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BMJ Open

A systematic review protocol for facilitators and barriers to integrating health services for traumatic brain injury and mental health or addictions

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Manuscripts

A systematic review protocol for facilitators and barriers to integrating health services for traumatic brain injury and mental health or addictions

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Abstract

Introduction

In the most populous province of Canada, one in five adults and one in six students report a lifetime history of traumatic brain injury (TBI). These individuals were also more likely to report elevated psychological distress and use illicit substances compared to those without TBI. The need for integrated health services has been recognized globally, yet efforts to develop more comprehensive and effective care for TBI and mental health and/or addictions (MHA) continue to be challenged by the siloing of the two systems. This protocol is for a systematic review that describes the current types of integrated care for TBI and MHA, and identifies the barriers and facilitators to integrating health care for these populations.

Methods and Analyses

This review will systematically search MEDLINE, EMBASE, PsycINFO, CINAHL, Cochrane Central Register of Controlled Trials, Sociological Abstracts, and Dissertations and Theses Global. References of eligible articles will also be searched for additional relevant studies. The search strategy will include the use of text words and subject headings relevant to the concepts 'TBI', 'substance abuse, gambling, or mental health', 'integrated healthcare', 'barriers and facilitators', and 'healthcare access'. Two reviewers will independently screen all articles based on pre-determined inclusion and exclusion criteria, and perform quality assessment on eligible studies. A narrative synthesis will be conducted using the data abstracted by the two reviewers.

Ethics and dissemination

Findings from the systematic review will be published in peer-reviewed journals, presented at scientific meetings, and summarized for key stakeholders in the field of TBI and/or MHA. This protocol will form a systematic review that holds the potential to impact policy and planning to develop integrated person-centred care for TBI and MHA, and addresses a recognized gap in TBI care.

Registration

CRD42018108343

Article Summary

Strengths and Limitations of this Study

- Findings from this review hold the potential to impact policy and planning for integrating care for traumatic brain injury (TBI) and mental health and/or addictions (MHA), addressing a recognized gap in TBI care
- A limitation of this study is the exclusion of non-English language studies, thereby omitting evidence on integrating TBI and MHA in jurisdictions where findings are not published in English
- A strength of this study is that, recognizing not all studies will explicitly describe a policy, intervention, service delivery, or program as integrating TBI and MHA care, the primary search strategy (TBI, MHA, and integrated care) will be supplemented with an additional search that aims to capture articles describing barriers and facilitators to healthcare for TBI and MHA (TBI, MHA, barriers and facilitators, and healthcare access) to maximize the return of relevant articles

A systematic review protocol for facilitators and barriers to integrating health services for traumatic brain injury and mental health or addictions

Traumatic brain injury (TBI) has been defined as “an alteration in brain function, or other evidence of brain pathology, caused by an external force”.¹ It is more common than breast cancer, HIV/AIDS, spinal cord injury, and multiple sclerosis combined,²⁻⁵ and the indirect economic costs due to a TBI is projected to be \$8.2 billion by 2031 in Canada alone. This exceeds costs of other common neurological conditions, including epilepsy, multiple sclerosis, and dementias including Alzheimer’s.⁶ In Ontario, Canada, home to 39% of Canadians,⁷ one in six adults⁸ and one in five students⁹ report a lifetime history of TBI. These individuals were also at least 52% more likely to have elevated psychological distress,¹⁰ 100% more likely to use cannabis,¹¹ 93% more likely to experience suicidal ideation,¹⁰ and 239% more likely to have attempted suicide¹⁰ compared to those without a history of TBI. Literature exploring the relationship between TBI and mental health and/or addictions (MHA) has found that MHA is prevalent after TBI across the lifespan, particularly diagnoses of schizophrenia, depression, anxiety, substance use disorder, post-traumatic stress disorder, obsessive-compulsive disorder (OCD), and attention deficit hyperactivity disorder (ADHD).¹²⁻²² It is noteworthy that among individuals with a MHA, a history of TBI is also common.¹²⁻²³

