:.mp.
2	experience:.mp.
3	qualitative.tw.
4	or/1-3
5	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
6	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
7	(patient? adj5 trauma\$).ti,ab.
8	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
9	wound\$ patient?.ti,ab.
10	injur\$ patient?.ti,ab.
11	accident\$ patient?.ti,ab.
12	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
13	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
14	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
15	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
16	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
17	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
18	(polytrauma? or poly-trauma?).ti,ab.
19	traumatolog\$.ti,ab.
20	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
21	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
22	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti,ab.
23	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti,ab.
24	((Flail\$ or stove in) adj3 chest?).ti,ab.
25	(rib? adj3 fractur\$).ti,ab.
26	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti,ab.
27	(amputat\$ or amputee?).ti,ab.
28	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti,ab.
29	(head adj3 injur\$).ti,ab.
30	(brain adj3 injur\$).ti,ab.
31	or/5-30
32	((patient? or user? or client?) adj5 need?).ti,ab.
33	(perceiv\$ adj3 need?).ti,ab.
34	(need? adj5 (met or meet\$ or achiev\$ or realiz\$ or realis\$ or fulfil\$ or satisf\$)).ti,ab.
35	(need? adj5 (unmet or unachiev\$ or unrealiz\$ or unrealis\$ or unfulfil\$)).ti,ab.
36	(rehab\$ adj5 need?).ti,ab.
37	or/32-36
38	((patient? or user? or client?) adj5 (priorit\$ or importan\$ or expect\$)).ti,ab.
39	((patient or user?) adj3 center\$ adj3 care).ti,ab.
40	31 and 37
41	31 and 38
42	31 and 39
43	or/40-42
44	limit 43 to yr="2000 -Current"
45	4 and 44

## Databases: Cochrane Central Register of Controlled Trials; and Cochrane Database of Systematic Reviews;

Date of last search: 23/09/2019

#	Searches
#1	interview*:ti,ab
#2	experience*:ti,ab
#3	qualitative:ti,ab
#4	#1 or #2 or #3
#5	([mh "WOUNDS AND INJURIES"] not ([mh ^ASPHYXIA] or [mh ^"BATTERED CHILD SYNDROME"] or [mh "BIRTH INJURIES"] or [mh "BITES AND STINGS"] or [mh DROWNING] or [mh ^"EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"] or [mh ^FROSTBITE] or [mh "HEAT STRESS DISORDERS"] or [mh "RADIATION INJURIES"] or [mh ^RETROPNEUMOPERITONEUM] or [mh ^"SURGICAL WOUND"]]))
#6	([mh ^HOSPITALIZATION] or [mh ^"PATIENT ADMISSION"] or [mh ^"ADOLESCENT, HOSPITALIZED"] or [mh ^"CHILD, HOSPITALIZED"] or [mh HOSPITALS] or [mh "EMERGENCY SERVICE, HOSPITAL"] or [mh "INTENSIVE CARE UNITS"] or [mh ^"REHABILITATION CENTERS"])
#7	#5 and #6
#8	(hospitalised or hospitalized or hospitalisation* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*)):ti,ab
#9	#5 and #8
#10	((hospitalised or hospitalized or hospitalisation* or hospitalization*) near/10 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#11	((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*) near/5 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#12	(patient* near/5 trauma*):ti,ab
#13	(patient* near/3 (burn* or burned or fractur*)):ti,ab
#14	"wound* patient*":ti,ab
#15	"injur* patient*":ti,ab
#16	"accident* patient*":ti,ab
#17	trauma*:ti,ab
#18	#5 and #17
#19	[mh "MULTIPLE TRAUMA"]
#20	[mh ^TRAUMATOLOGY]
#21	(trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#22	((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#23	(trauma* near/3 (severe or severely or major or multiple)):ti,ab
#24	((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab
#25	((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#26	(acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab
#27	(polytrauma* or poly-trauma*):ti,ab
#28	traumatolog*:ti,ab
#29	([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"])
#30	#5 and #29
#31	(injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab
#32	#29 and #31
#33	(accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#34	(accident* near/3 (serious* or severe or severely or major)):ti,ab
#35	#6 and #29
#36	(hospitalised or hospitalized or hospitalisation* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or intensive care or ICU* or PICU* or NICU* or department* or centre* or center*)):ti,ab
#37	#29 and #36
#38	[mh ^"SPINAL CORD INJURIES"] or [mh ^"SPINAL CORD COMPRESSION"]
#39	[mh "THORACIC INJURIES"] or [mh ^"ACUTE LUNG INJURY"]
#40	[mh ^"PERIPHERAL NERVE INJURIES"] or [mh "CRANIAL NERVE INJURIES"]
#41	[mh AMPUTATION] or [mh ^"AMPUTATION, TRAUMATIC"] or [mh ^AMPUTEES] or [mh ^"AMPUTATION STUMPS"] or [mh ^"LIMB SALVAGE"]
#42	((spinal* or spine* or chest* or thoracic* or nerve*) near/3 injur*):ti
#43	((spinal* or spine*) near/3 cord* near/3 compress*):ti
#44	((Flail* or stove in) near/3 chest*):ti
#45	(rib* near/3 fractur*):ti
#46	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) near/3 plexus near/3 injur*):ti
#47	(amputat* or amputee*):ti
#48	(limb* near/3 (loss or losing or lost or salvag* or re-construct* or reconstruct*)):ti
#49	[mh ^"HEAD INJURIES, CLOSED"] or [mh ^"HEAD INJURIES, PENETRATING"]
#50	(head near/3 injur*):ti
#51	[mh "BRAIN INJURIES"]
#52	(brain near/3 injur*):ti
#53	#7 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #30 or #32 or #33 or #34 or #35 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45

#	Searches
	or #46 or #47 or #48 or #49 or #50 or #51 or #52
#54	[mh ^"HEALTH SERVICES NEEDS AND DEMAND"]
#55	[mh ^"NEEDS ASSESSMENT"]
#56	((assess* or reassess* or evaluat* or measur* or explor* or identifi* or examin* or investigat* or research* or review* or consult* or test*) near/10 (patient* or user* or client*) near/5 need*):ti,ab
#57	((understand* or recognis* or recogniz* or aware* or address* or focus*) near/10 (patient* or user* or client*) near/5 need*):ti,ab
#58	(perceiv* near/3 need*):ti,ab
#59	(need* near/5 (met or meet* or achiev* or realiz* or realis* or fulfil* or satisf*)):ti,ab
#60	(need* near/5 (unmet or unachiev* or unrealiz* or unrealis* or unfulfil*)):ti,ab
#61	(rehab* near/5 need*):ti,ab
#62	#54 or #55 or #56 or #57 or #58 or #59 or #60 or #61
#63	((assess* or reassess* or evaluat* or measur* or explor* or identifi* or examin* or investigat* or research* or review* or consult* or test*) near/5 (patient* or user* or client*) near/5 (priorit* or importan* or expect*)):ti,ab
#64	[mh ^"PATIENT-CENTERED CARE"]
#65	((patient or user*) near/3 center* near/3 care):ti,ab
#66	#64 or #65
#67	#53 and #62
#68	#53 and #63
#69	#53 and #66
#70	#67 or #68 or #69
#71	#4 and #70
#72	#4 and #70 with Cochrane Library publication date Between Jan 2000 and Oct 2019, in Cochrane Reviews
#73	#4 and #70 with Publication Year from 2000 to 2019, in Trials

## Databases: Social Care Online

Date of last search: 23/09/2019

#	Searches
	AllFields: qualitative or interview or experience
	AND AllFields: rehabilitation
	AND AllFields: trauma or injury
	AND PublicationYear:'2000 2019'

## Health economics search strategies

## Databases: Medline; Medline EPub Ahead of Print; and Medline In-Process & Other Non-Indexed Citations

Date of last search: 20/03/2020

#	Searches
1	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
2	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or centre?))).ti,ab.
3	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
4	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or centre?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
5	(patient? adj5 trauma\$).ti,ab.
6	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
7	wound\$ patient?.ti,ab.
8	injur\$ patient?.ti,ab.

#	Searches
9	accident\$ patient?.ti,ab.
10	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ti.
11	(exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/)) and trauma\$.ab. /freq=2
12	exp MULTIPLE TRAUMA/
13	TRAUMATOLOGY/
14	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
15	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
16	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
17	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
18	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
19	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
20	(polytrauma? or poly-trauma?).ti,ab.
21	traumatolog\$.ti,ab.
22	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (exp "WOUNDS AND INJURIES"/ not (ASPHYXIA/ or BATTERED CHILD SYNDROME/ or exp BIRTH INJURIES/ or exp "BITES AND STINGS"/ or exp DROWNING/ or "EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"/ or exp FROSTBITE/ or exp HEAT STRESS DISORDERS/ or exp RADIATION INJURIES/ or RETROPNEUMOPERITONEUM/ or SURGICAL WOUND/))
23	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
24	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
25	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
26	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
27	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (HOSPITALIZATION/ or PATIENT ADMISSION/ or ADOLESCENT, HOSPITALIZED/ or CHILD, HOSPITALIZED/ or exp HOSPITALS/ or exp EMERGENCY SERVICE, HOSPITAL/ or exp INTENSIVE CARE UNITS/ or REHABILITATION CENTERS/)
28	(ACCIDENTS/ or ACCIDENTAL FALLS/ or ACCIDENTS, HOME/ or ACCIDENTS, OCCUPATIONAL/ or ACCIDENTS, TRAFFIC/) and (hospitali?ed or hospitali?tion? or ((adm\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)).ti,ab.
29	*SPINAL CORD INJURIES/ or *SPINAL CORD COMPRESSION/
30	exp *THORACIC INJURIES/ or *ACUTE LUNG INJURY/
31	*PERIPHERAL NERVE INJURIES/ or exp *CRANIAL NERVE INJURIES/
32	exp *AMPUTATION/ or *AMPUTATION, TRAUMATIC/ or *AMPUTEES/ or *AMPUTATION STUMPS/ or *LIMB SALVAGE/
33	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
34	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
35	((Flail\$ or stove in) adj3 chest?).ti.
36	(rib? adj3 fractur\$).ti.
37	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
38	(amputat\$ or amputee?).ti.
39	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
40	*HEAD INJURIES, CLOSED/ or *HEAD INJURIES, PENETRATING/
41	(head adj3 injur\$).ti.
42	exp *BRAIN INJURIES/
43	(brain adj3 injur\$).ti.
44	or/1-43
45	(rehab\$ adj3 prescription?).ti,ab.
46	44 and 45
47	limit 46 to english language
48	limit 47 to yr="2000 -Current"
49	LETTER/
50	EDITORIAL/
51	NEWS/
52	exp HISTORICAL ARTICLE/
53	ANECDOTES AS TOPIC/
54	COMMENT/
55	CASE REPORT/
56	(letter or comment*).ti.
57	or/49-56
58	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
59	57 not 58
60	ANIMALS/ not HUMANS/
61	exp ANIMALS, LABORATORY/
62	exp ANIMAL EXPERIMENTATION/

#	Searches
63	exp MODELS, ANIMAL/
64	exp RODENTIA/
65	(rat or rats or mouse or mice).ti.
66	or/59-65
67	48 not 66

## Databases: Embase; and Embase Classic

Date of last search: 20/03/2020

#	Searches
1	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
2	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?)).ti,ab.
3	((hospitali?ed or hospitali?ation?) adj10 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
4	((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?) adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$ or accident?)).ti,ab.
5	(patient? adj5 trauma\$).ti,ab.
6	(patient? adj3 (burn? or burned or fractur\$)).ti,ab.
7	wound\$ patient?.ti,ab.
8	injur\$ patient?.ti,ab.
9	accident\$ patient?.ti,ab.
10	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ti.
11	(exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/)) and trauma\$.ab. /freq=2
12	MULTIPLE TRAUMA/
13	TRAUMATOLOGY/
14	(trauma\$ adj5 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
15	((complex\$ or multiple or critical\$) adj3 (injur\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
16	(trauma\$ adj3 (severe or severely or major or multiple)).ti,ab.
17	((injur\$ or wound\$ or burn? or burned or fractur\$) adj2 (severe or severely or major or multiple)).ti,ab.
18	((physical\$ or body or bodily) adj3 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.
19	(acute adj1 (injur\$ or trauma\$ or wound\$ or burn? or burned or fractur\$)).ti,ab.
20	(polytrauma? or poly-trauma?).ti,ab.
21	traumatolog\$.ti,ab.
22	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (exp INJURY/ not (AUTOMUTILATION/ or BATTERED CHILD SYNDROME/ or BIRTH INJURY/ or exp "BITES AND STINGS"/ or exp DROWNING/ or exp EROSION/ or exp EXPERIMENTAL INJURY/ or exp HEART INJURY/ or IMMUNE INJURY/ or IMMUNE MEDIATED INJURY/ or MEMBRANE DAMAGE/ or PRENATAL INJURY/ or PSYCHOTRAUMA/ or exp RADIATION INJURY/ or exp REPERFUSION INJURY/ or exp RESPIRATORY TRACT INJURY/ or exp RUPTURE/ or STRANGULATION/ or SURGICAL INJURY/ or exp THERMAL INJURY/ or BITE WOUND/ or exp SURGICAL WOUND/))
23	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ti.
24	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (injur\$ or wound? or trauma\$ or burn? or burned or fractur\$).ab. /freq=2
25	(accident? adj5 (injur\$ or wound\$ or trauma\$ or burn? or burned or fractur\$)).ti,ab.

#	Searches
26	(accident? adj3 (serious\$ or severe or severely or major)).ti,ab.
27	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (HOSPITALIZATION/ or HOSPITAL ADMISSION/ or HOSPITALIZED ADOLESCENT/ or HOSPITALIZED CHILD/ or exp HOSPITAL/ or EMERGENCY HOSPITAL SERVICE/ or exp INTENSIVE CARE UNIT/ or REHABILITATION CENTER/)
28	(ACCIDENT/ or FALLING/ or HOME ACCIDENT/ or exp OCCUPATIONAL ACCIDENT/ or TRAFFIC ACCIDENT/) and (hospitali?ed or hospitali?tion? or ((admi\$ or stay? or stayed or treat\$ or present\$) adj5 (hospital? or unit? or intensive care or ICU? or PICU? or NICU? or department? or centre? or center?))).ti,ab.
29	*SPINAL CORD INJURY/ or *SPINAL CORD COMPRESSION/
30	exp *THORAX INJURY/ or *ACUTE LUNG INJURY/ or exp *RIB FRACTURE/
31	exp *NERVE INJURY/
32	exp *AMPUTATION/ or *AMPUTEES/ or *LIMB SALVAGE/
33	((spinal\$ or spine? or chest? or thoracic\$ or nerve?) adj3 injur\$).ti.
34	((spinal\$ or spine?) adj3 cord? adj3 compress\$).ti.
35	((Flail\$ or stove in) adj3 chest?).ti.
36	(rib? adj3 fractur\$).ti.
37	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) adj3 plexus adj3 injur\$).ti.
38	(amputat\$ or amputee?).ti.
39	(limb? adj3 (loss or losing or lost or salvag\$ or re-construct\$ or reconstruct\$)).ti.
40	*HEAD INJURY/
41	(head adj3 injur\$).ti.
42	exp *BRAIN INJURY/
43	(brain adj3 injur\$).ti.
44	or/1-43
45	(rehab\$ adj3 prescription?).ti,ab.
46	44 and 45
47	limit 46 to english language
48	limit 47 to yr="2000 -Current"
49	letter.pt. or LETTER/
50	note.pt.
51	editorial.pt.
52	CASE REPORT/ or CASE STUDY/
53	(letter or comment*).ti.
54	or/49-53
55	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
56	54 not 55
57	ANIMAL/ not HUMAN/
58	NONHUMAN/
59	exp ANIMAL EXPERIMENT/
60	exp EXPERIMENTAL ANIMAL/
61	ANIMAL MODEL/
62	exp RODENT/
63	(rat or rats or mouse or mice).ti.
64	or/56-63
65	48 not 64

## Database: Cochrane Central Register of Controlled Trials

Date of last search: 20/03/2020

#	Searches
#1	([mh "WOUNDS AND INJURIES"] not ([mh ^ASPHYXIA] or [mh ^"BATTERED CHILD SYNDROME"] or [mh "BIRTH INJURIES"] or [mh "BITES AND STINGS"] or [mh DROWNING] or [mh ^"EXTRAVASATION OF DIAGNOSTIC AND THERAPEUTIC MATERIALS"] or [mh ^FROSTBITE] or [mh "HEAT STRESS DISORDERS"] or [mh "RADIATION INJURIES"] or [mh ^RETROPNEUMOPERITONEUM] or [mh ^"SURGICAL WOUND"])))
#2	([mh ^HOSPITALIZATION] or [mh ^"PATIENT ADMISSION"] or [mh ^"ADOLESCENT, HOSPITALIZED"] or [mh ^"CHILD, HOSPITALIZED"] or [mh HOSPITALS] or [mh "EMERGENCY SERVICE, HOSPITAL"] or [mh "INTENSIVE CARE UNITS"] or [mh ^"REHABILITATION CENTERS"])
#3	#1 and #2
#4	(hospitalised or hospitalized or hospitalistion* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center?)).ti,ab
#5	#1 and #4
#6	((hospitalised or hospitalized or hospitalistion* or hospitalization*) near/10 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#7	((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or "intensive care" or ICU* or PICU* or NICU* or department* or centre* or center*) near/5 (injur* or wound* or trauma* or burn* or burned or fractur* or accident*)):ti,ab
#8	(patient* near/5 trauma*):ti,ab
#9	(patient* near/3 (burn* or burned or fractur*)):ti,ab

#	Searches
#10	"wound* patient*":ti,ab
#11	"injur* patient*":ti,ab
#12	"accident* patient*":ti,ab
#13	trauma*:ti,ab
#14	#1 and #13
#15	[mh "MULTIPLE TRAUMA"]
#16	[mh ^TRAUMATOLOGY]
#17	(trauma* near/5 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#18	((complex* or multiple or critical*) near/3 (injur* or wound* or burn* or burned or fractur*)):ti,ab
#19	(trauma* near/3 (severe or severely or major or multiple)):ti,ab
#20	((injur* or wound* or burn* or burned or fractur*) near/2 (severe or severely or major or multiple)):ti,ab
#21	((physical* or body or bodily) near/3 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#22	(acute near/1 (injur* or trauma* or wound* or burn* or burned or fractur*)):ti,ab
#23	(polytrauma* or poly-trauma*):ti,ab
#24	traumatolog*:ti,ab
#25	([mh ^ACCIDENTS] or [mh ^"ACCIDENTAL FALLS"] or [mh ^"ACCIDENTS, HOME"] or [mh ^"ACCIDENTS, OCCUPATIONAL"] or [mh ^"ACCIDENTS, TRAFFIC"])
#26	#1 and #25
#27	(injur* or wound* or trauma* or burn* or burned or fractur*):ti,ab
#28	#25 and #27
#29	(accident* near/5 (injur* or wound* or trauma* or burn* or burned or fractur*)):ti,ab
#30	(accident* near/3 (serious* or severe or severely or major)):ti,ab
#31	#2 and #25
#32	(hospitalised or hospitalized or hospitalistion* or hospitalization* or ((admi* or stay* or stayed or treat* or present*) near/5 (hospital* or unit* or intensive care or ICU* or PICU* or NICU* or department* or centre* or center*)):ti,ab
#33	#25 and #32
#34	[mh ^"SPINAL CORD INJURIES"] or [mh ^"SPINAL CORD COMPRESSION"]
#35	[mh "THORACIC INJURIES"] or [mh ^"ACUTE LUNG INJURY"]
#36	[mh ^"PERIPHERAL NERVE INJURIES"] or [mh "CRANIAL NERVE INJURIES"]
#37	[mh AMPUTATION] or [mh ^"AMPUTATION, TRAUMATIC"] or [mh ^AMPUTEES] or [mh ^"AMPUTATION STUMPS"] or [mh ^"LIMB SALVAGE"]
#38	((spinal* or spine* or chest* or thoracic* or nerve*) near/3 injur*):ti
#39	((spinal* or spine*) near/3 cord* near/3 compress*):ti
#40	((Flail* or stove in) near/3 chest*):ti
#41	(rib* near/3 fractur*):ti
#42	((brachial or lumbosacral or lumba or sacral or cervical or coccygeal) near/3 plexus near/3 injur*):ti
#43	(amputat* or amputee*):ti
#44	(limb* near/3 (loss or losing or lost or salvag* or re-construct* or reconstruct*)):ti
#45	[mh ^"HEAD INJURIES, CLOSED"] or [mh ^"HEAD INJURIES, PENETRATING"]
#46	(head near/3 injur*):ti
#47	[mh "BRAIN INJURIES"]
#48	(brain near/3 injur*):ti
#49	#3 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #26 or #28 or #29 or #30 or #31 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48
#50	(rehab* near/3 prescription*):ti,ab
#51	#49 and #50
#52	#49 and #50 with Publication Year from 2000 to 2020, in Trials

## **Appendix C – Clinical evidence study selection**

### **Clinical study selection for review questions:**

**A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury? What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

**A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

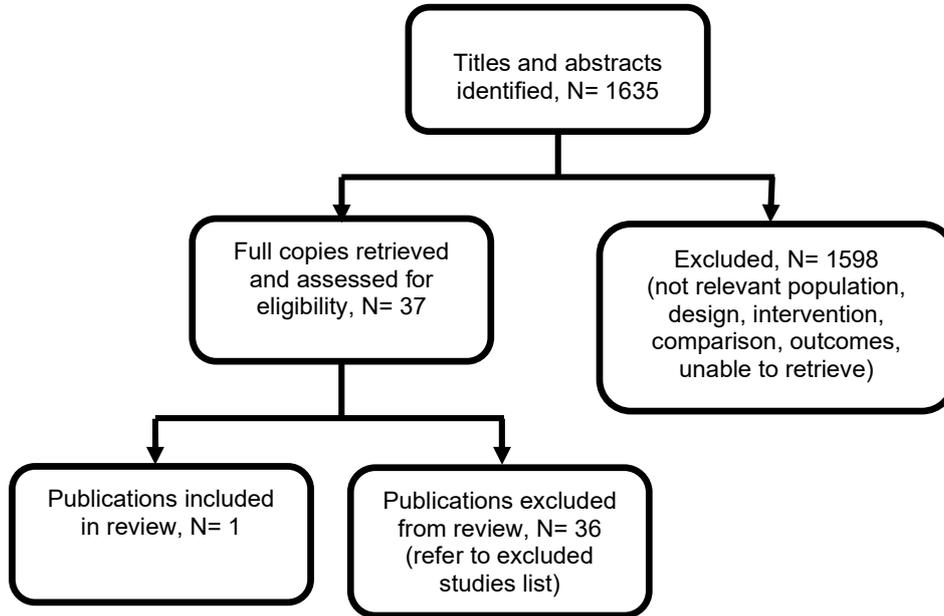
**A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

**A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

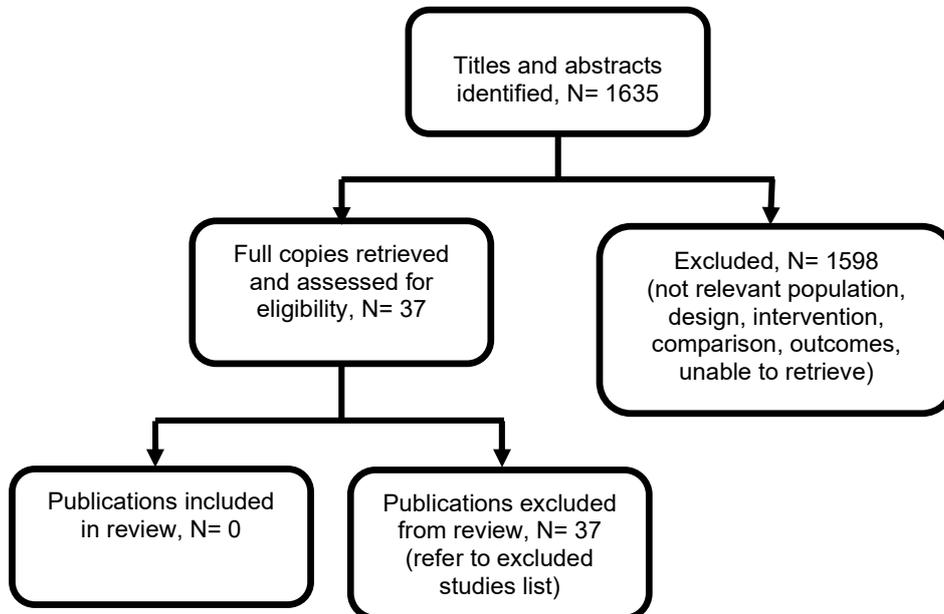
*A combined search was conducted for both quantitative review questions.*

*A combined search was conducted for both qualitative review questions which also included the review questions in reviews D3 and D4, as well as the qualitative review questions in reviews D1 and D2.*

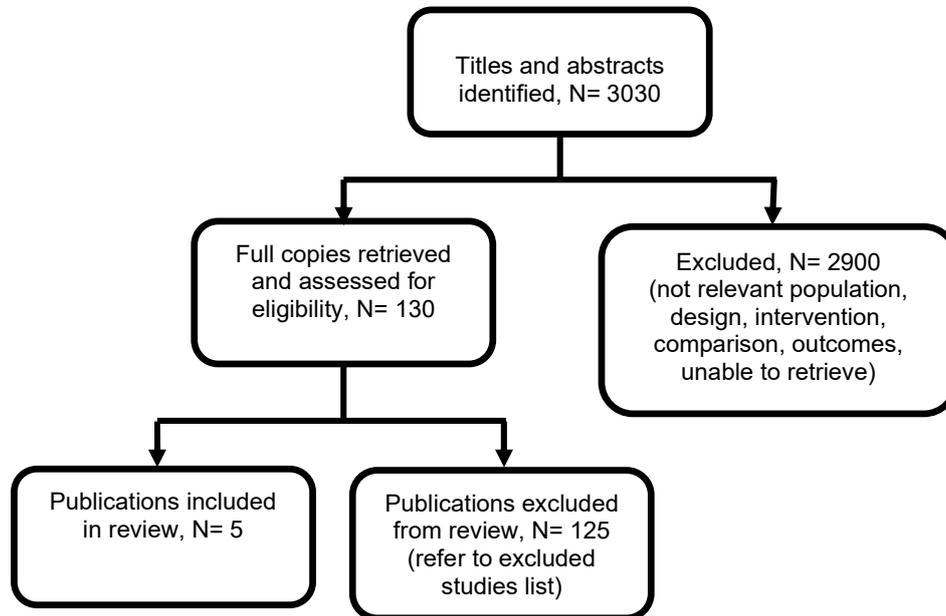
**Figure 1: Study selection flow chart: Adult quantitative review**



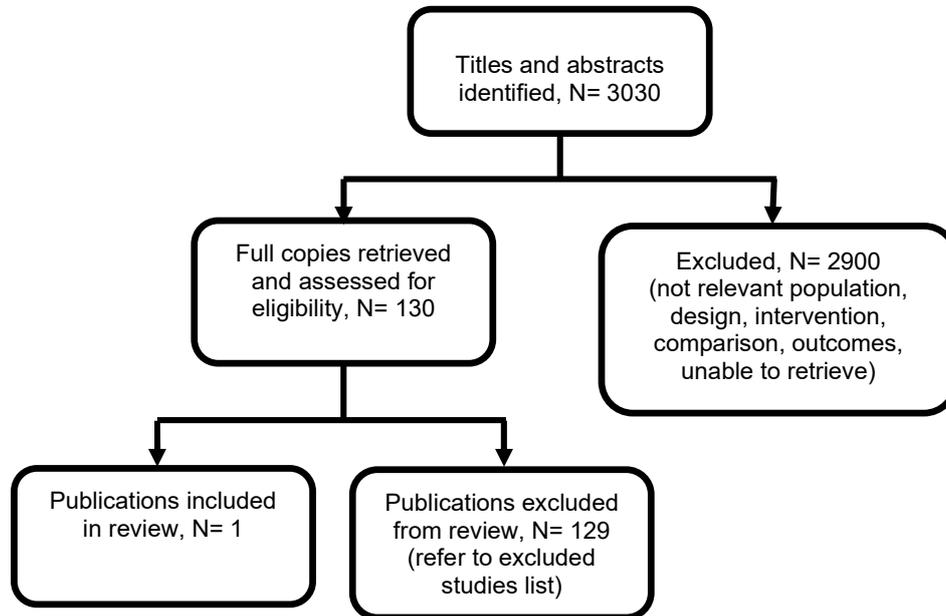
**Figure 2: Study selection flow chart: Children and young people quantitative review**



**Figure 3: Study selection flow chart: Adult qualitative review**



**Figure 4: Study selection flow chart: Children and young people qualitative review**



## Appendix D – Clinical evidence tables

### Clinical evidence tables for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?

Table 12: Clinical evidence tables

Study details	Participants	Interventions	Outcomes and Results	Comments
<p><b>Full citation</b> Wagner, Amy K., Fabio, Tony, Zafonte, Ross D., Goldberg, Gary, Marion, Donald W., Peitzman, Andrew B., Physical medicine and rehabilitation consultation: relationships with acute functional outcome, length of stay, and discharge planning after traumatic brain injury, American journal of physical medicine &amp; rehabilitation, 82, 526-36, 2003</p> <p><b>Ref Id</b> 1116805</p> <p><b>Country/ies where</b></p>	<p><b>Sample size</b> N=1866: Consultation: n=520 No consultation: n=1346)</p> <p><b>Characteristics</b> Age (mean; SD not reported):</p> <ul style="list-style-type: none"> <li>Consultation: 48.5 years</li> <li>No consultation: 39.4 years (p&lt; 0.001 Student's t test)</li> </ul> <p>Gender (M/F):</p> <ul style="list-style-type: none"> <li>Consultation(%) = 65.2/34.8</li> <li>No consultation (%) = 69.8/30.2</li> </ul> <p>Injury severity score (&lt;9/9-14/&gt;14):</p> <ul style="list-style-type: none"> <li>Consultation(%) = 6.9/25.4/67.7</li> <li>No consultation (%) =</li> </ul>	<p>1) Physical medicine and rehabilitation (PM&amp;R) consultation primarily undertaken by a core group of 3-4 physicians within 24 hours of request for consultation, consisting of thorough history (including social history and previous level of functioning), complete exam, with particular attention to the neurologic and musculoskeletal systems. "If physical and occupational therapists are involved at the time of initial consultation, their patient evaluations and functional progress is noted. Recommendations after initial evaluation often address provision of therapy and discharge planning services, suggestions for medical issues such as deep venous thrombosis prophylaxis, skin care, contracture prevention, pharmacological agents aimed at improving arousal, and</p>	<p><b>Comparison 1: Consultation versus no consultation</b> <u>Changes in activity of daily living (all FIM outcomes categories as low [1-3] versus high [4] risk category) at acute discharge (unadjusted n=1799; adjusted n=1669):</u></p> <ul style="list-style-type: none"> <li>- FIM locomotion: Unadjusted yes versus no OR (95% CI) = 15.97 (12.35-20.65; p &lt; 0.05); adjusted (for age, physiotherapy consult, complications, injury severity score, gender, Glasgow coma scale, and length of stay) yes versus no OR (95% CI) = 2.44 (1.7-3.49; p &lt; 0.05)</li> <li>- FIM transfer: Unadjusted yes versus no OR (95% CI) = 16.67 (12.87-21.55; p &lt; 0.05); adjusted (for age, physiotherapy consult, complications, injury severity score, gender, Glasgow coma scale, and length of stay) yes versus no OR (95% CI) = 2.39 (1.67-3.42; p &lt; 0.05)</li> <li>- FIM expression: Unadjusted yes versus no OR (95% CI) = 15.19 (10.45-22.08; p &lt; 0.05); adjusted (<i>not explicitly reported for what, but presumably for age,</i></li> </ul>	<p><b>Limitations</b> <b>Quality assessment:</b> Risk of bias assessed using ROBINS-I</p> <p><u>Domain 1: Bias due to confounding</u> 1.1 Is there potential for confounding of the effect of intervention in this study? Y 1.2 Was the analysis based on splitting participants' follow up time according to intervention received? N (if N, go to questions 1.4-1.6) 1.4 Did the authors use an appropriate analysis method that controlled for all the important confounding domains? PY 1.5. If Y/PY to 1.4: Were confounding domains that were controlled for measured validly and reliably by the variables available in this study? NI 1.6. Did the authors control for any post-intervention variables that could have been affected by the intervention? N Risk-of-bias judgement Moderate risk</p> <p><u>Domain 2: Bias in selection of participants into the study</u> 2.1. Was selection of participants into the study (or into the analysis) based</p>

Study details	Participants	Interventions	Outcomes and Results	Comments
<p><b>the study was carried out</b> USA</p> <p><b>Study type</b> Retrospective (comparative) cohort study</p> <p><b>Aim of the study</b> "Patients hospitalized with traumatic brain injury comprise a large portion of the population treated at trauma centers, and psychiatry consultants evaluate many traumatic brain injury patients in this setting. The purpose of this study was to delineate relationships between physical medicine and rehabilitation consultation in this population and acute functional outcome, length of stay, and discharge planning" (p. 526)</p>	<p>56.6/28.1/15.3 (p&lt;0.001 chi-square test)</p> <p>Glasgow coma scale (9-15/3-8):</p> <ul style="list-style-type: none"> <li>• Consultation(%) = 62.7/34.2</li> <li>• No consultation (%) = 86.4/6.7 (p&lt;0.001 chi-square test)</li> </ul> <p>Acute hospital complications (≥1/none):</p> <ul style="list-style-type: none"> <li>• Consultation(%) = 56.3/43.5</li> <li>• No consultation (%) = 9.7/90.3 (p&lt;0.001 chi-square test)</li> </ul> <p>Premorbid conditions (≥1/none):</p> <ul style="list-style-type: none"> <li>• Consultation(%) = 65.2/34.8</li> <li>• No consultation (%) = 47.3/52.7 (p=0.002 chi-square test)</li> </ul> <p><b>Inclusion criteria</b> Adults, aged &gt;17 years; hospitalized with nonfatal traumatic brain injury at a metropolitan level 1 trauma center with International Classification of Diseases-9 codes for skull</p>	<p>specific recommendations for evaluation to rule out additional injuries or medical rehabilitation complications. Additionally, tentative recommendations for postacute services are made. Follow-up evaluations are made based on length of stay and medical complexity. Follow-up evaluations address specific recommendations from the initial psychiatric consultation and also include detailed discussions and follow-up with the primary and other consulting services, therapy services, and discharge planning services." (p. 528)</p> <p>versus</p> <p>no PM&amp;R consultation</p> <p>2) PM&amp;P consultation ≥ 48 hours versus &lt; 48 hours of admission</p>	<p>physiotherapy consult, complications, injury severity score, gender, Glasgow coma scale, and length of stay) yes versus no OR (95% CI) = 1.74 (1.01-2.98; p &lt; 0.05)</p> <p>- FIM feed: Unadjusted yes versus no OR (95% CI) = 9.77 (7.26-13.17; p &lt; 0.05); adjusted (<i>not explicitly reported for what, but presumably</i> for age, physiotherapy consult, complications, injury severity score, gender, Glasgow coma scale, and length of stay) yes versus no OR (95% CI) = Not reported, but the authors do report that "Receipt of PM&amp;R consultation was not related to mFIM feeding in multivariate analysis." (p. 530)</p> <p>- FIM social: Unadjusted yes versus no OR (95% CI) = 16.67 (11.40-24.40; p &lt; 0.05) adjusted (<i>not explicitly reported for what, but presumably</i> for age, physiotherapy consult, complications, injury severity score, gender, Glasgow coma scale, and length of stay) yes versus no OR (95% CI) = 2.39 (1.38-4.14; p &lt; 0.05)</p> <p>Unadjusted FIMs: "Those who received a PM&amp;R consult had significantly worse acute discharge modified FIM scores within each functional domain evaluated compared with those not receiving a consult." (p. 528)</p> <p>Adjusted FIMs: Patients who received a PM&amp;R consult had</p>	<p>on participant characteristics observed after the start of intervention? PN (if N/PN, go to question 2.4)</p> <p>2.4. Do start of follow-up and start of intervention coincide for most participants? Y</p> <p>Risk-of-bias judgement Low risk</p> <p><u>Domain 3: Bias in classification of interventions</u></p> <p>3.1 Were intervention groups clearly defined? Y</p> <p>3.2 Was the information used to define intervention groups recorded at the start of the intervention? Y</p> <p>3.3 Could classification of intervention status have been affected by knowledge of the outcome or risk of the outcome? N</p> <p>Risk-of-bias judgement Low risk</p> <p><u>Domain 4: Bias due to deviations from intended interventions (aim to assess the effect of starting or adhering to intervention, answer questions 4.3-4.6)</u></p> <p>4.3. Were important co-interventions balanced across intervention groups? NI (PN)</p> <p>4.4. Was the intervention implemented successfully for most participants? PY</p> <p>4.5. Did study participants adhere to the assigned intervention regimen? NI</p> <p>Risk-of-bias judgement Moderate risk</p> <p><u>Domain 5: Bias due to missing data</u></p> <p>5.1 Were outcome data available for all, or nearly all, participants? For consultation v no consultation: Y (n=1799/1866 patients); for timing of consultation N (n=229/520)</p>

Study details	Participants	Interventions	Outcomes and Results	Comments
<p><b>Study dates</b> 1999-2000</p> <p><b>Source of funding</b> Support from the University of Pittsburgh Medical Center Trauma Registry</p>	<p>fractures, concussions, brain lesions, amnesia, loss of consciousness, cerebral edema, and pneumocephalus; and a trauma code activation at arrival to the emergency department or admission to the hospital with a diagnosis of traumatic brain injury.</p> <p><b>Exclusion criteria</b> None reported</p>		<p>significantly worse transfers, locomotion, expression and social interaction, but not feed scores at acute discharge.</p> <p><u>Length of acute hospital stay:</u> Unadjusted: Consultation: 11.85 days (SD not reported); No consultation: 2.47 days (SD not reported); <math>p &lt; 0.001</math> Student's t test) Adjusted (for age, physiotherapy consult, complications, premorbid conditions, injury severity score, Glasgow coma scale, primary payor source, and discharge destination) yes versus no standard coefficient = 0.13; <math>p &lt; 0.001</math>, favouring no PM&amp;R consultation, i.e., PM&amp; R consultation associated with longer length of stay)</p> <p><u>Discharge destination (%; n=1738):</u> - Home: Consultation = 25.4; No consultation = 88.9; - Psychiatric: Consultation= 1; No consultation = 0.9 - Rehabilitation: Consultation = 57.5; No consultation = 3.6; - Skilled nursing facility/subacute rehabilitation: Consultation = 12.7; No consultation = 1.7 - Other: Consultation = 3.4; No consultation = 4.8 "a significantly higher proportion of the population receiving a PM&amp;R consult were discharged to either an acute rehabilitation program, a subacute rehabilitation program, or skilled nursing facility (<math>P &lt; 0.001</math> for all comparisons)." (p. 530)</p>	<p>5.2 Were participants excluded due to missing data on intervention status? NI 5.3 Were participants excluded due to missing data on other variables needed for the analysis? For consultation v no consultation: Y (n=128-198/1866); for timing of consultation Y (n=55-307/520) 5.4 If PN/N to 5.1, or Y/PY to 5.2 or 5.3: Are the proportion of participants and reasons for missing data similar across interventions? NI 5.5 If PN/N to 5.1, or Y/PY to 5.2 or 5.3: Is there evidence that results were robust to the presence of missing data? N Risk-of-bias judgement For consultation v no consultation: Moderate risk; for timing of consultation Serious risk</p> <p><u>Domain 6: Bias in measurement of outcomes</u> 6.1 Could the outcome measure have been influenced by knowledge of the intervention received? NI 6.2 Were outcome assessors aware of the intervention received by study participants? PY/NI 6.3 Were the methods of outcome assessment comparable across intervention groups? NI 6.4 Were any systematic errors in measurement of the outcome related to intervention received? NI Risk-of-bias judgement Moderate risk</p> <p><u>Domain 7: Bias in selection of the reported result</u> Is the reported effect estimate likely to</p>

Study details	Participants	Interventions	Outcomes and Results	Comments
			<p><b>Comparison 2: Consultation ≥ 48 hours versus &lt; 48 hours of admission</b></p> <p><u>Changes in activity of daily living (all FIM outcomes categories as low [1-3] versus high [4] risk category) at acute discharge (unadjusted n=229; adjusted n=213-4):</u></p> <ul style="list-style-type: none"> <li>- FIM locomotion: Unadjusted ≥ 48 hours versus &lt; 48 hours OR (95% CI) = 3.76 (1.61-8.47; p &lt; 0.05); adjusted (for age, days to physiotherapy consult, gender, Glasgow coma scale, and length of stay) ≥ 48 hours versus &lt; 48 hours OR (95% CI) = 3.54 (1.34-9.32; p &lt; 0.05)</li> <li>- FIM transfer: Unadjusted ≥ 48 hours versus &lt; 48 hours OR (95% CI) = 2.86 (1.3-6.31; p &lt; 0.05); adjusted (for age, days to physiotherapy consult, gender, Glasgow coma scale, and length of stay) ≥ 48 hours versus &lt; 48 hours OR (95% CI) = 2.61 (1.06-6.4; p &lt; 0.05)</li> <li>- FIM expression: Unadjusted ≥ 48 hours versus &lt; 48 hours OR (95% CI) = 1.69 (1-2.86; non-significant); adjusted (<i>not explicitly reported for what, but presumably</i> for age, days to physiotherapy consult, gender, Glasgow coma scale, and length of stay) ≥ 48 hours versus &lt; 48 hours OR (95% CI) = not reported, but authors report it is non-significant</li> <li>- FIM feed: Unadjusted ≥ 48 hours versus &lt; 48 hours OR (95% CI) = 1.21 (0.72-2.03; non-significant);</li> </ul>	<p>be selected, on the basis of the results, from...</p> <p>7.1. ... multiple outcome <i>measurements</i> within the outcome domain? N</p> <p>7.2 ... multiple <i>analyses</i> of the intervention-outcome relationship? PN</p> <p>7.3 ... different <i>subgroups</i>? PN</p> <p>Risk-of-bias judgement Low risk</p> <p><u>Overall risk of bias</u></p> <p>Risk-of-bias judgement</p> <p>For consultation v no consultation: Moderate risk; for timing of consultation Serious risk</p> <p><b>Other information</b></p> <p>None</p>

Study details	Participants	Interventions	Outcomes and Results	Comments
			<p>adjusted (<i>not explicitly reported for what, but presumably for age, days to physiotherapy consult, gender, Glasgow coma scale, and length of stay</i>) <math>\geq 48</math> hours versus <math>&lt; 48</math> hours OR (95% CI) = not reported, but authors report it is non-significant</p> <p>- FIM social: Unadjusted <math>\geq 48</math> hours versus <math>&lt; 48</math> hours OR (95% CI) = 1.51 (0.9-2.55; non-significant) adjusted (<i>not explicitly reported for what, but presumably for age, days to physiotherapy consult, gender, Glasgow coma scale, and length of stay</i>) <math>\geq 48</math> hours versus <math>&lt; 48</math> hours OR (95% CI) = not reported, but authors report it is non-significant</p> <p>Unadjusted FIMs: "for those receiving a PM&amp;R consult, earlier time to consultation was associated with higher modified FIM scores for the FIM transfers and FIM locomotion subscales." (p. 530)</p> <p>Adjusted FIMs: "Earlier time to PM&amp;R consult was significantly related to higher modified FIM transfer and FIM locomotion scores at the time of acute care discharge." (p. 531)</p> <p><u>Length of acute hospital stay (N=465):</u> Adjusted (for age, complications, number of days until physiotherapy consult, injury severity score, Glasgow coma scale, and</p>	

Study details	Participants	Interventions	Outcomes and Results	Comments
			<p>discharge destination) <math>\geq</math> 48 hours versus <math>&lt;</math> 48 hours standard coefficient = 0.157; <math>p &lt; 0.001</math>, favouring shorter time to PM&amp;R consultation, i.e., <math>\geq</math> 48 hours to PM&amp;R consultation associated with longer length of stay)</p> <p><u>Discharge destination (%)</u>: "of those unable to be discharged home, earlier PM&amp;R consultation was not associated with any differences in actual discharge disposition based on X2 analysis. Discharge destination did not significantly impact either acute outcomes or LOS [length of acute hospital stay] in the multivariate analyses and, therefore, did not confound the relationship between early PM&amp;R consultation and these endpoints studied." (p. 532)</p>	

CI; Confidence interval; F: Female; FIM: Functional independence measure; NI: No information; M: Male; N: Number [or No if answering a risk of bias checklist question]; OR: Odds ratio; PN: Probably no; PY: Probably yes; SD: Standard deviation

**Clinical evidence tables for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

No evidence was identified which was applicable to this review question

## Clinical evidence tables for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?

Table 13: Clinical evidence tables

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
<p><b>Full citation</b> Beaton, Angela, O'Leary, Katrina, Thorburn, Julie, Campbell, Alaina, Christey, Grant, Improving patient experience and outcomes following serious injury, The New Zealand medical journal, 132, 15-25, 2019</p> <p><b>Ref Id</b> 1109425</p> <p><b>Country/ies where the study was carried out</b> New Zealand</p> <p><b>Study type</b> General qualitative inquiry</p> <p><b>Study dates</b> 2017</p>	<p><b>Recruitment strategy</b> Patients aged ≥16 years with Injury Severity Score (ISS) ≥8 injured with a blunt trauma mechanism who had Waikato Hospital as the definitive acute care provider and was a Waikato district domicile patient were eligible. However, patients with an injury within the Abbreviated Injury Scale body region 1 (head/neck) were not eligible. "A heterogeneous purposive sample of all eligible patients was used to target sample diversity across gender, age and ethnicity." (p. 16).</p> <p><b>Setting</b> The Midland Trauma System's population-based trauma registry, which captures data on major and non-major trauma patients admitted to a Midland hospital as a result of and within seven days of injury, including death in hospital as a result of injury, but does not capture data on trauma patients discharged from the emergency department, or who have experienced injuries from documented pathological processes, isolated peri-prosthetic fractures, exertional injuries, hanging/drowning/foreign bodies without</p>	<p><b>Findings (including author's interpretation)</b></p> <ul style="list-style-type: none"> <li>Author theme: The need for routine screening and access to psychological services: "Improved access to counselling services following routine psychological screening initiated in hospital, was one of the practical recommendations suggested by patients and key support people to improve the patient experience following serious injury." (p. 18)</li> </ul>	<p><b>1. Was there a clear statement of the aims of the research? (Yes/Can't tell/No)</b> Yes ("This is the first qualitative study to investigate the experience of Waikato Hospital trauma patients and their whānau as they transition from inpatient surgical services to community-based care." p. 16)</p> <p><b>2. Is a qualitative methodology appropriate? (Yes/Can't tell/No)</b> Yes</p> <p><b>3. Was the research design appropriate to address the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>4. Was the recruitment strategy appropriate to the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>5. Was the data collected in a way that addressed the research issue? (Yes/Can't tell/No)</b> Yes (Data collection continued until there was data saturation)</p> <p><b>6. Has the relationship between researcher and participants been adequately</b></p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
	<p>anatomical injury, poisoning, or patients admitted primarily for pre-existing medical conditions not directly as a result of injury.</p> <p><b>Participant characteristics</b> N=17: 8 patient participants (5 females/3 males; aged 16-79 years; 6 weeks (n=3), 6 months (n=3) or 12 months (n=2) post-discharge; with liver laceration (n=1), fractured ribs (n=4), punctured lung (n=3), multiple fractures (n=3), kidney injury (n=1), concussion (n=2), limb amputation (n=1) from falls (n=4), workplace incident (n=2), or road traffic crash (n=2); 8 patient-nominated key support people; 1 patient-nominated health professional (occupational therapist).</p> <p><b>Data collection and analysis</b> Semi-structured in-depth interviews. Braun and Clarke's (Braun V, Clarke V. Using thematic analysis in psychology. <i>Qualitative Research in Psychology</i>. 2006; 3(2):77–101. doi:10.1191/1478088706qp063oa) six-phase thematic analysis.</p>		<p><b>considered? (Yes/Can't tell/No)</b> Can't tell. (No information reported regarding the potential influence of the researchers on the findings)</p> <p><b>7. Have ethical issues been taken into consideration? (Yes/Can't tell/No)</b> Yes (Ethics approval was gained from the Health and Disability Ethics Committee New Zealand (HDEC), and project approval provided by Te Puna Oranga Maori Consultation Research Review Committee, Waikato District Health Board." p. 16)</p> <p><b>8. Was the data analysis sufficiently rigorous? (Yes/Can't tell/No)</b> Yes</p> <p><b>9. Is there a clear statement of findings? (Yes/Can't tell/No)</b> Yes</p> <p><b>10. How valuable is the research?</b> Limited value for the current question.</p> <p><b>Overall methodological limitations (No or minor/Minor/Moderate/Serious)</b> Minor</p> <p><b>Source of funding</b> Some funding received from Waikato Institute of Technology.</p> <p><b>Other information</b> None.</p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
<p><b>Full citation</b> Guldager, Rikke, Willis, Karen, Larsen, Kristian, Poulsen, Ingrid, Relatives' strategies in subacute brain injury rehabilitation: The warrior, the observer and the hesitant, Journal of Clinical Nursing, 28, 289-299, 2019</p> <p><b>Ref Id</b> 1110142</p> <p><b>Country/ies where the study was carried out</b> Denmark</p> <p><b>Study type</b> General qualitative enquiry</p> <p><b>Study dates</b> 2016-7</p>	<p><b>Recruitment strategy</b> Close relatives (or cohabiting partner) of patients with severe TBI with impaired consciousness (unresponsive wakefulness syndrome, minimally conscious state, or post-traumatic confusional state) at admission to subacute rehabilitation, "recruited in collaboration with the interdisciplinary management group of the rehabilitation department using purposeful sampling.... to achieve a broad variation of participants in terms of social position in education, profession and financial circumstances." (p. 291).</p> <p><b>Setting</b> A subacute 22 bed highly specialised rehabilitation department for patients with severe traumatic brain injury at a university hospital.</p> <p><b>Participant characteristics</b> 11 relatives of 9 patients (8 males/1 female); all (patients and relatives) aged ≥ 18 years. The relatives were either sister (n=1), mother (n=3), cohabiting male (n=1), wife (n=2), daughter (n=1) father (n=2) or cohabiting female (n=1)</p> <p><b>Data collection and analysis</b> Longitudinal study including 1) moderate participant observations of interdisciplinary status and planning</p>	<p><b>Findings (including author's interpretation)</b></p> <ul style="list-style-type: none"> <li>• Author theme: Bodily and verbal interaction <ul style="list-style-type: none"> <li>○ "Three different positions among the relatives in rehabilitation were evident: the warrior, the observant and the hesitant." (p. 293)</li> <li>○ "During the meetings, the warrior was keen to share their own observations about the patient, for example, relative ID 5 indicated the importance of this at interview: 'I was absolutely sure that behind the filter, he was present. And there was none of the staff seeing it. So that part I felt was totally frustrating and I felt like I should fight for his rights. I think I should fight and tell them what I was observing looking</li> </ul> </li> </ul>	<p><b>1. Was there a clear statement of the aims of the research? (Yes/Can't tell/No)</b> Yes ("To explore the experience of the rehabilitation process from the perspectives of relatives of patients with a traumatic brain injury. The aim of the study was, through a theoretical-empirical analysis, to identify relatives' strategies and practices in the rehabilitation process as evidenced in meetings with providers." p. 289)</p> <p><b>2. Is a qualitative methodology appropriate? (Yes/Can't tell/No)</b> Yes</p> <p><b>3. Was the research design appropriate to address the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>4. Was the recruitment strategy appropriate to the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>5. Was the data collected in a way that addressed the research issue? (Yes/Can't tell/No)</b> Can't tell (E.g., no mention of data saturation)</p> <p><b>6. Has the relationship between researcher and participants been adequately considered? (Yes/Can't tell/No)</b> Can't tell (No information reported regarding the potential influence of the researchers on the</p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
	meetings, and 2) subsequent qualitative semi-structured interviews. Analysis was undertaken using both an inductive and deductive approach using computer-assisted analysis, resulting in the construction of theoretical types.	through the filter that they did not see. (relative ID 5)' This indicates that the warrior is aware that their observations are important for the further rehabilitation process and that they find that health professionals do not always observe the same progress that they do." (p. 294)	<p>findings)</p> <p><b>7. Have ethical issues been taken into consideration? (Yes/Can't tell/No)</b> Yes (ethical approval from the Danish Data Protection Agency (ID 04346); data handled according to its requirements and registered with the Danish National Committee on Health Research Ethics [ID 17000765]).</p> <p><b>8. Was the data analysis sufficiently rigorous? (Yes/Can't tell/No)</b> Yes</p> <p><b>9. Is there a clear statement of findings? (Yes/Can't tell/No)</b> Yes</p> <p><b>10. How valuable is the research?</b> Limited value for the current question</p> <p><b>Overall methodological limitations (No or minor/Minor/Moderate/Serious)</b> Minor</p> <p><b>Source of funding</b> Danish Health Confederation and Danish Regions (Grant no. R26-A1033-B888).</p> <p><b>Other information</b> None</p>
<p><b>Full citation</b> Jannings, Wendy, Pryor, Julie, The experiences and</p>	<p><b>Recruitment strategy</b> Statewide SCI service in a major metropolitan centre invited 21 recent</p>	<p><b>Findings (including author's interpretation)</b></p> <ul style="list-style-type: none"> <li>• Author theme: Needs in</li> </ul>	<p><b>1. Was there a clear statement of the aims of the research? (Yes/Can't tell/No)</b> Yes ("The purpose was to explore the</p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
<p>needs of persons with spinal cord injury who can walk, Disability and Rehabilitation, 34, 1820-6, 2012</p> <p><b>Ref Id</b> 1022098</p> <p><b>Country/ies where the study was carried out</b> Australia</p> <p><b>Study type</b> General qualitative enquiry</p> <p><b>Study dates</b> 2010</p>	<p>service users who were walkers to participate by post.</p> <p><b>Setting</b> See "Recruitment strategy".</p> <p><b>Participant characteristics</b> N=12 patients (7 males/5 females) aged 23-71 years who had sustained an incomplete SCI, either traumatic (n=7) or non-traumatic (n=5), 1-16 years previously. These patients received care in the following inpatient settings: General acute ward (n=8), spinal acute ward (n=9), general rehabilitation ward (n=4), and spinal rehabilitation ward (n=8). 10/12 patients had lower limb dysfunction and 2/12 patients had upper limb dysfunction only.</p> <p><b>Data collection and analysis</b> Face-to-face semi-structured in-depth interviews. Inductive thematic analysis was employed as per Braun and Clarke (Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psych 2006;3:77–101.).</p>	<p>hospital:</p> <ul style="list-style-type: none"> <li>○ "Whilst in hospital, participants felt that more importance was placed on functional ability rather than their mental health: "there needed to be more emphasis on the mental side, I needed to talk to someone ... people need to talk about it ... get their feelings out (P10)." (p. 1824)</li> <li>● Author theme: Needs following discharge from hospital: <ul style="list-style-type: none"> <li>○ ""Requests for longer specialized follow-up were also thought to be beneficial as P2 explained, "This is an ongoing process. Support for let's say over a period of three years from the accident, so that you achieve the objective of whatever potential you have."" (p. 1824)</li> <li>○ These findings seem to relate to both non-</li> </ul> </li> </ul>	<p>experiences and needs of persons with spinal cord injury (SCI) who can walk." p. 1820)</p> <p><b>2. Is a qualitative methodology appropriate? (Yes/Can't tell/No)</b> Yes</p> <p><b>3. Was the research design appropriate to address the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>4. Was the recruitment strategy appropriate to the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>5. Was the data collected in a way that addressed the research issue? (Yes/Can't tell/No)</b> Can't tell (E.g., no mention of data saturation)</p> <p><b>6. Has the relationship between researcher and participants been adequately considered? (Yes/Can't tell/No)</b> Can't tell (No information reported regarding the potential influence of the researchers on the findings)</p> <p><b>7. Have ethical issues been taken into consideration? (Yes/Can't tell/No)</b> Yes (ethical approval from two human ethics committees)</p> <p><b>8. Was the data analysis sufficiently</b></p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
		traumatic and traumatic SCI.	<p><b>rigorous? (Yes/Can't tell/No)</b> Yes</p> <p><b>9. Is there a clear statement of findings? (Yes/Can't tell/No)</b> Yes</p> <p><b>10. How valuable is the research?</b> Limited value for the current question</p> <p><b>Overall methodological limitations (No or minor/Minor/Moderate/Serious)</b> Minor</p> <p><b>Source of funding</b> Not reported</p> <p><b>Other information</b> None</p>
<p><b>Full citation</b> Lefebvre, Helene, Levert, Marie Josee, The needs experienced by individuals and their loved ones following a traumatic brain injury, Journal of trauma nursing : the official journal of the Society of Trauma Nurses, 19, 197-207, 2012</p> <p><b>Ref Id</b> 1110571</p> <p><b>Country/ies where the study was carried out</b></p>	<p><b>Recruitment strategy</b> "The sample, chosen to reflect the diversity and complementarity of the perspectives to obtain a greater variety of information, 21 is made up of 150 participants (individuals who sustained TBIs, their loved ones, and their health care professionals), divided into 18 focus groups" (p. 198). Recruited from 3 regions of Quebec Canada and 3 regions of Canada. No further information specified.</p> <p><b>Setting</b> Unclear</p>	<p><b>Findings (including author's interpretation)</b></p> <ul style="list-style-type: none"> <li>• Author theme: Need for support: <ul style="list-style-type: none"> <li>○ "However, long-term access to community support services, psychological support, and accompanying services are another needs expressed by individuals with TBIs. They would like</li> </ul> </li> </ul>	<p><b>1. Was there a clear statement of the aims of the research? (Yes/Can't tell/No)</b> Yes ("to explore the needs of individuals with TBIs and their loved ones throughout the continuum of care and services." p. 197)</p> <p><b>2. Is a qualitative methodology appropriate? (Yes/Can't tell/No)</b> Yes</p> <p><b>3. Was the research design appropriate to address the aims of the research? (Yes/Can't tell/No)</b> Yes</p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
<p>Canada, France</p> <p><b>Study type</b> General qualitative enquiry</p> <p><b>Study dates</b> 2007-8</p>	<p><b>Participant characteristics</b> N=56 with TBI (34 from France/22 from Canada); n=34 loved ones (17 from France/17 from Canada). "Most individuals with TBIs who took part in the study are men (70%), single (55%), and between the ages of 18 and 29 years (36%). Their level of education is divided as follows: 41% completed high school, 27% have the equivalent of the French baccalaureate, and 27% have a university diploma. Most participants sustained TBIs 2 to 7 years back (average = 4.3 years), and most of the <i>loved ones</i> who were interviewed are women (59%) and related to (in 62% of cases) the individuals who suffered a severe TBI (88%). In more than half the cases, the loved ones live with individuals with TBIs." (p. 198) No further information reported</p> <p><b>Data collection and analysis</b> Discussion groups Thematic content analysis</p>	<p>more opportunities to meet with health care professionals, to be able to share their problems, feelings, and difficulties, and learn to manage them." (p. 200)</p> <ul style="list-style-type: none"> <li>• Author theme: Needs related to care and services: <ul style="list-style-type: none"> <li>○ "All participants underline the importance of a longterm follow-up of the individuals and their loved ones during the postrehabilitation phase, a follow-up that for now is nonexistent: "The needs of individuals and their loved ones are still present five or ten years post-injury and they need the contact information of people they can reach out to if necessary." (p. 203)</li> <li>○ "several participants insist on the importance of leisure</li> </ul> </li> </ul>	<p><b>4. Was the recruitment strategy appropriate to the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>5. Was the data collected in a way that addressed the research issue? (Yes/Can't tell/No)</b> Can't tell (E.g., no mention of data saturation)</p> <p><b>6. Has the relationship between researcher and participants been adequately considered? (Yes/Can't tell/No)</b> Can't tell (No information reported regarding the potential influence of the researchers on the findings)</p> <p><b>7. Have ethical issues been taken into consideration? (Yes/Can't tell/No)</b> Yes (ethical approval granted for both Canadian and French portions of the study)</p> <p><b>8. Was the data analysis sufficiently rigorous? (Yes/Can't tell/No)</b> Yes</p> <p><b>9. Is there a clear statement of findings? (Yes/Can't tell/No)</b> Yes</p> <p><b>10. How valuable is the research?</b> Limited value for the current question</p> <p><b>Overall methodological limitations (No or minor/Minor/Moderate/Serious)</b></p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
		resources and long-term therapeutic follow-up" (p 203)	<p>Minor</p> <p><b>Source of funding</b> Canadian Institute of Health Research and the Institut National de la Santé et de la Recherche Médicale (CIHR/INSERM), the Social Sciences and Humanities Research Council of Canada, and the Programme de recherche en réadaptation et intégration sociale en Traumatologie.</p> <p><b>Other information</b> None</p>
<p><b>Full citation</b> Thrusell, Helen, Coggrave, Maureen, Graham, Allison, Gall, Angela, Donald, Michelle, Kulshrestha, Richa, Geddis, Tracey, Women's experiences of sexuality after spinal cord injury: a UK perspective, Spinal Cord, 56, 1084-1094, 2018</p> <p><b>Ref Id</b> 1111517</p> <p><b>Country/ies where the study was carried out</b> United Kingdom</p> <p><b>Study type</b> Phenomenological</p>	<p><b>Recruitment strategy</b> Purposive sampling to recruit, from three SCI centres in the UK, women with a range of ages (<math>\geq 18</math> years), and levels (any) and density (any) of SCI affecting sexual function, who were <math>\geq 1</math> year post-initial rehabilitation and sexually active since SCI.</p> <p><b>Setting</b> See "Recruitment strategy"</p> <p><b>Participant characteristics</b> N=27 women aged 21–72 years; 12/27 had non-traumatic SCI and 15/27 had traumatic SCI; 12/27 had paraplegia (5/1/2/2 had Asia Impairment Scale (AIS) A/B/C/D injuries, respectively), 9/27 had tetraplegia (1/2/6 had AIS B/C/D injury). 6/27 had cauda equina</p>	<p><b>Findings (including author's interpretation)</b></p> <ul style="list-style-type: none"> <li>• Author theme: Sexuality rehabilitation: <ul style="list-style-type: none"> <li>○ "Access to a specialist HCP [health care professionals] at all stages post injury was also identified as valuable: "Coming towards recovery and leaving (rehabilitation), you are thinking about it, and wondering is it going to be the same, is there going to be problems? Am I going to work</li> </ul> </li> </ul>	<p><b>1. Was there a clear statement of the aims of the research? (Yes/Can't tell/No)</b> Yes ("To investigate women's experience of sexuality after spinal cord injury (SCI) with a focus on rehabilitation and managing practical impact." p. 1084)</p> <p><b>2. Is a qualitative methodology appropriate? (Yes/Can't tell/No)</b> Yes</p> <p><b>3. Was the research design appropriate to address the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>4. Was the recruitment strategy appropriate to the aims of the research? (Yes/Can't tell/No)</b> Yes</p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
<p><b>Study dates</b> Not reported</p>	<p>syndrome. Marital status at injury was single (n=4), married (n=10), in a relationship (n=8), in a civil partnership (n=1), or co-habiting (n=4). Marital status at interview was single (n=2), married (n=15), in a relationship (n=4), dating (n=1), or co-habiting (n=5).</p> <p><b>Data collection and analysis</b> Semi-structured individual interviews. Thematic analysis.</p>	<p>properly? And, you know, that type of thing. So, I think to have somebody make the approach [...] saying, 'Look, we're here. If you'd like to discuss it with us any time before you leave, just tell us.' Or, 'After you get home, if you have any problems, you can contact us on these numbers, and talk about it.' I think that would definitely be a good idea" (59 yrs, C5, D)." (p. 1091)</p> <ul style="list-style-type: none"> <li>○ "Sexuality emerged as a highly personal issue for these women and they felt it should be addressed accordingly in the rehabilitation process." (p. 1092)</li> <li>○ "It depends on individual situations. You don't want to offend people. You don't want to scare</li> </ul>	<p><b>5. Was the data collected in a way that addressed the research issue? (Yes/Can't tell/No)</b> Yes (recruitment until data saturation)</p> <p><b>6. Has the relationship between researcher and participants been adequately considered? (Yes/Can't tell/No)</b> Can't tell (No information reported regarding the potential influence of the researchers on the findings)</p> <p><b>7. Have ethical issues been taken into consideration? (Yes/Can't tell/No)</b> Yes ("We [authors] certify that all applicable institutional and governmental regulations concerning the ethical use of human volunteers were followed during the course of this research." p. 1085)</p> <p><b>8. Was the data analysis sufficiently rigorous? (Yes/Can't tell/No)</b> Yes</p> <p><b>9. Is there a clear statement of findings? (Yes/Can't tell/No)</b> Yes</p> <p><b>10. How valuable is the research?</b> Limited value for the current question</p> <p><b>Overall methodological limitations (No or minor/Minor/Moderate/Serious)</b> Minor</p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
		<p>people, you know. I think maybe sometimes a one-on-one session might work as well, before doing the group thing, [...] because if I go ahead and say, 'Okay, why don't you introduce some sexy videos,' it might be offensive to some people [...] But I know that it would definitely help some people. Well it's better to have an idea of people's levels of sexuality before injury and their expectation after injury, before you can make these changes or introduce these things" (48 yrs, T5, D)." (p. 1092)</p>	<p><b>Source of funding</b> Stoke Mandeville – Masson Research Award, Stoke Mandeville Spinal Research Trust, Stoke Mandeville Hospital, UK</p> <p><b>Other information</b> None</p>

N: number; p: page

## Clinical evidence tables for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?

**Table 19: Clinical evidence tables**

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
<p><b>Full citation</b> Wharewera-Mika, Julie, Cooper, Erana, Kool, Bridget, Pereira, Susana, Kelly, Patrick, Aitken, Anderson Arango-Lasprilla Arlidge Ashton Bedell Braun Bronfenbrenner Bull Byard Carnwath Clark Couch Durie Durie Ergh Feigin Fisher Friedmann Gan Gergen Gracey Guest Heather Jackson Jayawant Jones Keenan Kelly Kelly King Kiro Kraus Kurowski Langlois Lawson-Te Aho Makaroff Marsh McKinlay Ormond Parks Parslow Ponsford Rivara Robson Saltapidas Schwartz Serio Slomine Von Korff Wade Wade Wade Wagner Wells, Caregivers' voices: The experiences of caregivers of children who sustained serious accidental and non-accidental head injury in early childhood, <i>Clinical Child Psychology and Psychiatry</i>, 21, 268-286, 2016</p> <p><b>Ref Id</b> 1111677</p> <p><b>Country/ies where the study was carried out</b> New Zealand</p>	<p><b>Recruitment strategy</b> Caregivers of children who had suffered an accidental or non-accidental structural head injury (i.e., skull fracture, intracranial haemorrhage or cerebral injury reported on computerised tomography or magnetic resonance imaging scan) under the age of 2 years, residing in Auckland and contactable by telephone. The child had to be aged &gt;3 years old when that study commenced. "Head injury cases were identified from the Trauma Registry (2000–2010) and Child Protection (1992–2010) databases at Starship Children's Hospital, the paediatric neurosurgical centre for the Auckland region (population: 1.4 million)." (p. 270)</p> <p><b>Setting</b> See "Recruitment strategy"</p> <p><b>Participant characteristics</b> N=21 caregivers (16 females/5 males) of 15 children (13 of whom had suffered non-accidental head injury); mother (n=9), father (n=3), grandparent (n=4), other (n=5); 11 Maori/10 non-Maori; time since injury 2-5 years (n=2), 5-10 years (n=5), &gt;10 years (n=8)</p> <p><b>Data collection and analysis</b> Semi-structured interviews. Thematic analysis as per Braun and Clarke</p>	<p><b>Findings (including author's interpretation)</b></p> <ul style="list-style-type: none"> <li>• Author theme: Experiences of support (negative experiences-communication): <ul style="list-style-type: none"> <li>○ "All we had was a lot of therapists telling me what to do. I remember at the very first meeting I was so angry at all of them, and it was such an awkward meeting 'cause they (could) tell I was angry . . . with people telling you how to teach him to eat, to dress and more from that role, but not asking me 'what did we want?' (004)" (p. 278)</li> </ul> </li> <li>• Author theme: Recommendations for better care – effective communication: <ul style="list-style-type: none"> <li>○ ". . . just need to stay</li> </ul> </li> </ul>	<p><b>1. Was there a clear statement of the aims of the research? (Yes/Can't tell/No)</b> Yes ("to explore the experiences of caregivers of a child following serious head injury before the age of 2 years." p. 270)</p> <p><b>2. Is a qualitative methodology appropriate? (Yes/Can't tell/No)</b> Yes</p> <p><b>3. Was the research design appropriate to address the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>4. Was the recruitment strategy appropriate to the aims of the research? (Yes/Can't tell/No)</b> Yes</p> <p><b>5. Was the data collected in a way that addressed the research issue? (Yes/Can't tell/No)</b> Can't tell (E.g., no mention of data saturation)</p> <p><b>6. Has the relationship between researcher and participants been adequately considered? (Yes/Can't tell/No)</b> Can't tell (No information reported regarding the potential influence of the researchers on the findings)</p> <p><b>7. Have ethical issues been taken into consideration? (Yes/Can't tell/No)</b> Yes (Ethical approval granted from the Health and</p>

Study details	Methods and participants	Results	Risk of bias assessment using the CASP qualitative checklist
<p><b>Study type</b> General qualitative enquiry</p> <p><b>Study dates</b> Not reported</p>	<p>(Braun, V., &amp; Clarke, V. (2006). Using thematic analysis in psychology. <i>Qualitative Research in Psychology</i>, 3, 77–101.)</p>	<p>on top with communication. If his difficulties are discussed then they can be resolved, that's what I've found in the past. (012)" (p. 278)</p> <ul style="list-style-type: none"> <li>○ Authors relate both of these quotes to communication.</li> </ul>	<p>Disability Ethics Committee (NTX/11/EXP/149).</p> <p><b>8. Was the data analysis sufficiently rigorous? (Yes/Can't tell/No)</b> Yes</p> <p><b>9. Is there a clear statement of findings? (Yes/Can't tell/No)</b> Yes</p> <p><b>10. How valuable is the research?</b> Limited value for the current question</p> <p><b>Overall methodological limitations (No or minor/Minor/Moderate/Serious)</b> Minor</p> <p><b>Source of funding</b> "Bridget Kool's time on this project was supported by an Auckland Medical Research Foundation Post-Doctoral Fellowship. Research expenses for this study were covered by a Performance-Based Research Fund grant awarded to Bridget Kool by the University of Auckland. Dr Pereira's time as Child Protection Fellow and the supermarket vouchers were funded by the Starship Foundation." (p. 282-3)</p> <p><b>Other information</b> None</p>

N: Number

## Appendix E – Forest plots

### **Forest plots for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

No meta-analyses were performed as only 1 study was included

### **Forest plots for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

No meta-analyses were performed as no evidence was included

### **Forest plots for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

Not applicable as this was a qualitative question

### **Forest plots for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

Not applicable as this was a qualitative question

## Appendix F – GRADE tables

### GRADE tables for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?

**Table 110: Clinical evidence profile for consultation versus no consultation for adults with complex rehabilitation needs after traumatic injury**

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Consultation	No consultation	Relative (95% CI)	Absolute		
<b>Activities of daily living at acute hospital discharge: FIM locomotion (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sub>3</sub>	none	520 <sup>4</sup>	1346 <sup>4</sup>	OR 15.97 (12.35-20.65) <sup>5</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM locomotion (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sub>3</sub>	none	520 <sup>6</sup>	1346 <sup>6</sup>	OR 2.44 (1.7-3.49) <sup>7,8</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM transfer (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sub>3</sub>	none	520 <sup>4</sup>	1346 <sup>4</sup>	OR 16.67 (12.87-21.55) <sup>5</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM transfer (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sub>3</sub>	none	520 <sup>6</sup>	1346 <sup>6</sup>	OR 2.39 (1.67-3.42) <sup>7,8</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM expression (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sub>3</sub>	none	520 <sup>4</sup>	1346 <sup>4</sup>	OR 15.19 (10.45-22.08) <sup>5</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM expression (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sub>3</sub>	none	520 <sup>6</sup>	1346 <sup>6</sup>	OR 1.74 (1.01-2.98) <sup>7,8</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM feed (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												

DRAFT FOR CONSULTATION

Identification and assessment of rehabilitation needs after traumatic injury

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Consultation	No consultation	Relative (95% CI)	Absolute		
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sup>3</sup>	none	520 <sup>4</sup>	1346 <sup>4</sup>	OR 9.77 (7.26-13.17) <sup>5</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM feed (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sup>3</sup>	none	520 <sup>6</sup>	1346 <sup>6</sup>	Not reported <sup>7,9</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM social (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sup>3</sup>	none	520 <sup>4</sup>	1346 <sup>4</sup>	OR 16.67 (11.4-24.4) <sup>5</sup>	Not estimable	LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM social (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sup>3</sup>	none	520 <sup>6</sup>	1346 <sup>6</sup>	OR 2.39 (1.38-4.14) <sup>7,8</sup>	Not estimable	LOW	CRITICAL
<b>Length of acute hospital stay (unadjusted) (Better indicated by lower values)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sup>3</sup>	none	520	1346	Not estimable <sup>10</sup>	Consultation: Mean 11.85 days; No consultation: Mean 2.47 days	LOW	CRITICAL
<b>Length of acute hospital stay (adjusted)</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sup>3</sup>	none	520 <sup>11</sup>	1346 <sup>11</sup>	Coefficient 0.13 <sup>12</sup>	Not estimable	LOW	CRITICAL
<b>Discharge destination</b>												
1 (Wagner 2003)	observational studies	serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sup>3</sup>	none	520	1346	<u>Home (%)</u> Consultation 25.4; No consultation 88.9 <u>Psychiatric (%)</u> Consultation 1; No consultation 0.9 <u>Rehabilitation (%)</u> Consultation 57.5; No consultation 3.6 <u>Skilled nursing facility/subacute rehabilitation (%)</u> Consultation 12.7; No consultation 1.7 <u>Other (%)</u> Consultation 3.4; No consultation 4.8 <sup>13</sup>		LOW	CRITICAL

CI: Confidence interval; FIM: Functional independence measure; OR: Odds ratio; SD: Standard deviation

<sup>1</sup> Study at moderate risk of bias according to ROBINS-I

<sup>2</sup> Study dates (January 1999-December 2000) spanned the date cut-off in review protocol (2000)

<sup>3</sup> Imprecision could not be assessed using MIDAs as the study mainly reported ORs and not enough raw data to convert them to relative risks. Imprecision was instead assessed using the sample size: The result was not downgraded if  $n \geq 400$ , if  $n = 399-200$ , the result was downgraded 1 level, and if  $n < 200$  the result was downgraded by 2 levels.

<sup>4</sup>  $N$  = total number of participants in study group. Not all were included in the analyses, but it is not reported how many in each group was not included. The total number of participants in the study = 1866, and 1799 were included in these analyses across the intervention groups.

<sup>5</sup> Unadjusted FIMs: "Those who received a PM&R consult had significantly worse acute discharge modified FIM scores within each functional domain evaluated compared with those not receiving a consult." (p. 528)

<sup>6</sup>  $N$  = total number of participants in study group. Not all were included in the analyses, but it is not reported how many in each group was not included. The total number of participants in the study = 1866, and 1669 were included in these analyses across the intervention groups.

<sup>7</sup> Adjusted for age, physiotherapy consult, complications, injury severity score, gender, Glasgow coma scale, and length of stay

<sup>8</sup> Adjusted FIMs: Patients who received a PM&R consult had significantly worse transfers, locomotion, expression and social interaction, but not feed scores at acute discharge.

<sup>9</sup> Not reported, but the authors do report that "Receipt of PM&R consultation was not related to mFIM feeding in multivariate analysis." (p. 530)

<sup>10</sup> SDs not reported;  $p < 0.001$  Student's  $t$  test.

<sup>11</sup>  $N$  = total number of participants in study group. Not all were included in the analyses, but it is not reported how many in each group was not included. The total number of participants in the study = 1866, and 1738 were included in these analyses across the intervention groups.

<sup>12</sup> The measure given is a standard coefficient from the multivariate analysis, which was significant at  $p < 0.001$ , and adjusted for age, physiotherapy consult, complications, premorbid conditions, injury severity score, Glasgow coma scale, primary payor source, and discharge destination

<sup>13</sup> "a significantly higher proportion of the population receiving a PM&R consult were discharged to either an acute rehabilitation program, a subacute rehabilitation program, or skilled nursing facility ( $P < 0.001$  for all comparisons)." (p. 530)

**Table 6: Clinical evidence profile for consultation  $\geq 48$  hours versus  $< 48$  hours after admission for adults with complex rehabilitation needs after traumatic injury**

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Consultation $\leq 48$ hours	Consultation $> 48$ hours	Relative (95% CI)	Absolute		
<b>Activities of daily living at acute hospital discharge: FIM locomotion (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sup>3</sup>	none	229 <sup>4</sup>		OR 3.76 (1.61-8.47) <sup>5</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM locomotion (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sup>3</sup>	none	214 <sup>4</sup>		OR 3.54 (1.34-9.32) <sup>6,7</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM transfer (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sup>3</sup>	none	229 <sup>4</sup>		OR 2.86 (1.3-6.31) <sup>5</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM transfer (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational	very	no serious	serious <sup>2</sup>	serious	none	213 <sup>4</sup>		OR 2.61 (1.06-6.4) <sup>6,7</sup>	Not estimable	VER	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Consultation ≤ 48 hours	Consultation > 48 hours	Relative (95% CI)	Absolute		
	all studies	serious <sup>1</sup>	inconsistency		imprecision <sub>3</sub>						VERY LOW	LOW
<b>Activities of daily living at acute hospital discharge: FIM expression (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sub>3</sub>	none	229 <sup>4</sup>		OR 1.69 (1-2.86) <sup>5</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM expression (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sub>3</sub>	none	Not reported <sup>8</sup>		Not reported <sup>6,9</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM feed (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sub>3</sub>	none	229 <sup>4</sup>		OR 1.21 (0.72-2.03) <sup>5</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM feed (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sub>3</sub>	none	Not reported <sup>8</sup>		Not reported <sup>6,9</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM social (unadjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sub>3</sub>	none	229 <sup>4</sup>		OR 1.51 (0.9-2.55) <sup>5</sup>	Not estimable	VERY LOW	CRITICAL
<b>Activities of daily living at acute hospital discharge: FIM social (adjusted; scores of 1-3 [required assistance] versus 4 [independent]; higher is better)</b>												
1 (Wagner 2003)	observational studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sub>3</sub>	none	Not reported <sup>8</sup>		Not reported <sup>6,9</sup>	Not estimable	VERY LOW	CRITICAL
<b>Length of acute hospital stay (adjusted)</b>												
1 (Wagner 2003)	observational studies	serious <sup>10</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision <sub>3</sub>	none	465 <sup>4</sup>		Coefficient 0.157 <sup>11,12</sup>	Not estimable	LOW	CRITICAL
<b>Discharge destination</b>												
1 (Wagner 2003)	observational studies	serious <sup>10</sup>	no serious inconsistency	serious <sup>2</sup>	serious imprecision <sub>3</sub>	none	388 <sup>13</sup>		Not reported <sup>14</sup>		VERY LOW	CRITICAL

OR: Odds ratio; SD: Standard deviation

<sup>1</sup> Study at serious risk of bias according to ROBINS-I

<sup>2</sup> Study dates (January 1999-December 2000) spanned the date cut-off in review protocol (2000)

<sup>3</sup> Imprecision could not be assessed using MIDs as the study mainly reported ORs and not enough raw data to convert them to relative risks. Imprecision was instead assessed using the sample size: The result was not downgraded if  $n \geq 400$ , if  $n = 399-200$ , the result was downgraded 1 level, and if  $n < 200$  the result was downgraded by 2 levels.

<sup>4</sup>  $N$  = total number of participants in analysis. It is not reported how many in each group were included. The total number of participants in the study = 520 across the intervention groups.

<sup>5</sup> Unadjusted FIMs: "for those receiving a PM&R consult, earlier time to consultation was associated with higher modified FIM scores for the FIM transfers and FIM locomotion subscales." (p. 530)

<sup>6</sup> Adjusted for age, days to physiotherapy consult, gender, Glasgow coma scale, and length of stay

<sup>7</sup> Adjusted FIMs: "Earlier time to PM&R consult was significantly related to higher modified FIM transfer and FIM locomotion scores at the time of acute care discharge." (p. 531)

<sup>8</sup> Total number of patients in the analyses not reported

<sup>9</sup> OR not reported, but authors report it is non-significant

<sup>10</sup> Study at moderate risk of bias according to ROBINS-I

<sup>11</sup> Adjusted for age, complications, number of days until physiotherapy consult, injury severity score, Glasgow coma scale, and discharge destination

<sup>12</sup> Standard coefficient;  $p < 0.001$ , favouring shorter time to PM&R consultation, i.e.,  $\geq 48$  hours to PM&R consultation associated with longer length of stay

<sup>13</sup> Unclear how many participants included in the analyses.

<sup>14</sup> "of those unable to be discharged home, earlier PM&R consultation was not associated with any differences in actual discharge disposition based on X2 analysis. Discharge destination did not significantly impact either acute outcomes or LOS [length of acute hospital stay] in the multivariate analyses and, therefore, did not confound the relationship between early PM&R consultation and these endpoints studied." (p. 532)

## GRADE tables for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?

No evidence was identified which was applicable to this review question

## GRADE tables for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?

Table 16: Summary of evidence (GRADE-CERQual): Initial and/or ongoing assessment of rehabilitation needs

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				Overall Confidence
Number of studies	Design (No. of studies)		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	
<b>Routine psychological screening in hospital</b>							
2 <sup>1</sup>	Semi-structured interviews (2)	Patients felt that the emphasis was on their physical rather than psychological needs whilst in hospital and that they would benefit from routine psychological	Minor concerns <sup>2</sup>	No or very minor concerns	Minor concerns <sup>3</sup>	Serious concerns <sup>4</sup>	LOW

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				
Number of studies	Design (No. of studies)		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	Overall Confidence
		<p>screening whilst still in hospital.</p> <p>“there needed to be more emphasis on the mental side, I needed to talk to someone ... people need to talk about it ... get their feelings out (P10).” (Jannings 2012, p. 1824)</p>					
<b>Take into account relatives' opinions</b>							
1 (Guldager 2019)	Participant observations and semi-structured interviews	<p>Relatives who spent a lot of time with the patient were keen to share their observations about the patient with the health care staff and have those taken into account in terms of rehabilitation plans.</p> <p>“I was absolutely sure that behind the filter, he was present. And there was none of the staff seeing it. So that part I felt was totally frustrating and I felt like I should fight for his rights. I think I should fight and tell them what I was observing looking through the filter that they did not see. (relative ID 5)” (Guldager 2019, p 294)</p>	Minor concerns <sup>2</sup>	Moderate concerns <sup>5</sup>	Moderate concerns <sup>6</sup>	Serious concerns <sup>4</sup>	VERY LOW
<b>Access to/provision of longer term specialised follow up</b>							
3 <sup>7</sup>	Semi-structured interviews (3), discussion groups (1)	<p>Patients expressed their need/requests for opportunities to discuss their ongoing health care/rehabilitation needs with specialists both when and after leaving hospital, either through patient- or health care professional-initiated contact.</p> <p>“This is an ongoing process.</p>	Minor concerns <sup>2</sup>	No or very minor concerns	Moderate concerns <sup>8</sup>	Moderate concerns <sup>9</sup>	LOW

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				
Number of studies	Design (No. of studies)		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	Overall Confidence
		Support for let's say over a period of three years from the accident, so that you achieve the objective of whatever potential you have." (Jannings 2012, p. 1824)					

1 Beaton 2019; Jannings 2012.

2 The methodological limitations of the study/studies were minor as per the CASP qualitative study checklist, and not of sufficient severity to warrant downgrading.

3 The studies included data from patients with spinal cord injury and patients injured with a blunt trauma mechanism. Although these patients did not cover the entire target population, the theme was applicable to a broad spectrum of patients and downgrading for applicability was therefore not warranted.

4 Evidence was downgraded 2 levels for adequacy of data, as none of the studies' primary objective was to examine the phenomenon of interest in the target population, thus offering poor data.

5 Evidence was downgraded for coherence of findings, as the findings were only reported by one of the identified types of relatives in the study ("the warrior" and not "the observant" or "the hesitant").

6 Evidence was downgraded for applicability, as the findings were only reported by relatives of people with severe traumatic brain injury with impaired consciousness.

7 Jannings 2012; Lefebvre 2012; Thrussell 2018.

8 Evidence was downgraded for applicability as the studies only reported indirectly on phenomenon of interest (assessment of rehabilitation needs), by reporting on follow-up.

Moreover, this theme was more about the request for specialised follow-up rather than views and preferences about the phenomenon of interest.

9 Evidence was downgraded 1 level for adequacy of data, because even though all 3 studies generally agreed on this theme, none of the studies' primary objective was to examine the phenomenon of interest in the target population, thus offering poor data.

**GRADE tables for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

**Table 17: Summary of evidence (GRADE-CERQual): Initial and/or ongoing assessment of rehabilitation needs**

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				
Number of studies	Design (No. of studies)		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	Overall Confidence
<b>Take into account caregivers' opinions</b>							
1 (Whareweda-Mika 2016)	Semi-structured interviews	Caregivers wanted to be asked about how they wanted to address their child's needs  "All we had was a lot of therapists telling me what to do. I remember	Minor concerns <sup>1</sup>	No or very minor concerns	Moderate concerns <sup>2</sup>	Serious concerns <sup>3</sup>	LOW

Study information		Description of Theme or Finding	CERQUAL Quality Assessment				
Number of studies	Design (No. of studies)		Methodological Limitations	Coherence of findings	Applicability of evidence	Adequacy of Data	Overall Confidence
		at the very first meeting I was so angry at all of them, and it was such an awkward meeting 'cause they (could) tell I was angry . . . with people telling you how to teach him to eat, to dress and more from that role, but not asking me 'what did we want?' (004)" (Whareweda-Mika 2016, p. 278)					
<b>Discuss the child's needs</b>							
1 (Whareweda-Mika 2016)	Semi-structured interviews	Caregivers felt that their child's needs can be addressed if they are discussed  ". . . just need to stay on top with communication. If his difficulties are discussed then they can be resolved, that's what I've found in the past. (012)" (Whareweda-Mika 2016, p. 278)	Minor concerns <sup>1</sup>	No or very minor concerns	Moderate concerns <sup>2</sup>	Serious concerns <sup>3</sup>	LOW

<sup>1</sup> The methodological limitations of the study were minor as per the CASP qualitative study checklist, and not of sufficient severity to warrant downgrading.

<sup>2</sup> Evidence was downgraded for applicability as the study only reported indirectly on phenomenon of interest (assessment of rehabilitation needs).

<sup>3</sup> Evidence was downgraded 2 levels for adequacy of data, as the study's primary objective was not to examine the phenomenon of interest in the target population, thus offering poor data.

## Appendix G – Economic evidence study selection

### Economic study selection for review questions:

**A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury? What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

**A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

**A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

**A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

*A combined search was conducted for both quantitative review questions.*

*A combined search was conducted for both qualitative review questions which also included the review questions in reviews D3 and D4, as well as the qualitative review questions in reviews D1 and D2.*

### Figure 5: Study selection flow chart: Adult quantitative review

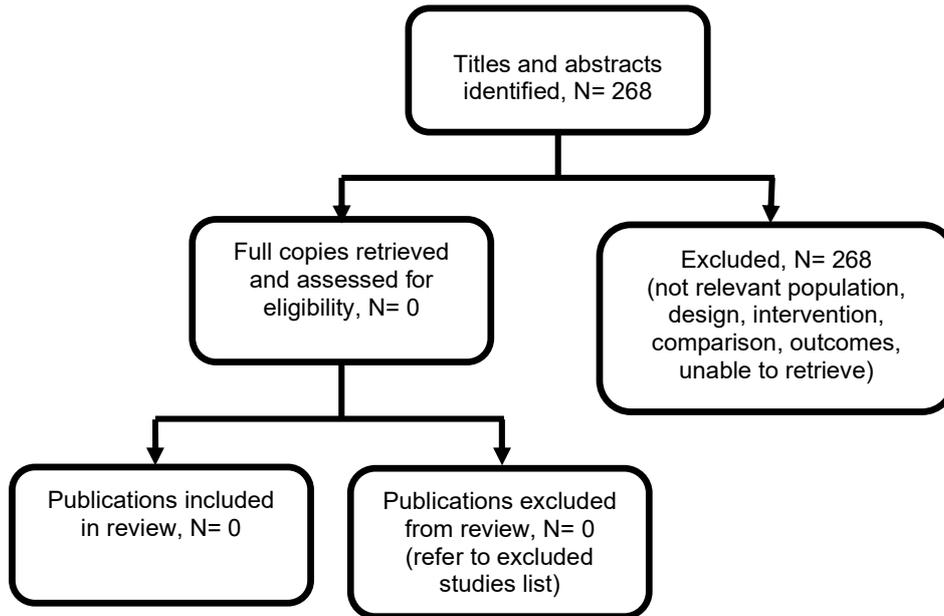
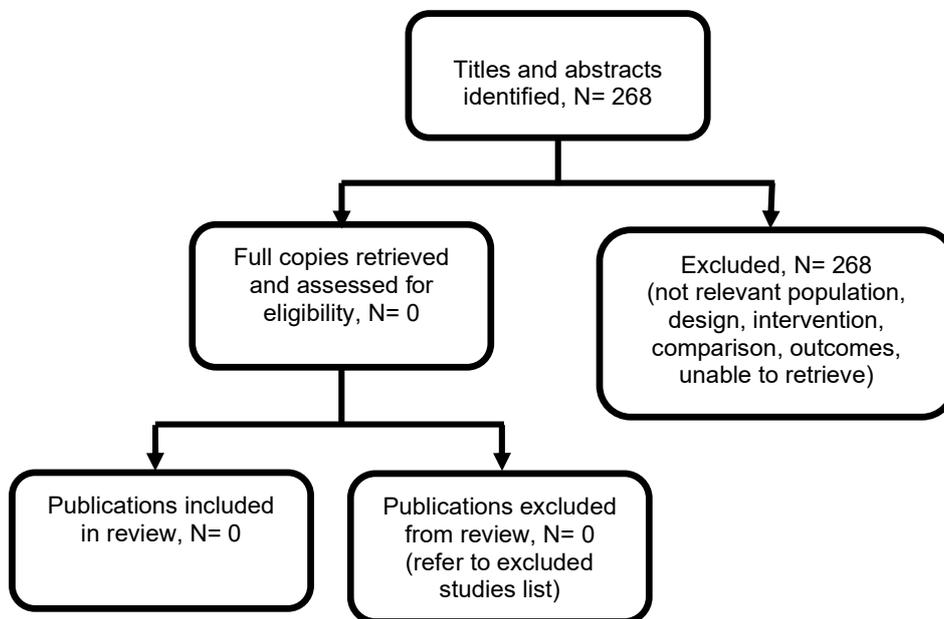
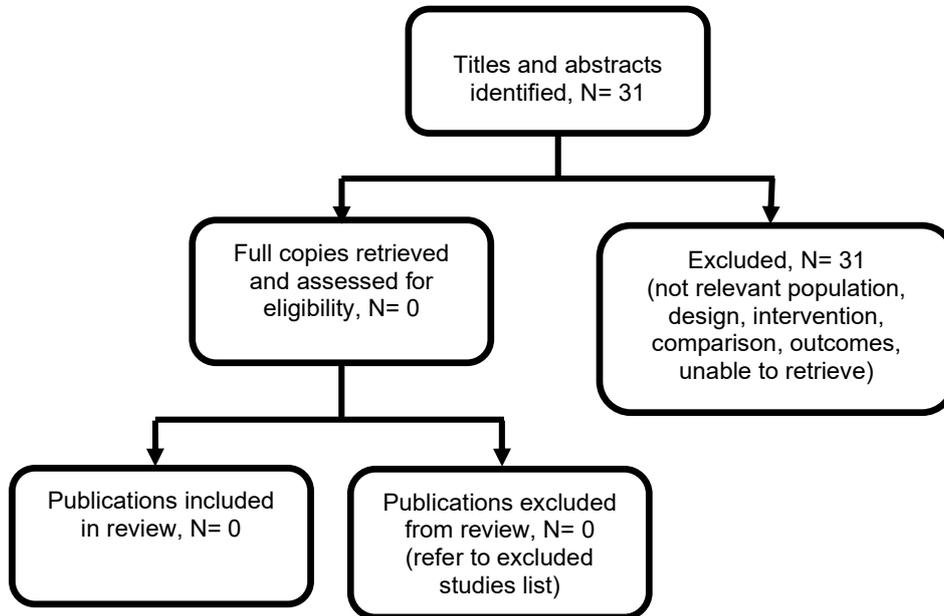


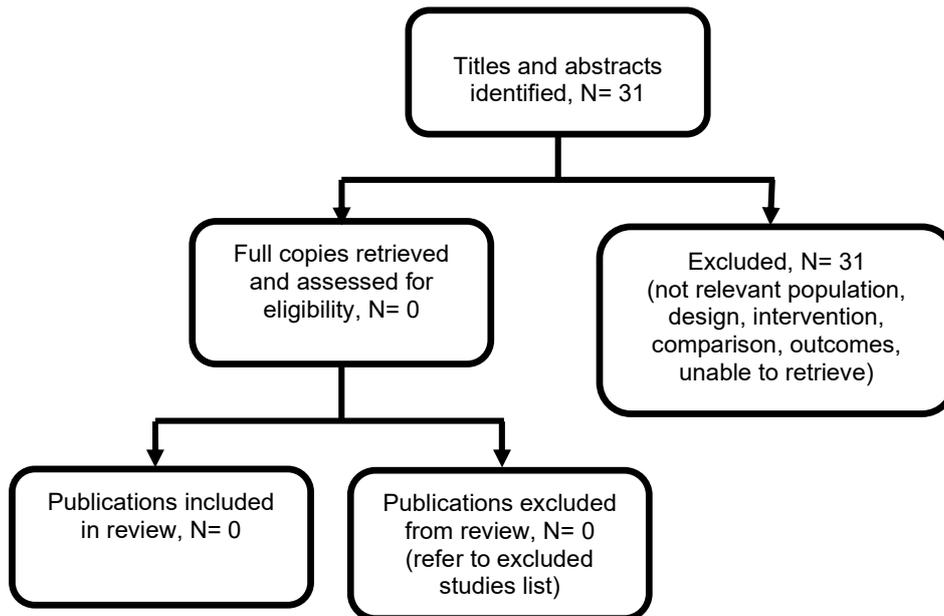
Figure 6: Study selection flow chart: Children and young people quantitative review



**Figure 7: Study selection flow chart on rehabilitation prescription: Adult qualitative review**



**Figure 8: Study selection flow chart rehabilitation prescription: Children and young people qualitative review**



## **Appendix H – Economic evidence tables**

### **Economic evidence tables for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

No economic studies were identified which were applicable to this review question.

### **Economic evidence tables for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

No economic studies were identified which were applicable to this review question.

### **Economic evidence tables for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No economic studies were identified which were applicable to this review question.

### **Economic evidence tables for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No economic studies were identified which were applicable to this review question.

## **Appendix I – Economic evidence profiles**

### **Economic evidence profiles for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

No economic studies were identified which were applicable to this review question.

### **Economic evidence profiles for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young after traumatic injury?**

No economic studies were identified which were applicable to this review question

### **Economic evidence profiles for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No economic studies were identified which were applicable to this review question.

### **Economic evidence profiles for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No economic studies were identified which were applicable to this review question.

## **Appendix J – Economic analysis**

### **Economic evidence tables for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

No economic analysis was undertaken for this review question.

### **Economic evidence tables for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

No economic analysis was undertaken for this review question.

### **Economic evidence tables for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No economic analysis was undertaken for this review question.

### **Economic evidence tables for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No economic analysis was undertaken for this review question.

## Appendix K – Excluded studies

### Excluded clinical and economic studies for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?

#### Clinical studies

**Table 18: Excluded studies and reasons for their exclusion**

Study	Reason for Exclusion
Archer, Kristin R., Mackenzie, Ellen J., Castillo, Renan C., Bosse, Michael J., Leap Study Group, Orthopedic surgeons and physical therapists differ in assessment of need for physical therapy after traumatic lower-extremity injury, <i>Physical therapy</i> , 89, 1337-49, 2009	Study dates not in PICO: 1994-1997
Cao, H., Zhang, Y., Zhe, C., Wang, H., An, L., Effects of early rehabilitation on postoperative healing and complications in patients with spinal cord injuries, <i>International Journal of Clinical and Experimental Medicine</i> , 12, 658-663, 2019	Comparison not in PICO: Receipt of rehabilitation <30 days versus >30 days after surgery
Dunn, A. L., Boylston, M., Practitioner, N., Dunn, A., The institution of a rehabilitation transitional care program can significantly decrease readmission rates to the acute care hospital from the acute inpatient rehabilitation unit, <i>PM and R</i> , 9, S179, 2017	Conference abstract
Edwards, Mary M., Baptiste, Sue, The HIPPA consultation and rehabilitation team: developing a streamlined service and its implications for work processes, <i>Work (Reading, Mass.)</i> , 23, 23-9, 2004	Narrative review/ contains no data
Elgmark Andersson, E., Emanuelson, I., Bjorklund, R., Stalhammar, D. A., Mild traumatic brain injuries: the impact of early intervention on late sequelae. A randomized controlled trial, <i>Acta neurochirurgica</i> , 149, 151-160, 2007	Patients and intervention not in PICO: Patients with mild uncomplicated head injury receiving targeted rehabilitation 2-8 weeks after injury.
Faux, S. G., Kohler, F., Mozer, R., Klein, L. A., Courtenay, S., D'Amours, S. K., Chapman, J., Estell, J., The ROARI project - Road Accident Acute Rehabilitation Initiative: a randomised clinical trial of two targeted early interventions for road-related trauma, <i>Clinical rehabilitation</i> , 29, 639-52, 2015	Mixed population, < 70% admitted to hospital; analyses not reported separately for the target population
Flikweert, E. R., Izaks, G. J., Knobben, B. A., Stevens, M., Wendt, K., The development of a comprehensive multidisciplinary care pathway for patients with a hip fracture: design and results of a clinical trial, <i>BMC Musculoskeletal Disorders</i> , 15, 188, 2014	Comparison not in PICO: Comprehensive care pathway versus standard care. The different interventions differed in many ways, not just in terms of assessment.
Fox, M. T., Sidani, S., Persaud, M., Tregunno, D., Maimets, I., Brooks, D., O'Brien, K., Acute care for elders components of acute geriatric unit care: Systematic descriptive review, <i>Journal of the American Geriatrics Society</i> , 61, 939-946, 2013	Systematic review, included studies checked for relevance.
Fox, Mary T., Persaud, Malini, Maimets, Ilo, O'Brien, Kelly, Brooks, Dina, Tregunno, Deborah, Schraa, Ellen, Effectiveness of acute geriatric unit care using	Systematic review, include studies checked for relevance

Study	Reason for Exclusion
acute care for elders components: a systematic review and meta-analysis, <i>Journal of the American Geriatrics Society</i> , 60, 2237-45, 2012	
Gonzalez-Montalvo, Juan I., Alarcon, Teresa, Mauleon, Jose L., Gil-Garay, Enrique, Gotor, Pilar, Martin-Vega, Alberto, The orthogeriatric unit for acute patients: a new model of care that improves efficiency in the management of patients with hip fracture, <i>Hip international : the journal of clinical and experimental research on hip pathology and therapy</i> , 20, 229-35, 2010	Non-randomised study; compares two models of care for hip fracture patients; unclear how assessment of rehabilitation needs are conducted (if at all)
Hoffman, K., Silvester, L., Nott, P., Goodfellow, T., Richardson, D., Wolstenholme, S., Turnbull, J., Jenks, T., One year on: Preliminary evaluation of the major trauma rehabilitation prescription within the London trauma system, <i>Trauma (United Kingdom)</i> , 17, 314, 2015	Conference abstract
Hoffman, K., Silvester, L., Nott, P., Goodfellow, T., Richardson, D., Wolstenholme, S., Turnbull, J., Jenks, T., Brohi, K., Evaluation of the value of rehabilitation prescriptions within four major trauma hospitals, <i>Physiotherapy (United Kingdom)</i> , 101, eS584, 2015	Conference abstract
Javemick, Matthew A., Doukas, William C., Process of care for battle casualties at Walter Reed Army Medical Center: Part I. Orthopedic surgery service, <i>Military medicine</i> , 171, 200-2, 2006	Narrative review
Lau, T. W., Fang, C., Leung, F., The Effectiveness of a Geriatric Hip Fracture Clinical Pathway in Reducing Hospital and Rehabilitation Length of Stay and Improving Short-Term Mortality Rates, <i>Geriatric Orthopaedic Surgery and Rehabilitation</i> , 4, 3-9, 2013	Comparison not in PICO: After implementation of a clinical pathway for hip fracture patients versus before implementation. The clinical pathway consisted of mainly non-rehabilitation-based assessments, e.g., pre-operative work-up.
Lau, T. W., Leung, F., Siu, D., Wong, G., Luk, K. D. K., Geriatric hip fracture clinical pathway: The Hong Kong experience, <i>Osteoporosis International</i> , 21, S627-S636, 2010	Non-comparative study
Leigheb, Fabrizio, Vanhaecht, Kris, Sermeus, Walter, Lodewijckx, Cathy, Deneckere, Svin, Boonen, Steven, Boto, Paulo A., Mendes, Rita Veloso, Panella, Massimiliano, The effect of care pathways for hip fractures: a systematic overview of secondary studies, <i>European journal of orthopaedic surgery &amp; traumatology : orthopedie traumatologie</i> , 23, 737-45, 2013	Systematic review, included studies checked for relevance
Machado, W. C., Silva, V. M., Silva, R. A., Ramos, R. L., Figueiredo, N. M., Branco, E. M., Rezende, L. K., Carreiro, M. A., Hospital discharge of patients with disabling neurological injury: necessary referrals to rehabilitation, <i>Ciencia &amp; saude coletiva</i> , 21, 3161-3170, 2016	Population not in PICO: Doctors and nurses.
Malec, J. F., Eicher, V. L., Stephanie, A. K. H., Murphy, M. P., Ambush-Mansfield, C., Therapy intensity, functional change, and progress measurement utilizing the Mayo Portland adaptability inventory (MPAI-4), and the Supervision Rating Scale	Conference abstract

Study	Reason for Exclusion
(SRS) in post- acute brain injury rehabilitation, Brain Injury, 24, 287-288, 2010	
McIlvoy, L., Spain, D. A., Raque, G., Vitaz, T., Boaz, P., Meyer, K., Successful incorporation of the Severe Head Injury Guidelines into a phased-outcome clinical pathway, The Journal of neuroscience nursing : journal of the American Association of Neuroscience Nurses, 33, 72-82, 2001	Non-randomised study, n<100 in each group.
Olsson, L. E., Hansson, E., Ekman, I., Karlsson, J., A cost-effectiveness study of a patient-centred integrated care pathway, Journal of Advanced Nursing, 65, 1626-1635, 2009	Non-randomised study, n= 112
Pareja-Sierra, T., Rodriguez-Solis, J., Hornillos-Calvo, M., Bassy-Iza, N., Bartolome-Martin, I., Barcena-Goitiandia, L., Impact and cost effectiveness of geriatric intervention in elderly patients with acute hip fracture in University Hospital of Guadalajara, Spain: Twelve years experience, Journal of the American Geriatrics Society, 64, S84, 2016	Conference abstract
Patel, Nirav K., Sarraf, Khaled M., Joseph, Sarah, Lee, Chooi, Middleton, Fiona R., Implementing the National Hip Fracture Database: An audit of care, Injury, 44, 1934-9, 2013	Comparison not in PICO: Comparison of two time periods after care pathway implementation, without change in care pathway.
Poulos, Christopher J., Magee, Christopher, Bashford, Guy, Eagar, Kathy, Determining level of care appropriateness in the patient journey from acute care to rehabilitation, BMC health services research, 11, 291, 2011	Non-randomised study, n=142
Prather, Heidi, Physiatry serves an important role in the acute care of patients: disability prevention!, PM & R : the journal of injury, function, and rehabilitation, 4, 469-72, 2012	Narrative review/non-comparative study/invited perspective
Prestmo, A., Sletvold, O., Thingstad, P., Taraldsen, K., Johnsen, L. G., Helbostad, J., Saltvedt, I., Outcomes of activities of daily living, cognition and mobility in the Trondheim Hip Fracture Trial. A randomized controlled trial, European Geriatric Medicine, 3, S56, 2012	Conference abstract
Reynolds, W. E., Page, S. J., Johnston, M. V., Coordinated and adequately funded state streams for rehabilitation of newly injured persons with tbi, The Journal of Head Trauma Rehabilitation, 16, 34-46, 2001	Interview study about medicaid availability for traumatic brain injury.
Roy, Christopher W., Thornhill, Sharon, Teasdale, Graham M., Identification of rehabilitation problems after head injury, Brain Injury, 16, 1057-63, 2002	Non-randomised study, n=26
Shyu, Y. I. L., Liang, J., Wu, C. C., Su, J. Y., Cheng, H. S., Chou, S. W., Chen, M. C., Yang, C. T., Tseng, M. Y., Two-year effects of interdisciplinary intervention for hip fracture in older taiwanese, Journal of the American Geriatrics Society, 58, 1081-1089, 2010	Comparison not in PICO: Interdisciplinary intervention (including assessment by geriatrician and rehabilitation physician, physiotherapy, visits by geriatric nurse and discharge planning) versus usual care (which did not include assessment, but also varied in physiotherapy and other intervention input)
Simpson, G., Mitsch, V., Doyle, M., Forman, M., Young, D., Solomon, V., Macpherson, M., Gillett, L., Strettlles, B., Investigating the model of community-	Intervention, comparison and outcomes not in PICO: Comparison between different community-based services in terms of their

Study	Reason for Exclusion
based case management in the New South Wales brain injury rehabilitation program: A prospective multicenter study, <i>Journal of Head Trauma Rehabilitation</i> , 33, E38-E48, 2018	roles and time allocations,
Singh, Rajiv, Venkateshwara, Guruprasad, Kirkland, John, Batterley, Julie, Bruce, Sarah, <i>Clinical pathways in head injury: improving the quality of care with early rehabilitation</i> , <i>Disability and Rehabilitation</i> , 34, 439-42, 2012	Non-comparative study, n=128
Smyth, C., Dubin, S., Restrepo, A., Nueva-Espana, H., Capezuti, E., <i>Creating order out of chaos: models of GNP practice with hospitalized older adults</i> , <i>Clinical excellence for nurse practitioners : the international journal of NPACE</i> , 5, 88-95, 2001	Narrative review
Soderqvist, Anita, Stromberg, Lars, Ponzer, Sari, Tidermark, Jan, <i>Documenting the cognitive status of hip fracture patients using the Short Portable Mental Status Questionnaire</i> , <i>Journal of clinical nursing</i> , 15, 308-14, 2006	Intervention not in PICO: Assessment of cognitive status only.
Togher, L., Wiseman-Hakes, C., Douglas, J., Stergiou-Kita, M., Ponsford, J., Teasell, R., Bayley, M., Turkstra, L. S., <i>INCOG recommendations for management of cognition following traumatic brain injury, Part IV: Cognitive communication</i> , <i>Journal of Head Trauma Rehabilitation</i> , 29, 353-368, 2014	Guideline on cognitive rehabilitation in traumatic brain injury
Tomaschek, R., Gemperli, A., Rupp, R., Geng, V., Scheel-Sailer, A., <i>A systematic review of outcome measures in initial rehabilitation of individuals with newly acquired spinal cord injury: providing evidence for clinical practice guidelines</i> , <i>European journal of physical and rehabilitation medicine</i> , 2019	Systematic review, included studies checked for relevance.
Vikane, E., Skouen, J. S., <i>A multidisciplinary treatment by patients with mild traumatic brain injury</i> , <i>Brain Impairment</i> , 13, 193, 2012	Conference abstract
Ziden, L., Asplin, G., Kjellby Wendt, G., <i>Early coordinated rehabilitation in acute phase after hip fracture-a new model for increased patient participation, independence and self-confidence</i> , <i>Physiotherapy (United Kingdom)</i> , 101, eS1717-eS1718, 2015	Conference abstract

## Economic studies

All economic studies for this review question were excluded at the initial title and abstract screening stage. See supplementary material D for further information.

## Excluded clinical and economic studies for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?

### Clinical studies

**Table 19: Excluded studies and reasons for their exclusion**

Study	Reason for Exclusion
Archer, Kristin R., Mackenzie, Ellen J., Castillo, Renan C., Bosse, Michael J., Leap Study Group, Orthopedic surgeons and physical therapists differ in assessment of need for physical therapy after traumatic lower-extremity injury, <i>Physical therapy</i> , 89, 1337-49, 2009	Study dates not in PICO: 1994-1997
Cao, H., Zhang, Y., Zhe, C., Wang, H., An, L., Effects of early rehabilitation on postoperative healing and complications in patients with spinal cord injuries, <i>International Journal of Clinical and Experimental Medicine</i> , 12, 658-663, 2019	Comparison not in PICO: Receipt of rehabilitation <30 days versus >30 days after surgery
Dunn, A. L., Boylston, M., Practitioner, N., Dunn, A., The institution of a rehabilitation transitional care program can significantly decrease readmission rates to the acute care hospital from the acute inpatient rehabilitation unit, <i>PM and R</i> , 9, S179, 2017	Conference abstract
Edwards, Mary M., Baptiste, Sue, The HIPP consultation and rehabilitation team: developing a streamlined service and its implications for work processes, <i>Work (Reading, Mass.)</i> , 23, 23-9, 2004	Narrative review/ contains no data
Elgmark Andersson, E., Emanuelson, I., Bjorklund, R., Stalhammar, D. A., Mild traumatic brain injuries: the impact of early intervention on late sequelae. A randomized controlled trial, <i>Acta neurochirurgica</i> , 149, 151-160, 2007	Patients and intervention not in PICO: Patients with mild uncomplicated head injury receiving targeted rehabilitation 2-8 weeks after injury.
Faux, S. G., Kohler, F., Mozer, R., Klein, L. A., Courtenay, S., D'Amours, S. K., Chapman, J., Estell, J., The ROARI project - Road Accident Acute Rehabilitation Initiative: a randomised clinical trial of two targeted early interventions for road-related trauma, <i>Clinical rehabilitation</i> , 29, 639-52, 2015	Mixed population, < 70% admitted to hospital; analyses not reported separately for the target population
Flikweert, E. R., Izaks, G. J., Knobben, B. A., Stevens, M., Wendt, K., The development of a comprehensive multidisciplinary care pathway for patients with a hip fracture: design and results of a clinical trial, <i>BMC Musculoskeletal Disorders</i> , 15, 188, 2014	Comparison not in PICO: Comprehensive care pathway versus standard care. The different interventions differed in many ways, not just in terms of assessment.
Fox, M. T., Sidani, S., Persaud, M., Tregunno, D., Maimets, I., Brooks, D., O'Brien, K., Acute care for elders components of acute geriatric unit care: Systematic descriptive review, <i>Journal of the American Geriatrics Society</i> , 61, 939-946, 2013	Systematic review, included studies checked for relevance.
Fox, Mary T., Persaud, Malini, Maimets, Ilo, O'Brien, Kelly, Brooks, Dina, Tregunno, Deborah, Schraa, Ellen, Effectiveness of acute geriatric unit care using acute care for elders components: a systematic review and meta-analysis, <i>Journal of the American Geriatrics Society</i> , 60, 2237-45, 2012	Systematic review, include studies checked for relevance
Gonzalez-Montalvo, Juan I., Alarcon, Teresa,	Non-randomised study; compares two

Study	Reason for Exclusion
Mauleon, Jose L., Gil-Garay, Enrique, Gotor, Pilar, Martin-Vega, Alberto, The orthogeriatric unit for acute patients: a new model of care that improves efficiency in the management of patients with hip fracture, <i>Hip international : the journal of clinical and experimental research on hip pathology and therapy</i> , 20, 229-35, 2010	models of care for hip fracture patients; unclear how assessment of rehabilitation needs are conducted (if at all)
Hoffman, K., Silvester, L., Nott, P., Goodfellow, T., Richardson, D., Wolstenholme, S., Turnbull, J., Jenks, T., One year on: Preliminary evaluation of the major trauma rehabilitation prescription within the London trauma system, <i>Trauma (United Kingdom)</i> , 17, 314, 2015	Conference abstract
Hoffman, K., Silvester, L., Nott, P., Goodfellow, T., Richardson, D., Wolstenholme, S., Turnbull, J., Jenks, T., Brohi, K., Evaluation of the value of rehabilitation prescriptions within four major trauma hospitals, <i>Physiotherapy (United Kingdom)</i> , 101, eS584, 2015	Conference abstract
Javemick, Matthew A., Doukas, William C., Process of care for battle casualties at Walter Reed Army Medical Center: Part I. Orthopedic surgery service, <i>Military medicine</i> , 171, 200-2, 2006	Narrative review
Lau, T. W., Fang, C., Leung, F., The Effectiveness of a Geriatric Hip Fracture Clinical Pathway in Reducing Hospital and Rehabilitation Length of Stay and Improving Short-Term Mortality Rates, <i>Geriatric Orthopaedic Surgery and Rehabilitation</i> , 4, 3-9, 2013	Comparison not in PICO: After implementation of a clinical pathway for hip fracture patients versus before implementation. The clinical pathway consisted of mainly non-rehabilitation-based assessments, e.g., pre-operative work-up.
Lau, T. W., Leung, F., Siu, D., Wong, G., Luk, K. D. K., Geriatric hip fracture clinical pathway: The Hong Kong experience, <i>Osteoporosis International</i> , 21, S627-S636, 2010	Non-comparative study
Leigheb, Fabrizio, Vanhaecht, Kris, Sermeus, Walter, Lodewijckx, Cathy, Deneckere, Svin, Boonen, Steven, Boto, Paulo A., Mendes, Rita Veloso, Panella, Massimiliano, The effect of care pathways for hip fractures: a systematic overview of secondary studies, <i>European journal of orthopaedic surgery &amp; traumatology : orthopedie traumatologie</i> , 23, 737-45, 2013	Systematic review, included studies checked for relevance
Machado, W. C., Silva, V. M., Silva, R. A., Ramos, R. L., Figueiredo, N. M., Branco, E. M., Rezende, L. K., Carreiro, M. A., Hospital discharge of patients with disabling neurological injury: necessary referrals to rehabilitation, <i>Ciencia &amp; saude coletiva</i> , 21, 3161-3170, 2016	Population not in PICO: Doctors and nurses.
Malec, J. F., Eicher, V. L., Stephanie, A. K. H., Murphy, M. P., Ambush-Mansfield, C., Therapy intensity, functional change, and progress measurement utilizing the Mayo Portland adaptability inventory (MPAI-4), and the Supervision Rating Scale (SRS) in post- acute brain injury rehabilitation, <i>Brain Injury</i> , 24, 287-288, 2010	Conference abstract
McIlvoy, L., Spain, D. A., Raque, G., Vitaz, T., Boaz, P., Meyer, K., Successful incorporation of the Severe	Non-randomised study, n<100 in each group.

Study	Reason for Exclusion
Head Injury Guidelines into a phased-outcome clinical pathway, <i>The Journal of neuroscience nursing : journal of the American Association of Neuroscience Nurses</i> , 33, 72-82, 2001	
Olsson, L. E., Hansson, E., Ekman, I., Karlsson, J., A cost-effectiveness study of a patient-centred integrated care pathway, <i>Journal of Advanced Nursing</i> , 65, 1626-1635, 2009	Non-randomised study, n= 112
Pareja-Sierra, T., Rodriguez-Solis, J., Hornillos-Calvo, M., Bassy-Iza, N., Bartolome-Martin, I., Barcena-Goitiandia, L., Impact and cost effectiveness of geriatric intervention in elderly patients with acute hip fracture in University Hospital of Guadalajara, Spain: Twelve years experience, <i>Journal of the American Geriatrics Society</i> , 64, S84, 2016	Conference abstract
Patel, Nirav K., Sarraf, Khaled M., Joseph, Sarah, Lee, Chooi, Middleton, Fiona R., Implementing the National Hip Fracture Database: An audit of care, <i>Injury</i> , 44, 1934-9, 2013	Comparison not in PICO: Comparison of two time periods after care pathway implementation, without change in care pathway.
Poulos, Christopher J., Magee, Christopher, Bashford, Guy, Eagar, Kathy, Determining level of care appropriateness in the patient journey from acute care to rehabilitation, <i>BMC health services research</i> , 11, 291, 2011	Non-randomised study, n=142
Prather, Heidi, Physiatry serves an important role in the acute care of patients: disability prevention!, <i>PM &amp; R : the journal of injury, function, and rehabilitation</i> , 4, 469-72, 2012	Narrative review/non-comparative study/invited perspective
Prestmo, A., Sletvold, O., Thingstad, P., Taraldsen, K., Johnsen, L. G., Helbostad, J., Saltvedt, I., Outcomes of activities of daily living, cognition and mobility in the Trondheim Hip Fracture Trial. A randomized controlled trial, <i>European Geriatric Medicine</i> , 3, S56, 2012	Conference abstract
Reynolds, W. E., Page, S. J., Johnston, M. V., Coordinated and adequately funded state streams for rehabilitation of newly injured persons with tbi, <i>The Journal of Head Trauma Rehabilitation</i> , 16, 34-46, 2001	Interview study about medicaid availability for traumatic brain injury.
Roy, Christopher W., Thornhill, Sharon, Teasdale, Graham M., Identification of rehabilitation problems after head injury, <i>Brain Injury</i> , 16, 1057-63, 2002	Non-randomised study, n=26
Shyu, Y. I. L., Liang, J., Wu, C. C., Su, J. Y., Cheng, H. S., Chou, S. W., Chen, M. C., Yang, C. T., Tseng, M. Y., Two-year effects of interdisciplinary intervention for hip fracture in older taiwanese, <i>Journal of the American Geriatrics Society</i> , 58, 1081-1089, 2010	Comparison not in PICO: Interdisciplinary intervention (including assessment by geriatrician and rehabilitation physician, physiotherapy, visits by geriatric nurse and discharge planning) versus usual care (which did not include assessment, but also varied in physiotherapy and other intervention input)
Simpson, G., Mitsch, V., Doyle, M., Forman, M., Young, D., Solomon, V., Macpherson, M., Gillett, L., Strettles, B., Investigating the model of community-based case management in the New South Wales brain injury rehabilitation program: A prospective multicenter study, <i>Journal of Head Trauma Rehabilitation</i> , 33, E38-E48, 2018	Intervention, comparison and outcomes not in PICO: Comparison between different community-based services in terms of their roles and time allocations,

Study	Reason for Exclusion
Singh, Rajiv, Venkateshwara, Guruprasad, Kirkland, John, Batterley, Julie, Bruce, Sarah, Clinical pathways in head injury: improving the quality of care with early rehabilitation, Disability and Rehabilitation, 34, 439-42, 2012	Non-comparative study, n=128
Smyth, C., Dubin, S., Restrepo, A., Nueva-Espana, H., Capezuti, E., Creating order out of chaos: models of GNP practice with hospitalized older adults, Clinical excellence for nurse practitioners : the international journal of NPACE, 5, 88-95, 2001	Narrative review
Soderqvist, Anita, Stromberg, Lars, Ponzer, Sari, Tidermark, Jan, Documenting the cognitive status of hip fracture patients using the Short Portable Mental Status Questionnaire, Journal of clinical nursing, 15, 308-14, 2006	Intervention not in PICO: Assessment of cognitive status only.
Togher, L., Wiseman-Hakes, C., Douglas, J., Stergiou-Kita, M., Ponsford, J., Teasell, R., Bayley, M., Turkstra, L. S., INCOG recommendations for management of cognition following traumatic brain injury, Part IV: Cognitive communication, Journal of Head Trauma Rehabilitation, 29, 353-368, 2014	Guideline on cognitive rehabilitation in traumatic brain injury
Tomaschek, R., Gemperli, A., Rupp, R., Geng, V., Scheel-Sailer, A., A systematic review of outcome measures in initial rehabilitation of individuals with newly acquired spinal cord injury: providing evidence for clinical practice guidelines, European journal of physical and rehabilitation medicine, 2019	Systematic review, included studies checked for relevance.
Vikane, E., Skouen, J. S., A multidisciplinary treatment by patients with mild traumatic brain injury, Brain Impairment, 13, 193, 2012	Conference abstract
Wagner, Amy K., Fabio, Tony, Zafonte, Ross D., Goldberg, Gary, Marion, Donald W., Peitzman, Andrew B., Physical medicine and rehabilitation consultation: relationships with acute functional outcome, length of stay, and discharge planning after traumatic brain injury, American journal of physical medicine & rehabilitation, 82, 526-36, 2003	Population not in PICO: Adults
Ziden, L., Asplin, G., Kjellby Wendt, G., Early coordinated rehabilitation in acute phase after hip fracture-a new model for increased patient participation, independence and self-confidence, Physiotherapy (United Kingdom), 101, eS1717-eS1718, 2015	Conference abstract

### Economic studies

All economic studies for this review question were excluded at the initial title and abstract screening stage. See supplementary material D for further information.

## Excluded clinical and economic studies for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?

### Clinical studies

**Table 20: Excluded studies and reasons for their exclusion**

Study	Reason for Exclusion
Aguayo, Miguel O., Coady, Nick F., The experience of defended adults: implications for rehabilitative services, <i>Health and Social Work</i> , 26, 269-276, 2001	Population not in PICO (n=8 deafened adults due to medical (n=2), surgical (n=3), and progressive-idiopathic (n=3) causes
Aitken, L. M., Chaboyer, W., Jeffrey, C., Martin, B., Whitty, J. A., Schuetz, M., Richmond, T. S., Indicators of injury recovery identified by patients, family members and clinicians, <i>Injury</i> , 47, 2655â 2663, 2016	No qualitative data on phenomenon of interest
Aitken, Mary E., Mele, Nancy, Barrett, Kathleen W., Recovery of injured children: parent perspectives on family needs, <i>Archives of Physical Medicine and Rehabilitation</i> , 85, 567-73, 2004	No qualitative data on phenomenon of interest
Albrich, L., Latour, J., Hickson, M., Experiences of intensive care patients following transition to a ward as expressed in online discussion forums: A qualitative study, <i>Journal of the Intensive Care Society</i> , 19, 105-106, 2018	Published as abstract only
Allen, M., Carrougher, G. J., Moore, M., Gibran, N., Pham, T. N., "My first wound care": Needs assessment and development of a targeted educational video for pediatric burn patients, <i>Journal of Burn Care and Research</i> , 39, S118, 2018	Published as abstract only
Amyotte, M., Cameron, J., Reed, N., Keightley, M., Timing is everything: Parents' informational and support needs following their child's sports-related concussion, <i>Brain Injury</i> , 24, 340-341, 2010	Published as abstract only
Andelic, N., Sigurdardottir, S., Arango-Lasprilla, J. C., Godbolt, A. K., Long-term functional and psychosocial consequences and health care provision after traumatic brain injury, <i>Behavioural Neurology</i> , 2016, 2678081, 2016	Editorial
Angel, Sanne, Kirkevold, Marit, Pedersen, Birthe D., Rehabilitation after spinal cord injury and the influence of the professional's support (or lack thereof), <i>Journal of Clinical Nursing</i> , 20, 1713-22, 2011	No qualitative data on phenomenon of interest
Armstrong, E., Missing voices: Aboriginal stories of stroke and traumatic brain injury, <i>International Journal of Stroke</i> , 12, 14, 2017	Published as abstract only
Augutis, Marika, Levi, Richard, Asplund, Kenneth, Berg-Kelly, Kristina, Psychosocial aspects of traumatic spinal cord injury with onset during adolescence: a qualitative study, <i>The journal of spinal cord medicine</i> , 30 Suppl 1, S55-64, 2007	Population injured in 1985-96; outside of inclusion criteria (2000 onwards)
Ayvazian, J., Lucente, J., Dudley-Brown, S., Clinical management of veterans with traumatic brain injury within the context of polytrauma, <i>Journal of Head</i>	Published as abstract only

Study	Reason for Exclusion
Trauma Rehabilitation, Conference, 2012	
Bailey, Thomas R., Patient needs from general practice following a traumatic injury: a qualitative study using narrative interviews with British service personnel, <i>Journal of the Royal Army Medical Corps</i> , 160, 46-51, 2014	No qualitative data on phenomenon of interest
Beaulieu, K., A new conceptual framework to facilitate return to paid work following a brain injury, <i>Brain Injury</i> , 30, 752-753, 2016	Published as abstract only
Beauregard, L., Guindon, A., Noreau, L., Lefebvre, H., Boucher, N., Community needs of people living with spinal cord injury and their family, <i>Topics in Spinal Cord Injury Rehabilitation</i> , 18, 122-125, 2012	Quantitative study
Bloemen-Vrencken, J. H. A., de Witte, L. P., Post-discharge nursing problems of spinal cord injured patients: on which fields can nurses contribute to rehabilitation?, <i>Clinical Rehabilitation</i> , 17, 890-8, 2003	Mixed methods study, with focus on nursing care needs, no qualitative data on phenomenon of interest
Boman, Inga-Lill, Bartfai, Aniko, The first step in using a robot in brain injury rehabilitation: patients' and health-care professionals' perspective, <i>Disability and Rehabilitation. Assistive technology</i> , 10, 365-70, 2015	Population not in PICO (stroke or brain haemorrhage)
Bourke, J. A., Hay-Smith, E. J., Snell, D. L., DeJong, G., Attending to biographical disruption: the experience of rehabilitation following tetraplegia due to spinal cord injury, <i>Disability and Rehabilitation</i> , 37, 296-303, 2015	No qualitative data on phenomenon of interest
Bouwman, Renee, Bomhoff, Manja, Robben, Paul, Friele, Roland, Adams, Ayres Beupert Behr Bismark Bismark Buetow Clwyd Dane Dixon-Woods Francis Francis Friele Friele Friele Grabosky Grabosky Healy Iedema Kruikemeier Kuzel Leidraad Meldingen Levtzion-Korach Ngo Ocloo Ocloo Prosser Rhodes Rhodes Sharpe Sluijs Sorgdrager Tyler Victoor Walshe Wessel, Patients' perspectives on the role of their complaints in the regulatory process, <i>Health Expectations: An International Journal of Public Participation in Health Care &amp; Health Policy</i> , 19, 483-496, 2016	No qualitative data on phenomenon of interest
Braaf, Sandra C., Lennox, Alyse, Nunn, Andrew, Gabbe, Belinda J., Experiences of hospital readmission and receiving formal carer services following spinal cord injury: a qualitative study to identify needs, <i>Disability and Rehabilitation</i> , 40, 1893-1899, 2018	No qualitative data on phenomenon of interest
Breen-Smyth, Marie, Injured and disabled casualties of the Northern Ireland conflict: issues in immediate and long-term treatment, care and support, <i>Medicine, conflict and survival</i> , 29, 244-266, 2013	Population not in PICO (29/30 participants injured before 2000, with 21/30 injured in the 1970s)
Brewster, Luke P., Bennett, Barry K., Gamelli, Richard L., Application of rehabilitation ethics to a selected burn patient population's perspective, <i>Journal of the American College of Surgeons</i> , 203, 766-71, 2006	No qualitative data on phenomenon of interest
Buddai, S., Di Taranti, L. J., Adenwala, A. Y., Aepli, S., Choudhary, M., George, D. L., Koilor, C. B., Linehan, M., Peifer, H., Rub, D., Kaplan, L., Johnson, N., Lane-Fall, M. B., Characterizing intensive care	Published as abstract only

Study	Reason for Exclusion
unit patient and family experiences of recovery after traumatic injury, American Journal of Respiratory and Critical Care Medicine. Conference: American Thoracic Society International Conference, ATS, 195, 2017	
Byrnes, Michelle, Beilby, Janet, Ray, Patricia, McLennan, Renee, Ker, John, Schug, Stephan, Bamm, Berry Cohen Cohen Dorsett Duff Duff Foley Kennedy Kennedy Kennedy Liamputtong MacLeod McGrath McGrath Middleton Norris-Baker Orbell Wade Wade Webb Willer, Patient-focused goal planning process and outcome after spinal cord injury rehabilitation: Quantitative and qualitative audit, Clinical Rehabilitation, 26, 1141-1149, 2012	No qualitative data on phenomenon of interest
Callaway, Libby, Barclay, Linda, McDonald, Rachael, Farnworth, Louise, Casey, Jackie, Secondary health conditions experienced by people with spinal cord injury within community living: implications for a National Disability Insurance Scheme, Australian Occupational Therapy Journal, 62, 246-54, 2015	Population not in PICO (population injured before 2000 (mean time since injury = 20.32 (SD=15.49) years)
Carr, J. J., Kendall, M. B., Amsters, D. I., Pershouse, K. J., Kuipers, P., Buettner, P., Barker, R. N., Community participation for individuals with spinal cord injury living in Queensland, Australia, Spinal Cord, 55, 192-197, 2017	No qualitative data on phenomenon of interest
Chisholm, J., Bruce, B., Unintentional traumatic brain injury in children: the lived experience, Axone (Dartmouth, N.S.), 23, 12-7, 2001	Population injured in 1995-97; outside of inclusion criteria (2000 onwards)
Chouliara, N., Lincoln, N. B., Qualitative exploration of the benefits of group-based memory rehabilitation for people with neurological disabilities: implications for rehabilitation delivery and evaluation, BMJ Open, 6, e011225, 2016	5/20 patients had traumatic brain injury (15/20 had stroke or multiple sclerosis), no qualitative data on phenomenon of interest
Christiaens, Wendy, Van de Walle, Elke, Devresse, Sophie, Van Halewyck, Dries, Benahmed, Nadia, Paulus, Dominique, Van den Heede, Koen, The view of severely burned patients and healthcare professionals on the blind spots in the aftercare process: a qualitative study, BMC health services research, 15, 302, 2015	No qualitative data on phenomenon of interest
Chu, Yi, Brown, Pat, Harniss, Mark, Kautz, Henry, Johnson, Kurt, Cognitive support technologies for people with TBI: current usage and challenges experienced, Disability and rehabilitation. Assistive technology, 9, 279-85, 2014	No qualitative data on phenomenon of interest
Chung, Joanne W. Y., Wong, Thomas K. S., Yeung, Andrew C. P., Non-attendance at an orthopaedic and trauma specialist outpatient department of a regional hospital, Journal of nursing management, 12, 362-7, 2004	No qualitative data on phenomenon of interest; mixed population
Cocks, Errol, Bulsara, Caroline, O'Callaghan, Annalise, Netto, Julie, Boaden, Ross, Exploring the experiences of people with the dual diagnosis of acquired brain injury and mental illness, Brain Injury, 28, 414-21, 2014	No qualitative data on phenomenon of interest
Conneeley, Anne Louise, Interdisciplinary collaborative goal planning in a post-acute	No qualitative data on phenomenon of interest

Study	Reason for Exclusion
neurological setting: a qualitative study, British Journal of Occupational Therapy, 67, 248-255, 2004	
Conneeley, Anne Louise, Exploring vocation following brain injury: a qualitative enquiry, Social Care and Neurodisability, 4, 6-16, 2013	No qualitative data on phenomenon of interest
Conneeley, L., Transitions and traumatic brain injury: Exploring the journey through the first 12 months following discharge to the home, Brain Injury, 26, 330-331, 2012	Published as abstract only
Corser, William D., The perceptions of older veterans concerning their postdischarge outcome experiences, Applied nursing research : ANR, 19, 63-9, 2006	Unclear population (veterans who had been discharged from one of three general care units (cardiology, medical “surgical, and neurology/specialty surgery units), unclear why they had been hospitalised in the first place)
Cox, Ruth J., Amsters, Delena I., Pershouse, Kiley J., Blumer, Brown Canupp Conroy Curtis Davidoff DeJong DeVivo Dunn Ernst Gallien Garber Gerhart Harrison Hart Johnson Krause Menter Meyers Noreau Pentland Pershouse Post Post Rintala Sabin Scriven Thomas Widersstrom-Noga, The need for a multidisciplinary outreach service for people with spinal cord injury living in the community, Clinical Rehabilitation, 15, 600-606, 2001	Quantitative study
Coy, K., Brock, P., Pomeroy, S., Cadogan, J., Beckett, K., A Road Less Travelled: using Experience Based Co-Design to map children's and families' emotional journey following burn injury and identify service improvements, Burns : journal of the International Society for Burn Injuries, 2019	No qualitative data on phenomenon of interest
Darragh, A. R., Sample, P. L., Krieger, S. R., "Tears in my eyes 'cause somebody finally understood": client perceptions of practitioners following brain injury, The American journal of occupational therapy : official publication of the American Occupational Therapy Association, 55, 191-9, 2001	Study (conducted on 1995-8) outside of data range specified in protocol
Davis, Jamie D., Engel, Charles C., Mishkind, Matthew, Jaffer, Ambereen, Sjoberg, Terry, Tinker, Tim, McGough, Martin, Tipton, Stacia, Armstrong, David, O'Leary, Timothy, Provider and patient perspectives regarding health care for war-related health concerns, Patient Education and Counseling, 68, 52-60, 2007	No qualitative data on phenomenon of interest
D'Cruz, Kate, Howie, Linsey, Lentin, Primrose, Client-centred practice: Perspectives of persons with a traumatic brain injury, Scandinavian journal of occupational therapy, 23, 30-8, 2016	No qualitative data on phenomenon of interest
Delgado, M. K., Richmond, T., Hollander, J., Holena, D., Katz, S., Jacobs, L., Medford-Davis, L., Carr, B., Patient and family perspectives on the trauma transfer decision and the potential role for telemedicine, Academic Emergency Medicine, 22, S253, 2015	Published as abstract only
Dixon, Guy, Thornton, Everard W., Young, Carolyn A., Perceptions of self-efficacy and rehabilitation among neurologically disabled adults, Clinical Rehabilitation, 21, 230-40, 2007	No qualitative data on phenomenon of interest

Study	Reason for Exclusion
Donker-Cools, Birgit H. P. M., Schouten, Maria J. E., Wind, Haije, Frings-Dresen, Monique H. W., Amir, Coole De Vries Dionne Donker-Cools Donker-Cools Dorland Foy Kuluski Lundqvist Morrison Sale Saunders Soeker Soeker Stergiou-Kita Tamminga Tiedtke Tong Tyerman Van Velzen Van Velzen Van Velzen, Return to work following acquired brain injury: The views of patients and employers, <i>Disability and Rehabilitation: An International, Multidisciplinary Journal</i> , 40, 185-191, 2018	3/10 participants had traumatic brain injury (TBI), 7/10 had non-traumatic brain injury; results not reported separately for TBI
Dubuc, E., Gagnon-Roy, M., Couture, M., Bier, N., Bottari, C., Developing technology to facilitate meal preparation after a traumatic brain injury: potential users and their caregivers express their needs, <i>Brain Impairment</i> , 19, 308-309, 2018	Published as abstract only
Ekland, Marcille, Lawrie, Barbara, How a woman's sexual adjustment after sustaining a spinal cord injury impacts sexual health interventions, <i>SCI nursing : a publication of the American Association of Spinal Cord Injury Nurses</i> , 21, 14-9, 2004	Article is unavailable
Eliacin, Johanne, Fortney, Sarah, Rattray, Nicholas A., Kean, Jacob, Access to health services for moderate to severe TBI in Indiana: patient and caregiver perspectives, <i>Brain Injury</i> , 32, 1510-1517, 2018	No direct qualitative evidence on phenomenon of interest
Elnitsky, Christine A., Andresen, Elena M., Clark, Michael E., McGarity, Suzanne, Hall, Carmen G., Kerns, Robert D., Access to the US Department of Veterans Affairs health system: self-reported barriers to care among returnees of Operations Enduring Freedom and Iraqi Freedom, <i>BMC health services research</i> , 13, 498, 2013	Quantitative study with small qualitative element, but no qualitative data on phenomenon of interest
Elnitsky, Christine A., Latlief, Gail A., Andrews, Erin E., Adams-Koss, Laurel B., Phillips, Samuel L., Preferences for rehabilitation services among women with major limb amputations, <i>Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses</i> , 38, 32-6, 2013	1/5 participants had traumatic injury
Fernandes, A., McDonnell, L., Regel, S., The role of general practice in following up patients with trauma, <i>British Journal of General Practice</i> , 66, 10-11, 2016	Editorial
Fleming, Jennifer, Sampson, Jennifer, Cornwell, Petrea, Turner, Ben, Griffin, Janell, Brain injury rehabilitation: The lived experience of inpatients and their family caregivers, <i>Scandinavian journal of occupational therapy</i> , 19, 184-193, 2012	No qualitative data on phenomenon of interest
Foster, Kim, Mitchell, Rebecca, Young, Alexandra, Van, Connie, Curtis, Kate, Parent experiences and psychosocial support needs 6 months following paediatric critical injury: A qualitative study, <i>Injury</i> , 50, 1082-1088, 2019	No direct qualitative data on phenomenon of interest
Foster, Michele, Allen, Shelley, Fleming, Jennifer, Unmet health and rehabilitation needs of people with long-term neurological conditions in Queensland, Australia, <i>Health and Social Care in the Community</i> , 23, 292-303, 2015	No qualitative data on phenomenon of interest
Fox, R., Goberman-Hill, R., Swinkels, A., Chesser,	Published as abstract only

Study	Reason for Exclusion
T. J. S., Palmer, S., Recovery from extracapsular hip fracture. A longitudinal qualitative study of patients' experiences, <i>Physiotherapy (United Kingdom)</i> , 103, e33-e34, 2017	
Fraas, Michael, Balz, Magdalen, DeGrauw, William, Bell, Ben-Yishay, Ben-Yishay, Bottari, Brown, Christensen, Cicerone, Colantonio, Corrigan, Edwards, Engberg, Felicetti, Fleminger, Games, Gibbs, Glenn, Glover, Gomez-Hernandez, Goodall, Goss, Hammond, Hanks, Hare, Hashimoto, Heinemann, Holliday, Hux, Hux, Jacobs, Jacobs, Jacobs, Jacobs, Kaitaro, Kalpakjian, Kim, Kolakowsky-Hayner, Kolakowsky-Hayner, Koskinen, Krempels, Krempels, Krempels, Kromrey, Langlois, Leach, Leith, Malee, Malee, Man, McCarthy, Morgan, Moules, O'Connor, Pagulayan, Pollock, Powell, Rauch, Riley, Rotondi, Sander, Seidman, Smith, Steadman-Pare, Voogt, Welch, Ylvisaker, Meeting the long-term needs of adults with acquired brain injury through community-based programming, <i>Brain Injury</i> , 21, 1267-1281, 2007	Mixed population with acquired brain injury (19/33 had traumatic brain injury); majority of population injured before 2000 (mean 8.58 (SD=8.5) years)
Francis, A., Ziviani, J., Fleming, J., Rae, M., McKinlay, L., Transitioning to adulthood: Needs of young people with an acquired brain injury and those of their families, <i>Neurorehabilitation and Neural Repair</i> , 26, 780-781, 2012	Published as abstract only
Fry, J. C., Price, P., Meeting the re-integration needs of individuals with spinal cord injury: Effectiveness of community-based occupational therapy, <i>Archives of Physical Medicine and Rehabilitation</i> , 94, e8, 2013	Published as abstract only
Gabbe, Belinda J., Sleney, Jude S., Gosling, Cameron M., Wilson, Krystle, Hart, Melissa J., Sutherland, Ann M., Christie, Nicola, Patient perspectives of care in a regionalised trauma system: lessons from the Victorian State Trauma System, <i>The Medical Journal of Australia</i> , 198, 149-52, 2013	No qualitative data on phenomenon of interest
Gan, C., Gargaro, J., Brandys, C., Gerber, G., Boschen, K., Family caregivers' support needs after brain injury: A synthesis of perspectives from caregivers, programs, and researchers, <i>NeuroRehabilitation</i> , 27, 5-18, 2010	Mixed population mostly not in PICO (caregivers of patients with a mean age of 34.06 (SD 14.14, range 12-60) years; results not reported separately for caregivers of patients below 18 years old)
Garrino, Lorenza, Curto, Natascia, Decorte, Rita, Felisi, Nadia, Matta, Ebe, Gregorino, Silvano, Actis, M. Vittoria, Marchisio, Cecilia, Carone, Roberto, Towards personalized care for persons with spinal cord injury: a study on patients' perceptions, <i>The Journal of Spinal Cord Medicine</i> , 34, 67-75, 2011	No qualitative data on phenomenon of interest
Gfroerer, S. D., Wade, S., Wu, M., Parent perceptions of school-based support for students with traumatic brain injuries, <i>Brain Injury</i> , 22, 649-656, 2008	Quantitative study
Gilad, Dvorit, Lavee, Yoav, Innes-Kenig, Orly, The structure of dyadic support among couples with and without long-term disability, <i>Journal of Behavioral Medicine</i> , 32, 453-65, 2009	Population not in PICO (injuries sustained when participants were between 18-22 years old, and their mean age was 51.2 (SD = 10) years when study conducted)
Gillespie, Elena, A Qualitative Pilot Study of Spirituality in Long-term Recovery in Acquired Brain Injury, <i>The Journal of Pastoral Care &amp; Counseling: JPCC</i> , 73, 96-105, 2019	No qualitative data on phenomenon of interest

Study	Reason for Exclusion
Gilworth, G., Eyres, S., Carey, A., Bhakta, B., Tennant, A., Working with a brain injury: Personal experiences of returning to work following a mild or moderate brain injury, <i>Journal of Rehabilitation Medicine</i> , 40, 334-339, 2008	A&E population, 13/33 admitted to hospital for 2 days or more; results not presented separately for this subgroup
Glang, Ann, Todis, Bonnie, Thomas, Catherine W., Hood, Donald, Bedell, Gary, Cockrell, Janice, Return to school following childhood TBI: who gets services?, <i>NeuroRehabilitation</i> , 23, 477-86, 2008	No qualitative data on phenomenon of interest
Glintborg, Charlotte, Hansen, Tia G. B., Bech, Bech Braun Brenner Creswell Ellervik Engel Ghaziani Glintborg Glintborg Glintborg Glintborg Hackett Haggerty Hald Hall Holm Jorge Jorge Keith Kennedy Miles Morton Norholm Pallant Rivera Schlossberg Teasdale Teasdale Turner, Bio-psycho-social effects of a coordinated neurorehabilitation programme: A naturalistic mixed methods study, <i>NeuroRehabilitation</i> , 38, 99-113, 2016	20/82 patients in PICO (TBI); results not reported separately for them
Goodridge, Donna, Rogers, Marla, Klassen, Laura, Jeffery, Bonnie, Knox, Katherine, Rohatinsky, Noelle, Linassi, Gary, Access to health and support services: perspectives of people living with a long-term traumatic spinal cord injury in rural and urban areas, <i>Disability and Rehabilitation</i> , 37, 1401-10, 2015	No direct qualitative data on phenomenon of interest
Gullick, Janice G., Taggart, Susan B., Johnston, Rae A., Ko, Natalie, The trauma bubble: patient and family experience of serious burn injury, <i>Journal of burn care &amp; research : official publication of the American Burn Association</i> , 35, e413-27, 2014	No qualitative data on phenomenon of interest
Guptill, C. A., The lived experience of professional musicians with playing-related injuries: A phenomenological inquiry, <i>Medical Problems of Performing Artists</i> , 26, 84-95, 2011	Population did not have traumatic injuries ("Their injuries ranged from tendinitis to difficulties with orofacial musculature, arthritis, and bone spurs." p. 86)
Hansen, Alice Orts, Kristensen, Hanne Kaae, Cederlund, Ragnhild, Lauridsen, Henrik Hein, Tromborg, Hans, Client-centred practice from the perspective of Danish patients with hand-related disorders, <i>Disability and Rehabilitation</i> , 40, 1542-1552, 2018	Population not in PICO (no traumatic injury resulting in hospitalisation)
Harrison, Anne L., Hunter, Elizabeth G., Thomas, Heather, Bordy, Paige, Stokes, Erin, Kitzman, Patrick, Baptiste, Beaven Bellon Campbell Cheek Clark-Wilson Corrigan Danzl Degeneffe DiCicco-Bloom Donaldson Duncan Espinosa Fuortes Gaboda Halverson Heinemann Johnstone Kitzman Lannin Lefebvre Lefebvre Levack Lewis Malec Martin Marwitz Masel Pistarini Poston Rivera Rotondi Rotondi Salter Saman Sample Sample Sandelowski Saverino Schoenberg Solovieva Trudel Turner-Stokes Walker Winkler Zitnay, Living with traumatic brain injury in a rural setting: Supports and barriers across the continuum of care, <i>Disability and Rehabilitation: An International, Multidisciplinary Journal</i> , 39, 2071-2080, 2017	No qualitative data on phenomenon of interest
Hedman, A. M., Grafstrom, M., Conditions for rehabilitation of older patients with dementia and hip fracture--the perspective of their next of kin,	No direct qualitative data on phenomenon of interest

Study	Reason for Exclusion
Scandinavian Journal of Caring Sciences, 15, 151-8, 2001	
Holmlund, Lisa, Guidetti, Susanne, Eriksson, Gunilla, Asaba, Eric, Return to work in the context of everyday life 7-11 years after spinal cord injury - a follow-up study, Disability and Rehabilitation, 40, 2875-2883, 2018	No direct qualitative data on phenomenon of interest
Jones, M., Tan, D., Bechtel, E., Hoffman, J., Reyes, M., Perceptions of aging and healthcare after spinal cord injury, Journal of Spinal Cord Medicine, 39, 561, 2016	Published as abstract only
Kern, Stephen B., Hunter, Louis N., Sims, Ashley C., Berzins, Davis, Riekema, Helena, Andrews, Marisa L., Alderfer, Jillian K., Nelson, Kelly, Kushner, Reva, Understanding the Changing Health Care Needs of Individuals Aging With Spinal Cord Injury, Topics in Spinal Cord Injury Rehabilitation, 25, 62-73, 2019	No direct qualitative data on phenomenon of interest
Kimmel, Lara A., Holland, Anne E., Hart, Melissa J., Edwards, Elton R., Page, Richard S., Hau, Raphael, Bucknill, Andrew, Gabbe, Belinda J., Discharge from the acute hospital: trauma patients' perceptions of care, Australian health review : a publication of the Australian Hospital Association, 40, 625-632, 2016	No qualitative data on phenomenon of interest
Kingston, Gail A., Judd, Jenni, Gray, Marion A., The experience of medical and rehabilitation intervention for traumatic hand injuries in rural and remote North Queensland: a qualitative study, Disability and Rehabilitation, 37, 423-9, 2015	No direct qualitative evidence on phenomenon of interest
Kuipers, P., Lancaster, A., Developing a suicide prevention strategy based on the perspectives of people with brain injuries, Journal of Head Trauma Rehabilitation, 15, 1275-1284, 2000	Population injured before 2000 (outside of inclusion criteria)
Kuipers, Pim, Foster, Michele, Smith, Sharon, Fleming, Jennifer, Using ICF-Environment factors to enhance the continuum of outpatient ABI rehabilitation: an exploratory study, Disability and Rehabilitation, 31, 144-51, 2009	No qualitative data on phenomenon of interest
Lafortune, Claire, Elliott, Jacobi, Egan, Mary Y., Stolee, Paul, Berg, Cagle Ceci Corrigan Demiris Deshpande Elliott Elliott Epstein Filipovych Glenn Graneheim Granger Gray Hamilton Harris Heinemann Hirdes Hirdes Hjar Hoover Hsieh Jin Johnson Kidd Lafortune Lauver Lawton Lundgren-Nilsson McNeil Morris Morris Ottenbacher Paolinelli Sims-Gould Sinha Stuck Stuck Toscan Toscan Wellens Wellens Wells, The rest of the story: A qualitative study of complementing standardized assessment data with informal interviews with older patients and families, The Patient: Patient-Centered Outcomes Research, 10, 215-224, 2017	No qualitative data on phenomenon of interest
Leith, Katherine H., Phillips, Lyn, Sample, Pat L., Abreu, Bryant Bullock Coneely Corrigan Creswell Darragh Dean Finfer Forbes Foster Fyfee Guilmette Haas Hooper Kayser-Jones Lincoln McCullough McMordie Mcuaniel Miles Morgan Morse Nochi Nochi Patton Patton Rauch Sample Sample Sandelowski Sandelowski Selassie Silverman Smith Swift	Study dates outside of PICO for majority of patients: 7/10 participants injured before 2000; data not reported separately for the 3/10 participants injured after 2000

Study	Reason for Exclusion
Tashakkori, Exploring the service needs and experiences of persons with TBI and their families: The South Carolina experience, <i>Brain Injury</i> , 18, 1191-1208, 2004	
Liddle, Jacki, Fleming, Jennifer, McKenna, Kryss, Turpin, Merrill, Whitelaw, Penny, Allen, Shelley, Brooks, Cloute Coleman Gracey Hakamies-Blomqvist Hakamies-Blomqvist Harradine Hopewell Langdridge Leon-Carrion Liddle Liddle Liddle Lundqvist Marottoli McCabe Mezuk Molnar Novack Patton Pietrapiana Ragland Rapport Rapport Schanke Tamietto Turner Verburg, Driving and driving cessation after traumatic brain injury: Processes and key times of need, <i>Disability and Rehabilitation: An International, Multidisciplinary Journal</i> , 33, 2574-2586, 2011	No qualitative data on phenomenon of interest
Limond, Jenny, Dorris, Liam, McMillan, Thomas M., Quality of life in children with acquired brain injury: parent perspectives 1-5 years after injury, <i>Brain Injury</i> , 23, 617-22, 2009	Quantitative study
Lindahl, Marianne, Teljigovic, Sanel, Heegaard Jensen, Lars, Hvalsoe, Berit, Juneja, Hemant, Importance of a patient-centred approach in ensuring quality of post-fracture rehabilitation for working aged people: A qualitative study of therapists' and patients' perspectives, <i>Work (Reading, Mass.)</i> , 55, 831-839, 2016	Mixed population: 5/7 patients had simple fractures, 2/7 patients had multiple fractures; results not presented separately for the latter 2.
McColl, M. A., Aiken, A., McColl, A., Sakakibara, B., Smith, K., Primary care of people with spinal cord injury: Scoping review, <i>Canadian Family Physician</i> , 58, 1207-e635, 2012	Semi-systematic review, included studies checked for relevance, none were
McDermott, Garret L., McDonnell, Anne Marie, Aitken, Allen Barbour Bowen Elliott Fleming Gagnon Hreay Heinemann Howes Hsieh Katz Kreutzer Krueger Lamontagne Lefebvre Lefebvre Lefebvre Leith Mays McFarland McLellan Morgan O'Callaghan O'Callaghan Pearce Petersen Pickard Pickelsimer Redpath Rotondi Sample Serio Shiel Williams Wilson Zaloshnja, Acquired brain injury services in the Republic of Ireland: Experiences and perceptions of families and professionals, <i>Brain Injury</i> , 28, 81-91, 2014	Population not in PICO (family members of adults with acquired brain injury; professionals working with adults with acquired brain injury)
McGarry, Sarah, Elliott, Catherine, McDonald, Ann, Valentine, Jane, Wood, Fiona, Girdler, Sonya, "This is not just a little accident": a qualitative understanding of paediatric burns from the perspective of parents, <i>Disability and Rehabilitation</i> , 37, 41-50, 2015	No qualitative data on phenomenon of interest
McRae, Philippa, Hallab, Lisa, Simpson, Grahame, Anstey, Braun Brooks Ellingsen Frost Gilworth Gilworth Gracey Harradine Kreutzer Macaden Medin Menon Nightingale Olver Oppermann Petrella Ponsford Rubenson Sabatello Simpson Tate Teasdale van Velzen van Velzen, Navigating employment pathways and supports following brain injury in Australia: Client perspectives, <i>Australian Journal of Rehabilitation Counselling</i> , 22, 76-92, 2016	No direct qualitative data on phenomenon of interest
Meade, M., Carr, L., Ellenbogen, P., Barrett, K., Perceptions of provider education and attitude by individuals with spinal cord injury: Implications for	No direct qualitative data on phenomenon of interest; unclear population (n=7, reason for SCI only reported for 1/7 patients);

Study	Reason for Exclusion
health care disparities, Topics in Spinal Cord Injury Rehabilitation, 17, 25-37, 2011	duration reported for 6/7 and was 3 months, at least 2 years, >9 years, >20 years [n=2] and > 40 years).
Mueller, Christoph, Wang, Yuepeng, Brooks, Alice, Morant, Nicola, Sullivan, Paul, Raymond, Vanessa, Barbour, Bazeley Braun Braun Colantonio Dibley Dikmen Dinh Elliott Elovic Fleming Fleminger Fraas Guest Hou Howes Kay Lefebvre Lefebvre Leith Link London Malec McDermott McLellan O'Brien O'Callaghan O'Callaghan Olver Patton Penchansky Redpath Rotondi Sample Sharp Snead Turner Warren Whitnall, 'Attending to the wound and the person'-Patients' experiences and expectations of a newly established traumatic brain injury clinic, Brain Injury, 31, 1863-1870, 2017	No direct qualitative data on phenomenon of interest
New, P. W., A multidisciplinary consultation team to address the unmet needs of hospitalized patients with spinal cord injury, Archives of Neurology, 67, 1074-1076, 2010	Commentary
O'Callaghan, A., McNamara, B., Cocks, E., 'What am I supposed to do? Cartwheels down the passageway?' Perspectives on the rehabilitation journey from people with ABI, Brain Injury, 28, 577-578, 2014	Published as abstract only
Ogilvie, Rebekah, Foster, Kim, McCloughen, Andrea, Curtis, Kate, Young peoples' experience and self-management in the six months following major injury: A qualitative study, Injury, 46, 1841-7, 2015	No qualitative data on phenomenon of interest
O'Hagan, F. T., Coutu, M. F., Baril, R., A case of mistaken identity? The role of injury representations in chronic musculoskeletal pain, Disability and Rehabilitation, 35, 1552-63, 2013	Population not in PICO (not traumatic injury requiring admission to hospital)
Oster, Caisa, Kildal, Morten, Ekselius, Lisa, Return to work after burn injury: burn-injured individuals' perception of barriers and facilitators, Journal of burn care & research : official publication of the American Burn Association, 31, 540-50, 2010	No direct qualitative data on phenomenon of interest
Oyesanya, Tolu, Arango-Lasprilla, Baumeister Black Bond Brereton Bull Butler Cain Chan Ciuffreda Coco Conti Corrigan Corrigan Crewe Dickson Dickson Dikmen Fleming Fraser Garrett Garrino Gebhardt Heinemann Hsieh Jennekens Keenan Kmet Kneafsey Kolakowsky-Hayner Lefebvre Lefebvre Leith Levack Lindberg Lindberg Lloyd-Jones Lutz Lyon Macciocchi Mirr Moher Murray Paterson Pegg Perry Pickelsimer Rotondi Sand Silva-Smith Singh Sinnakaruppan Turkstra Turner Turner Turner Verhaeghe Weiss Wongvatunyu, The experience of patients with ABI and their families during the hospital stay: A systematic review of qualitative literature, Brain Injury, 31, 151-173, 2017	Systematic review, included studies checked for relevance
Patton, Desmond, Sodhi, Aparna, Affinati, Steven, Lee, Jooyoung, Crandall, Marie, Bingenheimer, Brooke Chapman Cooper Crandall Dowd Fahimi Forster Glaser Goner Gowins Grinshteyn Hinkel Isackson Kleinman Lee Liebschutz Mazza Mccoy Mrug Rich Roy Sangji Sims Vermeiren Zinzow, Post-discharge needs of victims of gun violence in	Country not in PICO: USA

Study	Reason for Exclusion
Chicago: A qualitative study, <i>Journal of Interpersonal Violence</i> , 34, 135-155, 2019	
Pellatt, Glynis Collis, Patient-professional partnership in spinal cord injury rehabilitation, <i>British journal of nursing</i> (Mark Allen Publishing), 13, 948-53, 2004	No direct evidence on phenomenon of interest
Pentland, W., Walker, J., Minnes, P., Tremblay, M., Brouwer, B., Gould, M., Women with spinal cord injury and the impact of aging, <i>Spinal Cord</i> , 40, 374-87, 2002	Study dates outside of PICO: All participants injured before 2000
Piatt, J., Herbenick, D., Eldridge, L., Knee, E., Burton, G., Sexuality and intimacy: Lack of educational resources for females with Spinal Cord Injury, <i>Journal of Spinal Cord Medicine</i> , 41, 595-596, 2018	Published as abstract only
Pouliquen, U., Etcharry-Bouyx, F., Pinon, K., Patureau, F., Petit, A., Lambert, A., Richard, I., Post-acute assessment programme for patients with traumatic brain injury: Measuring the gap between patients' expectations on entering and end of programme recommendations, <i>Brain Injury</i> , 27, 789-792, 2013	Quantitative study
Reed, Deborah, Understanding and meeting the needs of farmers with amputations, <i>Orthopedic nursing</i> , 23, 397-5, 2004	Study dates outside of PICO for majority of patients: 11/16 participants injured before 2000; data not reported separately for the 5/16 participants injured after 2000
Roscigno, Cecelia I., Fleig, Denise K., Knafl, Kathleen A., Parent management of the school reintegration needs of children and youth following moderate or severe traumatic brain injury, <i>Disability and Rehabilitation</i> , 37, 523-33, 2015	No qualitative data on phenomenon of interest
Rotondi, Armando J., Sinkule, Jennifer, Balzer, Kathleen, Harris, Jeffrey, Moldovan, Rene, Allen, Bond Brzuzy Bull Callan Campbell Camplair Carnwath Cleeland Corrigan Corrigan Dixon Draper Flanagan Glass Hallberg Heinemann Junque King Kozloff Kreutzer Kreutzer Leith Mathis Mauss-Clum McCubbin McKinlay Miles Molter Oddy Olvingson Panting Poulshock Rotondi Rotondi Serio Serio Smith Thomsen Vadhan Vogt Von Korff Von Korff Wagner Whyte Witol, A Qualitative Needs Assessment of Persons Who Have Experienced Traumatic Brain Injury and Their Primary Family Caregivers, <i>The Journal of Head Trauma Rehabilitation</i> , 22, 14-25, 2007	No direct qualitative data on phenomenon of interest
Ryerson Espino, S., Kelly, E., Riordan, A., Zebracki, K., Vogel, L., Personal and family experiences of caregivers of children with SCI, <i>Developmental Medicine and Child Neurology</i> , 58, 107-108, 2016	Published as abstract only
Ryerson Espino, Susan L., Kelly, Erin H., Rivelli, Anne, Zebracki, Kathy, Vogel, Lawrence C., It is a marathon rather than a sprint: an initial exploration of unmet needs and support preferences of caregivers of children with SCI, <i>Spinal Cord</i> , 56, 284-294, 2018	No qualitative data on phenomenon of interest
Sager, L., James, C., Injured workers' perspectives of their rehabilitation process under the New South Wales Workers Compensation System, <i>Australian Occupational Therapy Journal</i> , 52, 127-135, 2005	Unclear population: N=6 who had sustained a work-related injury "Two of the injuries were spinal injuries, three were muscular injuries and one was a bone fracture." (p. 129) Procedure Once ethical

Study	Reason for Exclusion
Sand, Asa, Karlberg, Ingvar, Kreuter, Margareta, Spinal cord injured persons' conceptions of hospital care, rehabilitation, and a new life situation, Scandinavian journal of occupational therapy, 13, 183-92, 2006	ap" Study dates outside of PICO for majority of patients/majority of patients injured before 2000
Sandstrom, Linda, Engstrom, Asa, Nilsson, Carina, Juuso, Paivi, Experiences of suffering multiple trauma: A qualitative study, Intensive & critical care nursing, 2019	No qualitative data on phenomenon of interest
Sashika, H., Kikuchi, N., Takada, K., Relation of participation limitation and rehabilitation needs of mild-to-moderate traumatic brain injured (TBI) persons discharged from the advanced critical emergency centre: A qualitative study, Brain Injury, 28, 539-540, 2014	Published as abstract only
Sashika, Hironobu, Takada, Kaoruko, Kikuchi, Naohisa, Rehabilitation needs and participation restriction in patients with cognitive disorder in the chronic phase of traumatic brain injury, Medicine, 96, e5968, 2017	No qualitative data on phenomenon of interest
Schiller, Claire, Franke, Thea, Belle, Jessica, Sims-Gould, Joanie, Sale, Joanna, Ashe, Maureen C., Words of wisdom - patient perspectives to guide recovery for older adults after hip fracture: a qualitative study, Patient preference and adherence, 9, 57-64, 2015	No qualitative data on phenomenon of interest
Sjodahl, C., Gard, G., Jarnlo, G. B., Transfemoral amputees' experiences of the first meeting and subsequent interactions with hospital staff, Disability & Rehabilitation, 30, 1192-1203, 2008	Mixed population: 5/11 had amputations due to trauma; the majority of the 11 patients had amputations before 2000
Sleney, Judith, Christie, Nicola, Earthy, Sarah, Lyons, Ronan A., Kendrick, Denise, Towner, Elizabeth, Improving recovery-Learning from patients' experiences after injury: a qualitative study, Injury, 45, 312-9, 2014	Unclear population: Injuries not reported only that "All patients had to meet the criterion that they did not perceive themselves as recovered at one week post injury" (p. 313); 40% were not admitted as inpatients
Smith-Forbes, Enrique V., Howell, Dana M., Willoughby, Jason, Armstrong, Hilary, Pitts, Donald G., Uhl, Tim L., Adherence of Individuals in Upper Extremity Rehabilitation: A Qualitative Study, Archives of Physical Medicine and Rehabilitation, 97, 1262-1268.e1, 2016	No qualitative data on phenomenon of interest
Turner, Benjamin James, Fleming, Jennifer, Ownsworth, Tamara, Cornwell, Petrea, Perceived service and support needs during transition from hospital to home following acquired brain injury, Disability and Rehabilitation, 33, 818-29, 2011	No qualitative data on phenomenon of interest
Turner, Benjamin, Fleming, Jennifer, Ownsworth, Tamara, Cornwell, Petrea, Barker, Dewar Doig Dowsell Fleming Fletcher Gracey Gracey Johnston Jones Kendall Kuipers Liamputtong McCabe Minnes Muenchberger Ownsworth Ownsworth Paterson Patton Robertson Sander Turner Turner Turner Turner Wertheimer Yates, Perceptions of recovery during the early transition phase from hospital to home following acquired brain injury: A journey of	No qualitative data on phenomenon of interest

Study	Reason for Exclusion
discovery, <i>Neuropsychological Rehabilitation</i> , 21, 64-91, 2011	
Umeasiegbu, Veronica I., Waletich, Brittany, Whitten, Laura A., Bishop, Malachy, Abreu, Bartlett Berg Bishop Corrigan Cott Creswell Degeneffe Degeneffe deGuise Elbogen Gontkovsky Heinemann Jennekens Kreuzer Lefebvre Lehan Man Murphy O'Callaghan O'Callaghan Pickelsimer Ponsford Rotondi Sinnakaruppan Spearman Turner Vaughn, Community-based rehabilitation needs: Perceptions of individuals with brain injury and their families in the Midwestern United States, <i>Special Issue: Family support and adjustment following acquired brain injury: An international perspective.</i> , 19, 155-163, 2013	Quantitative study
Vu, Cecilia, Rothman, Emily, Kistin, Caroline J., Barton, Kelly, Bulman, Barb, Budzak-Garza, Ann, Olson-Dorff, Denyse, Bair-Merritt, Megan H., Adapting the Patient-Centered Medical Home to Address Psychosocial Adversity: Results of a Qualitative Study, <i>Academic pediatrics</i> , 17, S115-S122, 2017	4/25 adult participants are patients, but no further details about them reported (e.g., the reason for their patient status)
Waldera, Kathryn E., Heckathorne, Craig W., Parker, Margaret, Fatone, Stefania, Assessing the prosthetic needs of farmers and ranchers with amputations, <i>Disability and rehabilitation. Assistive technology</i> , 8, 204-12, 2013	Majority of participants in PICO injured before 2000
Whalley Hammell, K., Experience of rehabilitation following spinal cord injury: a meta-synthesis of qualitative findings, <i>Spinal cord</i> , 45, 260-74, 2007	(Semi-)systematic review, included studies checked for relevance, none were
Wharewera-Mika, Julie, Cooper, Erana, Kool, Bridget, Pereira, Susana, Kelly, Patrick, Aitken, Anderson Arango-Lasprilla Arlidge Ashton Bedell Braun Bronfenbrenner Bull Byard Carnwath Clark Couch Durie Durie Ergh Feigin Fisher Friedman Gan Gergen Gracey Guest Heather Jackson Jayawant Jones Keenan Kelly Kelly King Kiro Kraus Kurowski Langlois Lawson-Te Aho Makaroff Marsh McKinlay Ormond Parks Parslow Ponsford Rivara Robson Saltapidas Schwartz Serio Slomine Von Korff Wade Wade Wade Wagner Wells, Caregivers' voices: The experiences of caregivers of children who sustained serious accidental and non-accidental head injury in early childhood, <i>Clinical Child Psychology and Psychiatry</i> , 21, 268-286, 2016	Population not in PICO (caregivers of children who have suffered a head injury)
Williams, Cydni N., Eriksson, Carl, Piantino, Juan, Hall, Trevor, Moyer, Danielle, Kirby, Aileen, McEvoy, Cindy, Long-term Sequelae of Pediatric Neurocritical Care: The Parent Perspective, <i>Journal of pediatric intensive care</i> , 7, 173-181, 2018	Mixed population (67% in PICO, 33% not in PICO); no direct qualitative data on phenomenon of interest
Wiseman, Taneal, Foster, Kim, Curtis, Kate, The experience of emotional wellbeing for patients with physical injury: A qualitative follow-up study, <i>Injury</i> , 47, 1983-9, 2016	No direct qualitative data on phenomenon of interest
Ziden, L., The break remains-elderly people's experiences of a hip fracture one year after discharge, <i>Physiotherapy (United Kingdom)</i> , 97,	Published as abstract only

Study	Reason for Exclusion
eS1377, 2011	
Ziden, Lena, Scherman, Marianne Hansson, Wenestam, Claes-Goran, Archibald, Bandura Blomfeldt Bruggemann Calnan Dahlgren Fletcher Folden Fortinsky Fredman Friedman Furstenberg Giorgi Hallberg Kvale Lach Lazarus LeClerc Lenze Lepp Magaziner Marton Marton Resnick Robinson Sandberg Schwarzer Shaw Shaw Shaw Wallston Wenestam Wijlhuizen Ziden Ziden Zijlstra, The break remains-Elderly people's experiences of a hip fracture 1 year after discharge, Disability and Rehabilitation: An International, Multidisciplinary Journal, 32, 103-113, 2010	No direct qualitative data on phenomenon of interest

### Economic studies

All economic studies for this review question were excluded at the initial title and abstract screening stage. See supplementary material D for further information.

### Excluded clinical and economic studies for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?

### Clinical studies

**Table 21: Excluded studies and reasons for their exclusion**

Study	Reason for Exclusion
Aguayo, Miguel O., Coody, Nick F., The experience of defended adults: implications for rehabilitative services, Health and Social Work, 26, 269-276, 2001	Population not in PICO (n=8 deafened adults due to medical (n=2), surgical (n=3), and progressive-idiopathic (n=3) causes
Aitken, L. M., Chaboyer, W., Jeffrey, C., Martin, B., Whitty, J. A., Schuetz, M., Richmond, T. S., Indicators of injury recovery identified by patients, family members and clinicians, Injury, 47, 2655â 2663, 2016	No qualitative data on phenomenon of interest
Aitken, Mary E., Mele, Nancy, Barrett, Kathleen W., Recovery of injured children: parent perspectives on family needs, Archives of Physical Medicine and Rehabilitation, 85, 567-73, 2004	No qualitative data on phenomenon of interest
Albrich, L., Latour, J., Hickson, M., Experiences of intensive care patients following transition to a ward as expressed in online discussion forums: A qualitative study, Journal of the Intensive Care Society, 19, 105-106, 2018	Published as abstract only
Allen, M., Carrouger, G. J., Moore, M., Gibran, N., Pham, T. N., "My first wound care": Needs assessment and development of a targeted educational video for pediatric burn patients, Journal of Burn Care and Research, 39, S118, 2018	Published as abstract only
Amyotte, M., Cameron, J., Reed, N., Keightley, M., Timing is everything: Parents' informational and support needs following their child's sports-related	Published as abstract only

Study	Reason for Exclusion
concussion, <i>Brain Injury</i> , 24, 340-341, 2010	
Andelic, N., Sigurdardottir, S., Arango-Lasprilla, J. C., Godbolt, A. K., Long-term functional and psychosocial consequences and health care provision after traumatic brain injury, <i>Behavioural Neurology</i> , 2016, 2678081, 2016	Editorial
Angel, Sanne, Kirkevold, Marit, Pedersen, Birthe D., Rehabilitation after spinal cord injury and the influence of the professional's support (or lack thereof), <i>Journal of Clinical Nursing</i> , 20, 1713-22, 2011	No qualitative data on phenomenon of interest
Armstrong, E., Missing voices: Aboriginal stories of stroke and traumatic brain injury, <i>International Journal of Stroke</i> , 12, 14, 2017	Published as abstract only
Augutis, Marika, Levi, Richard, Asplund, Kenneth, Berg-Kelly, Kristina, Psychosocial aspects of traumatic spinal cord injury with onset during adolescence: a qualitative study, <i>The journal of spinal cord medicine</i> , 30 Suppl 1, S55-64, 2007	Population injured in 1985-96; outside of inclusion criteria (2000 onwards)
Ayvazian, J., Lucente, J., Dudley-Brown, S., Clinical management of veterans with traumatic brain injury within the context of polytrauma, <i>Journal of Head Trauma Rehabilitation</i> , Conference, 2012	Published as abstract only
Bailey, Thomas R., Patient needs from general practice following a traumatic injury: a qualitative study using narrative interviews with British service personnel, <i>Journal of the Royal Army Medical Corps</i> , 160, 46-51, 2014	No qualitative data on phenomenon of interest
Beaton, Angela, O'Leary, Katrina, Thorburn, Julie, Campbell, Alaina, Christey, Grant, Improving patient experience and outcomes following serious injury, <i>The New Zealand medical journal</i> , 132, 15-25, 2019	Population not in PICO (adults)
Beaulieu, K., A new conceptual framework to facilitate return to paid work following a brain injury, <i>Brain Injury</i> , 30, 752-753, 2016	Published as abstract only
Beauregard, L., Guindon, A., Noreau, L., Lefebvre, H., Boucher, N., Community needs of people living with spinal cord injury and their family, <i>Topics in Spinal Cord Injury Rehabilitation</i> , 18, 122-125, 2012	Quantitative study
Bloemen-Vrencken, J. H. A., de Witte, L. P., Post-discharge nursing problems of spinal cord injured patients: on which fields can nurses contribute to rehabilitation?, <i>Clinical Rehabilitation</i> , 17, 890-8, 2003	Mixed methods study, with focus on nursing care needs, no qualitative data on phenomenon of interest
Boman, Inga-Lill, Bartfai, Aniko, The first step in using a robot in brain injury rehabilitation: patients' and health-care professionals' perspective, <i>Disability and Rehabilitation. Assistive technology</i> , 10, 365-70, 2015	Population not in PICO (stroke or brain haemorrhage)
Bourke, J. A., Hay-Smith, E. J., Snell, D. L., DeJong, G., Attending to biographical disruption: the experience of rehabilitation following tetraplegia due to spinal cord injury, <i>Disability and Rehabilitation</i> , 37, 296-303, 2015	No qualitative data on phenomenon of interest
Bouwman, Renee, Bomhoff, Manja, Robben, Paul, Friele, Roland, Adams, Ayres Beupert Behr Bismark Bismark Buetow Clwyd Dane Dixon-Woods Francis Francis Friele Friele Friele Grabosky Grabosky Healy	No qualitative data on phenomenon of interest

Study	Reason for Exclusion
Iedema Kruikemeier Kuzel Leidraad Meldingen Levtzion-Korach Ngo Ocloo Ocloo Prosser Rhodes Rhodes Sharpe Sluijs Sorgdrager Tyler Victoor Walshe Wessel, Patients' perspectives on the role of their complaints in the regulatory process, Health Expectations: An International Journal of Public Participation in Health Care & Health Policy, 19, 483-496, 2016	
Braaf, Sandra C., Lennox, Alyse, Nunn, Andrew, Gabbe, Belinda J., Experiences of hospital readmission and receiving formal carer services following spinal cord injury: a qualitative study to identify needs, Disability and Rehabilitation, 40, 1893-1899, 2018	No qualitative data on phenomenon of interest
Breen-Smyth, Marie, Injured and disabled casualties of the Northern Ireland conflict: issues in immediate and long-term treatment, care and support, Medicine, conflict and survival, 29, 244-266, 2013	Population not in PICO (29/30 participants injured before 2000, with 21/30 injured in the 1970s)
Brewster, Luke P., Bennett, Barry K., Gamelli, Richard L., Application of rehabilitation ethics to a selected burn patient population's perspective, Journal of the American College of Surgeons, 203, 766-71, 2006	No qualitative data on phenomenon of interest
Buddai, S., Di Taranti, L. J., Adenwala, A. Y., Aeppli, S., Choudhary, M., George, D. L., Koilor, C. B., Linehan, M., Peifer, H., Rub, D., Kaplan, L., Johnson, N., Lane-Fall, M. B., Characterizing intensive care unit patient and family experiences of recovery after traumatic injury, American Journal of Respiratory and Critical Care Medicine. Conference: American Thoracic Society International Conference, ATS, 195, 2017	Published as abstract only
Byrnes, Michelle, Beilby, Janet, Ray, Patricia, McLennan, Renee, Ker, John, Schug, Stephan, Bamm, Berry Cohen Cohen Dorsett Duff Duff Foley Kennedy Kennedy Kennedy Liamputtong MacLeod McGrath McGrath Middleton Norris-Baker Orbell Wade Wade Webb Willer, Patient-focused goal planning process and outcome after spinal cord injury rehabilitation: Quantitative and qualitative audit, Clinical Rehabilitation, 26, 1141-1149, 2012	No qualitative data on phenomenon of interest
Callaway, Libby, Barclay, Linda, McDonald, Rachael, Farnworth, Louise, Casey, Jackie, Secondary health conditions experienced by people with spinal cord injury within community living: implications for a National Disability Insurance Scheme, Australian Occupational Therapy Journal, 62, 246-54, 2015	Population not in PICO (population injured before 2000 (mean time since injury = 20.32 (SD=15.49) years)
Carr, J. J., Kendall, M. B., Amsters, D. I., Pershouse, K. J., Kuipers, P., Buettner, P., Barker, R. N., Community participation for individuals with spinal cord injury living in Queensland, Australia, Spinal Cord, 55, 192-197, 2017	No qualitative data on phenomenon of interest
Chisholm, J., Bruce, B., Unintentional traumatic brain injury in children: the lived experience, Axone (Dartmouth, N.S.), 23, 12-7, 2001	Population injured in 1995-97; outside of inclusion criteria (2000 onwards)
Chouliara, N., Lincoln, N. B., Qualitative exploration of the benefits of group-based memory rehabilitation for	5/20 patients had traumatic brain injury (15/20 had stroke or multiple sclerosis), no

Study	Reason for Exclusion
people with neurological disabilities: implications for rehabilitation delivery and evaluation, <i>BMJ Open</i> , 6, e011225, 2016	qualitative data on phenomenon of interest
Christiaens, Wendy, Van de Walle, Elke, Devresse, Sophie, Van Halewyck, Dries, Benahmed, Nadia, Paulus, Dominique, Van den Heede, Koen, The view of severely burned patients and healthcare professionals on the blind spots in the aftercare process: a qualitative study, <i>BMC health services research</i> , 15, 302, 2015	No qualitative data on phenomenon of interest
Chu, Yi, Brown, Pat, Harniss, Mark, Kautz, Henry, Johnson, Kurt, Cognitive support technologies for people with TBI: current usage and challenges experienced, <i>Disability and rehabilitation. Assistive technology</i> , 9, 279-85, 2014	No qualitative data on phenomenon of interest
Chung, Joanne W. Y., Wong, Thomas K. S., Yeung, Andrew C. P., Non-attendance at an orthopaedic and trauma specialist outpatient department of a regional hospital, <i>Journal of nursing management</i> , 12, 362-7, 2004	No qualitative data on phenomenon of interest; mixed population
Cocks, Errol, Bulsara, Caroline, O'Callaghan, Annalise, Netto, Julie, Boaden, Ross, Exploring the experiences of people with the dual diagnosis of acquired brain injury and mental illness, <i>Brain Injury</i> , 28, 414-21, 2014	No qualitative data on phenomenon of interest
Conneeley, Anne Louise, Interdisciplinary collaborative goal planning in a post-acute neurological setting: a qualitative study, <i>British Journal of Occupational Therapy</i> , 67, 248-255, 2004	No qualitative data on phenomenon of interest
Conneeley, Anne Louise, Exploring vocation following brain injury: a qualitative enquiry, <i>Social Care and Neurodisability</i> , 4, 6-16, 2013	No qualitative data on phenomenon of interest
Conneeley, L., Transitions and traumatic brain injury: Exploring the journey through the first 12 months following discharge to the home, <i>Brain Injury</i> , 26, 330-331, 2012	Published as abstract only
Corser, William D., The perceptions of older veterans concerning their postdischarge outcome experiences, <i>Applied nursing research : ANR</i> , 19, 63-9, 2006	Unclear population (veterans who had been discharged from one of three general care units (cardiology, medical "surgical, and neurology/specialty surgery units), unclear why they had been hospitalised in the first place)
Cox, Ruth J., Amsters, Delena I., Pershouse, Kiley J., Blumer, Brown Canupp Conroy Curtis Davidoff DeJong DeVivo Dunn Ernst Gallien Garber Gerhart Harrison Hart Johnson Krause Menter Meyers Noreau Pentland Pershouse Post Post Rintala Sabin Scriven Thomas Widersstrom-Noga, The need for a multidisciplinary outreach service for people with spinal cord injury living in the community, <i>Clinical Rehabilitation</i> , 15, 600-606, 2001	Quantitative study
Coy, K., Brock, P., Pomeroy, S., Cadogan, J., Beckett, K., A Road Less Travelled: using Experience Based Co-Design to map children's and families' emotional journey following burn injury and identify service improvements, <i>Burns : journal of the International Society for Burn Injuries</i> , 2019	No qualitative data on phenomenon of interest

Study	Reason for Exclusion
Darragh, A. R., Sample, P. L., Krieger, S. R., "Tears in my eyes 'cause somebody finally understood": client perceptions of practitioners following brain injury, <i>The American journal of occupational therapy</i> : official publication of the American Occupational Therapy Association, 55, 191-9, 2001	Study (conducted on 1995-8) outside of data range specified in protocol
Davis, Jamie D., Engel, Charles C., Mishkind, Matthew, Jaffer, Ambereen, Sjoberg, Terry, Tinker, Tim, McGough, Martin, Tipton, Stacia, Armstrong, David, O'Leary, Timothy, Provider and patient perspectives regarding health care for war-related health concerns, <i>Patient Education and Counseling</i> , 68, 52-60, 2007	No qualitative data on phenomenon of interest
D'Cruz, Kate, Howie, Linsey, Lentin, Primrose, Client-centred practice: Perspectives of persons with a traumatic brain injury, <i>Scandinavian journal of occupational therapy</i> , 23, 30-8, 2016	No qualitative data on phenomenon of interest
Delgado, M. K., Richmond, T., Hollander, J., Holena, D., Katz, S., Jacobs, L., Medford-Davis, L., Carr, B., Patient and family perspectives on the trauma transfer decision and the potential role for telemedicine, <i>Academic Emergency Medicine</i> , 22, S253, 2015	Published as abstract only
Dixon, Guy, Thornton, Everard W., Young, Carolyn A., Perceptions of self-efficacy and rehabilitation among neurologically disabled adults, <i>Clinical Rehabilitation</i> , 21, 230-40, 2007	No qualitative data on phenomenon of interest
Donker-Cools, Birgit H. P. M., Schouten, Maria J. E., Wind, Haije, Frings-Dresen, Monique H. W., Amir, Coole De Vries Dionne Donker-Cools Donker-Cools Dorland Foy Kuluski Lundqvist Morrison Sale Saunders Soeker Soeker Stergiou-Kita Tamminga Tiedtke Tong Tyerman Van Velzen Van Velzen Van Velzen, Return to work following acquired brain injury: The views of patients and employers, <i>Disability and Rehabilitation: An International, Multidisciplinary Journal</i> , 40, 185-191, 2018	3/10 participants had traumatic brain injury (TBI), 7/10 had non-traumatic brain injury; results not reported separately for TBI
Dubuc, E., Gagnon-Roy, M., Couture, M., Bier, N., Bottari, C., Developing technology to facilitate meal preparation after a traumatic brain injury: potential users and their caregivers express their needs, <i>Brain Impairment</i> , 19, 308-309, 2018	Published as abstract only
Ekland, Marcille, Lawrie, Barbara, How a woman's sexual adjustment after sustaining a spinal cord injury impacts sexual health interventions, <i>SCI nursing : a publication of the American Association of Spinal Cord Injury Nurses</i> , 21, 14-9, 2004	Article is unavailable
Eliacin, Johanne, Fortney, Sarah, Rattray, Nicholas A., Kean, Jacob, Access to health services for moderate to severe TBI in Indiana: patient and caregiver perspectives, <i>Brain Injury</i> , 32, 1510-1517, 2018	No direct qualitative evidence on phenomenon of interest
Elnitsky, Christine A., Andresen, Elena M., Clark, Michael E., McGarity, Suzanne, Hall, Carmen G., Kerns, Robert D., Access to the US Department of Veterans Affairs health system: self-reported barriers to care among returnees of Operations Enduring	Quantitative study with small qualitative element, but no qualitative data on phenomenon of interest

Study	Reason for Exclusion
Freedom and Iraqi Freedom, BMC health services research, 13, 498, 2013	
Elnitsky, Christine A., Lathief, Gail A., Andrews, Erin E., Adams-Koss, Laurel B., Phillips, Samuel L., Preferences for rehabilitation services among women with major limb amputations, Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses, 38, 32-6, 2013	1/5 participants had traumatic injury
Fernandes, A., McDonnell, L., Regel, S., The role of general practice in following up patients with trauma, British Journal of General Practice, 66, 10-11, 2016	Editorial
Fleming, Jennifer, Sampson, Jennifer, Cornwell, Petrea, Turner, Ben, Griffin, Janell, Brain injury rehabilitation: The lived experience of inpatients and their family caregivers, Scandinavian journal of occupational therapy, 19, 184-193, 2012	No qualitative data on phenomenon of interest
Foster, Kim, Mitchell, Rebecca, Young, Alexandra, Van, Connie, Curtis, Kate, Parent experiences and psychosocial support needs 6 months following paediatric critical injury: A qualitative study, Injury, 50, 1082-1088, 2019	No direct qualitative data on phenomenon of interest
Foster, Michele, Allen, Shelley, Fleming, Jennifer, Unmet health and rehabilitation needs of people with long-term neurological conditions in Queensland, Australia, Health and Social Care in the Community, 23, 292-303, 2015	No qualitative data on phenomenon of interest
Fox, R., Goberman-Hill, R., Swinkels, A., Chesser, T. J. S., Palmer, S., Recovery from extracapsular hip fracture. A longitudinal qualitative study of patients' experiences, Physiotherapy (United Kingdom), 103, e33-e34, 2017	Published as abstract only
Fraas, Michael, Balz, Magdalen, DeGrauw, William, Bell, Ben-Yishay Ben-Yishay Bottari Brown Christensen Cicerone Colantonio Corrigan Edwards Engberg Felicetti Fleminger Games Gibbs Glenn Glover Gomez-Hernandez Goodall Goss Hammond Hanks Hare Hashimoto Heinemann Holliday Hux Hux Jacobs Jacobs Jacobs Jacobs Kaitaro Kalpakjian Kim Kolakowsky-Hayner Kolakowsky-Hayner Koskinen Krempels Krempels Krempels Kromrey Langlois Leach Leith Malee Malee Man McCarthy Morgan Moules O'Connor Pagulayan Pollock Powell Rauch Riley Rotondi Sander Seidman Smith Steadman-Pare Voogt Welch Ylvisaker, Meeting the long-term needs of adults with acquired brain injury through community-based programming, Brain Injury, 21, 1267-1281, 2007	Mixed population with acquired brain injury (19/33 had traumatic brain injury); majority of population injured before 2000 (mean 8.58 (SD=8.5) years)
Francis, A., Ziviani, J., Fleming, J., Rae, M., McKinlay, L., Transitioning to adulthood: Needs of young people with an acquired brain injury and those of their families, Neurorehabilitation and Neural Repair, 26, 780-781, 2012	Published as abstract only
Fry, J. C., Price, P., Meeting the re-integration needs of individuals with spinal cord injury: Effectiveness of community-based occupational therapy, Archives of Physical Medicine and Rehabilitation, 94, e8, 2013	Published as abstract only
Gabbe, Belinda J., Sleney, Jude S., Gosling,	No qualitative data on phenomenon of

Study	Reason for Exclusion
Cameron M., Wilson, Krystle, Hart, Melissa J., Sutherland, Ann M., Christie, Nicola, Patient perspectives of care in a regionalised trauma system: lessons from the Victorian State Trauma System, The Medical journal of Australia, 198, 149-52, 2013	interest
Gan, C., Gargaro, J., Brandys, C., Gerber, G., Boschen, K., Family caregivers' support needs after brain injury: A synthesis of perspectives from caregivers, programs, and researchers, NeuroRehabilitation, 27, 5-18, 2010	Mixed population mostly not in PICO (caregivers of patients with a mean age of 34.06 (SD 14.14, range 12-60) years; results not reported separately for caregivers of patients below 18 years old
Garrino, Lorenza, Curto, Natascia, Decorte, Rita, Felisi, Nadia, Matta, Ebe, Gregorino, Silvano, Actis, M. Vittoria, Marchisio, Cecilia, Carone, Roberto, Towards personalized care for persons with spinal cord injury: a study on patients' perceptions, The journal of spinal cord medicine, 34, 67-75, 2011	No qualitative data on phenomenon of interest
Gfroerer, S. D., Wade, S., Wu, M., Parent perceptions of school-based support for students with traumatic brain injuries, Brain Injury, 22, 649-656, 2008	Quantitative study
Gilad, Dvorit, Lavee, Yoav, Innes-Kenig, Orly, The structure of dyadic support among couples with and without long-term disability, Journal of behavioral medicine, 32, 453-65, 2009	Population not in PICO (injuries sustained when participants were between 18-22 years old, and their mean age was 51.2 (SD = 10) years when study conducted)
Gillespie, Elena, A Qualitative Pilot Study of Spirituality in Long-term Recovery in Acquired Brain Injury, The journal of pastoral care & counseling : JPCC, 73, 96-105, 2019	No qualitative data on phenomenon of interest
Gilworth, G., Eyres, S., Carey, A., Bhakta, B., Tennant, A., Working with a brain injury: Personal experiences of returning to work following a mild or moderate brain injury, Journal of Rehabilitation Medicine, 40, 334-339, 2008	A&E population, 13/33 admitted to hospital for 2 days or more; results not presented separately for this subgroup
Glang, Ann, Todis, Bonnie, Thomas, Catherine W., Hood, Donald, Bedell, Gary, Cockrell, Janice, Return to school following childhood TBI: who gets services?, NeuroRehabilitation, 23, 477-86, 2008	No qualitative data on phenomenon of interest
Glintborg, Charlotte, Hansen, Tia G. B., Bech, Bech Braun Brenner Creswell Ellervik Engel Ghaziani Glintborg Glintborg Glintborg Glintborg Hackett Haggerty Hald Hall Holm Jorge Jorge Keith Kennedy Miles Morton Norholm Pallant Rivera Schlossberg Teasdale Teasdale Turner, Bio-psycho-social effects of a coordinated neurorehabilitation programme: A naturalistic mixed methods study, NeuroRehabilitation, 38, 99-113, 2016	20/82 patients in PICO (TBI); results not reported separately for them
Goodridge, Donna, Rogers, Marla, Klassen, Laura, Jeffery, Bonnie, Knox, Katherine, Rohatinsky, Noelle, Linassi, Gary, Access to health and support services: perspectives of people living with a long-term traumatic spinal cord injury in rural and urban areas, Disability and Rehabilitation, 37, 1401-10, 2015	No direct qualitative data on phenomenon of interest
Guldager, Rikke, Willis, Karen, Larsen, Kristian, Poulsen, Ingrid, Relatives' strategies in subacute brain injury rehabilitation: The warrior, the observer and the hesitant, Journal of Clinical Nursing, 28, 289-299, 2019	Population not in PICO (relatives of adults)
Gullick, Janice G., Taggart, Susan B., Johnston, Rae	No qualitative data on phenomenon of

Study	Reason for Exclusion
A., Ko, Natalie, The trauma bubble: patient and family experience of serious burn injury, <i>Journal of burn care &amp; research : official publication of the American Burn Association</i> , 35, e413-27, 2014	inertrest
Guptill, C. A., The lived experience of professional musicians with playing-related injuries: A phenomenological inquiry, <i>Medical Problems of Performing Artists</i> , 26, 84-95, 2011	Population did not have traumatic injuries ("Their injuries ranged from tendinitis to difficulties with orofacial musculature, arthritis, and bone spurs." p. 86)
Hansen, Alice Orts, Kristensen, Hanne Kaae, Cederlund, Ragnhild, Lauridsen, Henrik Hein, Tromborg, Hans, Client-centred practice from the perspective of Danish patients with hand-related disorders, <i>Disability and Rehabilitation</i> , 40, 1542-1552, 2018	Population not in PICO (no traumatic injury resulting in hospitalisation)
Harrison, Anne L., Hunter, Elizabeth G., Thomas, Heather, Bordy, Paige, Stokes, Erin, Kitzman, Patrick, Baptiste, Beaven Bellon Campbell Cheek Clark-Wilson Corrigan Danzl Degeneffe DiCicco-Bloom Donaldson Duncan Espinosa Fuortes Gaboda Halverson Heinemann Johnstone Kitzman Lannin Lefebvre Lefebvre Levack Lewis Malec Martin Marwitz Masel Pistarini Poston Rivera Rotondi Rotondi Salter Saman Sample Sample Sandelowski Saverino Schoenberg Solovieva Trudel Turner-Stokes Walker Winkler Zitnay, Living with traumatic brain injury in a rural setting: Supports and barriers across the continuum of care, <i>Disability and Rehabilitation: An International, Multidisciplinary Journal</i> , 39, 2071-2080, 2017	No qualitative data on phenomenon of interest
Hedman, A. M., Grafstrom, M., Conditions for rehabilitation of older patients with dementia and hip fracture--the perspective of their next of kin, <i>Scandinavian Journal of Caring Sciences</i> , 15, 151-8, 2001	No direct qualitative data on phenomenon of interest
Holmlund, Lisa, Guidetti, Susanne, Eriksson, Gunilla, Asaba, Eric, Return to work in the context of everyday life 7-11 years after spinal cord injury - a follow-up study, <i>Disability and Rehabilitation</i> , 40, 2875-2883, 2018	No direct qualitative data on phenomenon of interest
Jannings, Wendy, Pryor, Julie, The experiences and needs of persons with spinal cord injury who can walk, <i>Disability and Rehabilitation</i> , 34, 1820-6, 2012	Population not in PICO (adults)
Jones, M., Tan, D., Bechtel, E., Hoffman, J., Reyes, M., Perceptions of aging and healthcare after spinal cord injury, <i>Journal of Spinal Cord Medicine</i> , 39, 561, 2016	Published as abstract only
Kern, Stephen B., Hunter, Louis N., Sims, Ashley C., Berzins, Davis, Riekana, Helena, Andrews, Marisa L., Alderfer, Jillian K., Nelson, Kelly, Kushner, Reva, Understanding the Changing Health Care Needs of Individuals Aging With Spinal Cord Injury, <i>Topics in Spinal Cord Injury Rehabilitation</i> , 25, 62-73, 2019	No direct qualitative data on phenomenon of interest
Kimmel, Lara A., Holland, Anne E., Hart, Melissa J., Edwards, Elton R., Page, Richard S., Hau, Raphael, Bucknill, Andrew, Gabbe, Belinda J., Discharge from the acute hospital: trauma patients' perceptions of care, <i>Australian health review : a publication of the</i>	No qualitative data on phenomenon of interest

Study	Reason for Exclusion
Australian Hospital Association, 40, 625-632, 2016	
Kingston, Gail A., Judd, Jenni, Gray, Marion A., The experience of medical and rehabilitation intervention for traumatic hand injuries in rural and remote North Queensland: a qualitative study, <i>Disability and Rehabilitation</i> , 37, 423-9, 2015	No direct qualitative evidence on phenomenon of interest
Kuipers, P., Lancaster, A., Developing a suicide prevention strategy based on the perspectives of people with brain injuries, <i>Journal of Head Trauma Rehabilitation</i> , 15, 1275-1284, 2000	Population injured before 2000 (outside of inclusion criteria)
Kuipers, Pim, Foster, Michele, Smith, Sharon, Fleming, Jennifer, Using ICF-Environment factors to enhance the continuum of outpatient ABI rehabilitation: an exploratory study, <i>Disability and Rehabilitation</i> , 31, 144-51, 2009	No qualitative data on phenomenon of interest
Lafortune, Claire, Elliott, Jacobi, Egan, Mary Y., Stolee, Paul, Berg, Cagle Ceci Corrigan Demiris Deshpande Elliott Elliott Epstein Filipovych Glennie Graneheim Granger Gray Hamilton Harris Heinemann Hirdes Hirdes Hjar Hoover Hsieh Jin Johnson Kidd Lafortune Lauver Lawton Lundgren-Nilsson McNeil Morris Morris Ottenbacher Paolinelli Sims-Gould Sinha Stuck Stuck Toscan Toscan Wellens Wellens Wells, The rest of the story: A qualitative study of complementing standardized assessment data with informal interviews with older patients and families, <i>The Patient: Patient-Centered Outcomes Research</i> , 10, 215-224, 2017	No qualitative data on phenomenon of interest
Lefebvre, Helene, Levert, Marie Josee, The needs experienced by individuals and their loved ones following a traumatic brain injury, <i>Journal of trauma nursing : the official journal of the Society of Trauma Nurses</i> , 19, 197-207, 2012	Population not in PICO (adults)
Leith, Katherine H., Phillips, Lyn, Sample, Pat L., Abreu, Bryant Bullock Coneely Corrigan Creswell Darragh Dean Finfer Forbes Foster Fyfee Guilmette Haas Hooper Kayser-Jones Lincoln McCullough McMordie Mcuaniel Miles Morgan Morse Nochi Nochi Patton Patton Rauch Sample Sample Sandelowski Sandelowski Selassie Silverman Smith Swift Tashakkori, Exploring the service needs and experiences of persons with TBI and their families: The South Carolina experience, <i>Brain Injury</i> , 18, 1191-1208, 2004	Study dates outside of PICO for majority of patients: 7/10 participants injured before 2000; data not reported separately for the 3/10 participants injured after 2000
Liddle, Jacki, Fleming, Jennifer, McKenna, Kryss, Turpin, Merrill, Whitelaw, Penny, Allen, Shelley, Brooks, Cloute Coleman Gracey Hakamies-Blomqvist Hakamies-Blomqvist Harradine Hopewell Langdrige Leon-Carrion Liddle Liddle Liddle Lundqvist Marottoli McCabe Mezuk Molnar Novack Patton Pietrapiana Ragland Rapport Rapport Schanke Tamietto Turner Verburg, Driving and driving cessation after traumatic brain injury: Processes and key times of need, <i>Disability and Rehabilitation: An International, Multidisciplinary Journal</i> , 33, 2574-2586, 2011	No qualitative data on phenomenon of interest
Limond, Jenny, Dorris, Liam, McMillan, Thomas M., Quality of life in children with acquired brain injury: parent perspectives 1-5 years after injury, <i>Brain</i>	Quantitative study

Study	Reason for Exclusion
Injury, 23, 617-22, 2009	
Lindahl, Marianne, Teljigovic, Sanel, Heegaard Jensen, Lars, Hvalsoe, Berit, Juneja, Hemant, Importance of a patient-centred approach in ensuring quality of post-fracture rehabilitation for working aged people: A qualitative study of therapists' and patients' perspectives, Work (Reading, Mass.), 55, 831-839, 2016	Mixed population: 5/7 patients had simple fractures, 2/7 patients had multiple fractures; results not presented separately for the latter 2.
McColl, M. A., Aiken, A., McColl, A., Sakakibara, B., Smith, K., Primary care of people with spinal cord injury: Scoping review, Canadian Family Physician, 58, 1207-e635, 2012	Semi-systematic review, included studies checked for relevance, none were
McDermott, Garret L., McDonnell, Anne Marie, Aitken, Allen Barbour Bowen Elliott Fleming Gagnon Heary Heinemann Howes Hsieh Katz Kreutzer Krueger Lamontagne Lefebvre Lefebvre Lefebvre Leith Mays McFarland McLellan Morgan O'Callaghan O'Callaghan Pearce Petersen Pickard Pickelsimer Redpath Rotondi Sample Serio Shiel Williams Wilson Zaloshnja, Acquired brain injury services in the Republic of Ireland: Experiences and perceptions of families and professionals, Brain Injury, 28, 81-91, 2014	Population not in PICO (family members of adults with acquired brain injury; professionals working with adults with acquired brain injury)
McGarry, Sarah, Elliott, Catherine, McDonald, Ann, Valentine, Jane, Wood, Fiona, Girdler, Sonya, "This is not just a little accident": a qualitative understanding of paediatric burns from the perspective of parents, Disability and Rehabilitation, 37, 41-50, 2015	No qualitative data on phenomenon of interest
McRae, Philippa, Hallab, Lisa, Simpson, Grahame, Anstey, Braun Brooks Ellingsen Frost Gilworth Gilworth Gracey Harradine Kreutzer Macaden Medin Menon Nightingale Olver Oppermann Petrella Ponsford Rubenson Sabatello Simpson Tate Teasdale van Velzen van Velzen, Navigating employment pathways and supports following brain injury in Australia: Client perspectives, Australian Journal of Rehabilitation Counselling, 22, 76-92, 2016	No direct qualitative data on phenomenon of interest
Meade, M., Carr, L., Ellenbogen, P., Barrett, K., Perceptions of provider education and attitude by individuals with spinal cord injury: Implications for health care disparities, Topics in Spinal Cord Injury Rehabilitation, 17, 25-37, 2011	No direct qualitative data on phenomenon of interest; unclear population (n=7, reason for SCI only reported for 1/7 patients; duration reported for 6/7 and was 3 months, at least 2 years, >9 years, >20 years [n=2] and > 40 years).
Mueller, Christoph, Wang, Yuepeng, Brooks, Alice, Morant, Nicola, Sullivan, Paul, Raymont, Vanessa, Barbour, Bazeley Braun Braun Colantonio Dibley Dikmen Dinh Elliott Elovic Fleming Fleminger Fraas Guest Hou Howes Kay Lefebvre Lefebvre Leith Link London Malec McDermott McLellan O'Brien O'Callaghan O'Callaghan Olver Patton Penchansky Redpath Rotondi Sample Sharp Snead Turner Warren Whitnall, 'Attending to the wound and the person'-Patients' experiences and expectations of a newly established traumatic brain injury clinic, Brain Injury, 31, 1863-1870, 2017	No direct qualitative data on phenomenon of interest
New, P. W., A multidisciplinary consultation team to address the unmet needs of hospitalized patients with spinal cord injury, Archives of Neurology, 67, 1074-	Commentary

Study	Reason for Exclusion
1076, 2010	
O'Callaghan, A., McNamara, B., Cocks, E., 'What am I supposed to do? Cartwheels down the passageway?' Perspectives on the rehabilitation journey from people with ABI, <i>Brain Injury</i> , 28, 577-578, 2014	Published as abstract only
Ogilvie, Rebekah, Foster, Kim, McCloughen, Andrea, Curtis, Kate, Young peoples' experience and self-management in the six months following major injury: A qualitative study, <i>Injury</i> , 46, 1841-7, 2015	No qualitative data on phenomenon of interest
O'Hagan, F. T., Coutu, M. F., Baril, R., A case of mistaken identity? The role of injury representations in chronic musculoskeletal pain, <i>Disability and Rehabilitation</i> , 35, 1552-63, 2013	Population not in PICO (not traumatic injury requiring admission to hospital)
Oster, Caisa, Kildal, Morten, Ekselius, Lisa, Return to work after burn injury: burn-injured individuals' perception of barriers and facilitators, <i>Journal of burn care &amp; research : official publication of the American Burn Association</i> , 31, 540-50, 2010	No direct qualitative data on phenomenon of interest
Oyesanya, Tolu, Arango-Lasprilla, Baumeister Black Bond Brereton Bull Butler Cain Chan Ciuffreda Coco Conti Corrigan Corrigan Crewe Dickson Dickson Dikmen Fleming Fraser Garrett Garrino Gebhardt Heinemann Hsieh Jennekens Keenan Kmet Kneafsey Kolakowsky-Hayner Lefebvre Lefebvre Leith Levack Lindberg Lindberg Lloyd-Jones Lutz Lyon Macciocchi Mirr Moher Murray Paterson Pegg Perry Pickelsimer Rotondi Sand Silva-Smith Singh Sinnakaruppan Turkstra Turner Turner Turner Verhaeghe Weiss Wongvatunyu, The experience of patients with ABI and their families during the hospital stay: A systematic review of qualitative literature, <i>Brain Injury</i> , 31, 151-173, 2017	Systematic review, included studies checked for relevance
Patton, Desmond, Sodhi, Aparna, Affinati, Steven, Lee, Jooyoung, Crandall, Marie, Bingenheimer, Brooke Chapman Cooper Crandall Dowd Fahimi Forster Glaser Gorner Gowins Grinshteyn Hinkel Isackson Kleinman Lee Liebschutz Mazza Mccoy Mrug Rich Roy Sangji Sims Vermeiren Zinzow, Post-discharge needs of victims of gun violence in Chicago: A qualitative study, <i>Journal of Interpersonal Violence</i> , 34, 135-155, 2019	Population not in PICO (adults)
Pellatt, Glynis Collis, Patient-professional partnership in spinal cord injury rehabilitation, <i>British journal of nursing (Mark Allen Publishing)</i> , 13, 948-53, 2004	No direct evidence on phenomenon of interest
Pentland, W., Walker, J., Minnes, P., Tremblay, M., Brouwer, B., Gould, M., Women with spinal cord injury and the impact of aging, <i>Spinal Cord</i> , 40, 374-87, 2002	Study dates outside of PICO: All participants injured before 2000
Piatt, J., Herbenick, D., Eldridge, L., Knee, E., Burton, G., Sexuality and intimacy: Lack of educational resources for females with Spinal Cord Injury, <i>Journal of Spinal Cord Medicine</i> , 41, 595-596, 2018	Published as abstract only
Pouliquen, U., Etcharry-Bouyx, F., Pinon, K., Patureau, F., Petit, A., Lambert, A., Richard, I., Post-acute assessment programme for patients with traumatic brain injury: Measuring the gap between	Quantitative study

Study	Reason for Exclusion
patients' expectations on entering and end of programme recommendations, <i>Brain Injury</i> , 27, 789-792, 2013	
Reed, Deborah, Understanding and meeting the needs of farmers with amputations, <i>Orthopedic nursing</i> , 23, 397-5, 2004	Study dates outside of PICO for majority of patients: 11/16 participants injured before 2000; data not reported separately for the 5/16 participants injured after 2000
Roscigno, Cecelia I., Fleig, Denise K., Knafel, Kathleen A., Parent management of the school reintegration needs of children and youth following moderate or severe traumatic brain injury, <i>Disability and Rehabilitation</i> , 37, 523-33, 2015	No qualitative data on phenomenon of interest
Rotondi, Armando J., Sinkule, Jennifer, Balzer, Kathleen, Harris, Jeffrey, Moldovan, Rene, Allen, Bond Brzuzy Bull Callan Campbell Camplair Carnwath Cleeland Corrigan Corrigan Dixon Draper Flanagan Glass Hallberg Heinemann Junque King Kozloff Kreutzer Leith Mathis Mauss-Clum McCubbin McKinlay Miles Molter Oddy Olvingson Panting Poulshock Rotondi Rotondi Serio Serio Smith Thomsen Vadhan Vogt Von Korff Von Korff Wagner Whyte Witol, A Qualitative Needs Assessment of Persons Who Have Experienced Traumatic Brain Injury and Their Primary Family Caregivers, <i>The Journal of Head Trauma Rehabilitation</i> , 22, 14-25, 2007	No direct qualitative data on phenomenon of interest
Ryerson Espino, S., Kelly, E., Riordan, A., Zebracki, K., Vogel, L., Personal and family experiences of caregivers of children with SCI, <i>Developmental Medicine and Child Neurology</i> , 58, 107-108, 2016	Published as abstract only
Ryerson Espino, Susan L., Kelly, Erin H., Rivelli, Anne, Zebracki, Kathy, Vogel, Lawrence C., It is a marathon rather than a sprint: an initial exploration of unmet needs and support preferences of caregivers of children with SCI, <i>Spinal Cord</i> , 56, 284-294, 2018	No qualitative data on phenomenon of interest
Sager, L., James, C., Injured workers' perspectives of their rehabilitation process under the New South Wales Workers Compensation System, <i>Australian Occupational Therapy Journal</i> , 52, 127-135, 2005	Unclear population: N=6 who had sustained a work-related injury "Two of the injuries were spinal injuries, three were muscular injuries and one was a bone fracture." (p. 129) Procedure Once ethical ap"
Sand, Asa, Karlberg, Ingvar, Kreuter, Margareta, Spinal cord injured persons' conceptions of hospital care, rehabilitation, and a new life situation, <i>Scandinavian journal of occupational therapy</i> , 13, 183-92, 2006	Study dates outside of PICO for majority of patients/majority of patients injured before 2000
Sandstrom, Linda, Engstrom, Asa, Nilsson, Carina, Juuso, Paivi, Experiences of suffering multiple trauma: A qualitative study, <i>Intensive &amp; critical care nursing</i> , 2019	No qualitative data on phenomenon of interest
Sashika, H., Kikuchi, N., Takada, K., Relation of participation limitation and rehabilitation needs of mild-to-moderate traumatic brain injured (TBI) persons discharged from the advanced critical emergency centre: A qualitative study, <i>Brain Injury</i> , 28, 539-540, 2014	Published as abstract only
Sashika, Hironobu, Takada, Kaoruko, Kikuchi,	No qualitative data on phenomenon of

Study	Reason for Exclusion
Naohisa, Rehabilitation needs and participation restriction in patients with cognitive disorder in the chronic phase of traumatic brain injury, <i>Medicine</i> , 96, e5968, 2017	interest
Schiller, Claire, Franke, Thea, Belle, Jessica, Sims-Gould, Joanie, Sale, Joanna, Ashe, Maureen C., Words of wisdom - patient perspectives to guide recovery for older adults after hip fracture: a qualitative study, <i>Patient preference and adherence</i> , 9, 57-64, 2015	No qualitative data on phenomenon of interest
Sjodahl, C., Gard, G., Jarnlo, G. B., Transfemoral amputees' experiences of the first meeting and subsequent interactions with hospital staff, <i>Disability &amp; Rehabilitation</i> , 30, 1192-1203, 2008	Mixed population: 5/11 had amputations due to trauma; the majority of the 11 patients had amputations before 2000
Sloney, Judith, Christie, Nicola, Earthy, Sarah, Lyons, Ronan A., Kendrick, Denise, Towner, Elizabeth, Improving recovery-Learning from patients' experiences after injury: a qualitative study, <i>Injury</i> , 45, 312-9, 2014	Unclear population: Injuries not reported only that "All patients had to meet the criterion that they did not perceive themselves as recovered at one week post injury" (p. 313); 40% were not admitted as inpatients
Smith-Forbes, Enrique V., Howell, Dana M., Willoughby, Jason, Armstrong, Hilary, Pitts, Donald G., Uhl, Tim L., Adherence of Individuals in Upper Extremity Rehabilitation: A Qualitative Study, <i>Archives of Physical Medicine and Rehabilitation</i> , 97, 1262-1268.e1, 2016	No qualitative data on phenomenon of interest
Thrussell, Helen, Coggrave, Maureen, Graham, Allison, Gall, Angela, Donald, Michelle, Kulshrestha, Richa, Geddis, Tracey, Women's experiences of sexuality after spinal cord injury: a UK perspective, <i>Spinal Cord</i> , 56, 1084-1094, 2018	Population not in PICO (adults)
Turner, Benjamin James, Fleming, Jennifer, Ownsworth, Tamara, Cornwell, Petrea, Perceived service and support needs during transition from hospital to home following acquired brain injury, <i>Disability and Rehabilitation</i> , 33, 818-29, 2011	No qualitative data on phenomenon of interest
Turner, Benjamin, Fleming, Jennifer, Ownsworth, Tamara, Cornwell, Petrea, Barker, Dewar Doig Dowsell Fleming Fletcher Gracey Gracey Johnston Jones Kendall Kuipers Liamputtong McCabe Minnes Muenchberger Ownsworth Ownsworth Paterson Patton Robertson Sander Turner Turner Turner Turner Wertheimer Yates, Perceptions of recovery during the early transition phase from hospital to home following acquired brain injury: A journey of discovery, <i>Neuropsychological Rehabilitation</i> , 21, 64-91, 2011	No qualitative data on phenomenon of interest
Umeasiegbu, Veronica I., Waletich, Brittany, Whitten, Laura A., Bishop, Malachy, Abreu, Bartlett Berg Bishop Corrigan Cott Creswell Degeneffe Degeneffe deGuise Elbogen Gontkovsky Heinemann Jennekens Kreutzer Lefebvre Lehan Man Murphy O'Callaghan O'Callaghan Pickelsimer Ponsford Rotondi Sinnakaruppan Spearman Turner Vaughn, Community-based rehabilitation needs: Perceptions of individuals with brain injury and their families in the Midwestern United States, <i>Special Issue: Family support and adjustment following acquired brain</i>	Quantitative study

Study	Reason for Exclusion
injury: An international perspective., 19, 155-163, 2013	
Vu, Cecilia, Rothman, Emily, Kistin, Caroline J., Barton, Kelly, Bulman, Barb, Budzak-Garza, Ann, Olson-Dorff, Denyse, Bair-Merritt, Megan H., Adapting the Patient-Centered Medical Home to Address Psychosocial Adversity: Results of a Qualitative Study, Academic pediatrics, 17, S115-S122, 2017	4/25 adult participants are patients, but no further details about them reported (e.g., the reason for their patient status)
Waldera, Kathryn E., Heckathorne, Craig W., Parker, Margaret, Fatone, Stefania, Assessing the prosthetic needs of farmers and ranchers with amputations, Disability and rehabilitation. Assistive technology, 8, 204-12, 2013	Majority of participants in PICO injured before 2000
Whalley Hammell, K., Experience of rehabilitation following spinal cord injury: a meta-synthesis of qualitative findings, Spinal cord, 45, 260-74, 2007	(Semi-)systematic review, included studies checked for relevance, none were
Williams, Cydni N., Eriksson, Carl, Piantino, Juan, Hall, Trevor, Moyer, Danielle, Kirby, Aileen, McEvoy, Cindy, Long-term Sequelae of Pediatric Neurocritical Care: The Parent Perspective, Journal of pediatric intensive care, 7, 173-181, 2018	Mixed population (67% in PICO, 33% not in PICO); no direct qualitative data on phenomenon of interest
Wiseman, Taneal, Foster, Kim, Curtis, Kate, The experience of emotional wellbeing for patients with physical injury: A qualitative follow-up study, Injury, 47, 1983-9, 2016	No direct qualitative data on phenomenon of interest
Ziden, L., The break remains-elderly people's experiences of a hip fracture one year after discharge, Physiotherapy (United Kingdom), 97, eS1377, 2011	Published as abstract only
Ziden, Lena, Scherman, Marianne Hansson, Wenestam, Claes-Goran, Archibald, Bandura Blomfeldt Bruggemann Calnan Dahlgren Fletcher Folden Fortinsky Fredman Friedman Furstenberg Giorgi Hallberg Kvale Lach Lazarus LeClerc Lenze Lepp Magaziner Marton Marton Resnick Robinson Sandberg Schwarzer Shaw Shaw Shaw Wallston Wenestam Wijlhuizen Ziden Ziden Zijlstra, The break remains-Elderly people's experiences of a hip fracture 1 year after discharge, Disability and Rehabilitation: An International, Multidisciplinary Journal, 32, 103-113, 2010	No direct qualitative data on phenomenon of interest

## Economic studies

All economic studies for this review question were excluded at the initial title and abstract screening stage. See appendix G for further information.

## **Appendix L – Research recommendations**

### **Research recommendations for review question: A.1a What should be included in initial rehabilitation needs identification and assessment for adults after traumatic injury?**

No research recommendations was made for this review question.

### **Research recommendations for review question: A.1b What should be included in initial rehabilitation needs identification and assessment for children and young people after traumatic injury?**

No research recommendations was made for this review question.

### **Research recommendations for review question: A.2a What are the views and preferences of adults who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No research recommendations was made for this review question.

### **Research recommendations for review question: A.2b What are the views and preferences of children and young people who have used rehabilitation services after traumatic injury about assessment of their rehabilitation needs?**

No research recommendations was made for this review question.