Despite these alarming statistics and the plethora of research establishing a relationship between TBI and MHA, a systems analysis of community and health services for TBI in Ontario identified a lack of appropriate services and community support for individuals with a TBI and MHA.²⁴ Efforts to develop more effective and early intervention and care continue to be challenged by the current siloing of the TBI and MHA systems. This need for integrated healthcare has been recognized globally²⁵⁻²⁶ and across many health conditions and settings.²⁷⁻³² Most recently, the World Health Assembly adopted the “Framework on Integrated People-Centred Health Services”³³ with the vision that “all people have equal access to quality health services that are co-produced in a way that meets their life course needs and respects social preferences, are coordinated across the continuum of care, and are comprehensive, safe, effective, timely, efficient and acceptable; and all carers are motivated, skilled and operate in a supportive environment”.³³ Such integrated care is attractive, as it holds the potential to enable the health systems to provide care that addresses the priorities and needs of persons with lived experience, and improve their experiences in transitions across their continuum of care, to positively impact patient outcome and quality of life.

Building on this vision, this protocol is for a systematic review that (1) describes the current types of integrated care for TBI and MHA and (2) identifies the barriers and facilitators to integrating health services for individuals with TBI and MHA. It is recognized that there are numerous concepts and definitions of integration currently applied in the literature,³³⁻³⁴ as many factors impact the delivery of health services in any given setting,³⁴⁻³⁵ making it difficult to identify one definition of health service integration. As such, this protocol will form a systematic review that aims to identify all forms of integration of care (e.g., vertical, horizontal, clinical, functional integration) to inform policy and programs to develop integrated care for TBI and MHA.

Methods and Analysis

Search Strategy

The following databases will be searched for relevant articles:

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- 2
- 3 1. MEDLINE In-Process and Other Non-Indexed Citations and MEDLINE;
- 4 2. EMBASE;
- 5 3. PsycINFO;
- 6 4. CINAHL;
- 7 5. Cochrane Central Register of Controlled Trials;
- 8 6. Sociological Abstracts; and
- 9 7. Dissertations & Theses Global.
- 10
- 11

12 The search strategy for this protocol is available through the online supplementary additional file 1. This
 13 search strategy will include the use of text words and subject headings (e.g., MeSH, Emtree) related to the
 14 following concepts:

- 15
- 16 A. TBI;
- 17 B. Substance abuse, gambling, or mental health;
- 18 C. Integrated healthcare;
- 19 D. Barrier and facilitator; and
- 20 E. Healthcare access.
- 21

22 The primary search strategy (concepts A + B + C) will identify papers that discuss integrated healthcare
 23 in a population with TBI and MHA. To complement this primary search strategy, an additional search
 24 (concepts A + B + D + E) will be included, based on the search strategies of other published reviews^{27 31 32}
 25³⁶⁻³⁸ and the “Framework on Integrated People-Centred Health Services”, adopted by the World Health
 26 Organization in 2016.³³ These two searches will be combined with an “OR” statement to complete the
 27 strategy for each of the databases searched, with the exception of the database Sociological Abstracts,
 28 where the strategy will be reduced (concepts A + B) due to paucity of results.

29 Searches will be limited to English language publications and exclude animal studies when possible.
 30 Additional limits and search fields will be applied, when applicable, to exclude conference abstracts,
 31 magazines, books, and encyclopedias. Records returned from this search strategy will be managed in
 32 EndNote.

33 *Study Selection*

34 For all databases, a first screen will be conducted by two reviewers who will independently assess all
 35 titles and abstracts for eligibility based on pre-determined inclusion criteria:

- 36
- 37
- 38 1. Describe or evaluate a (a) policy, (b) program, or (c) intervention/treatment at the health service
 39 delivery level for individuals with TBI and/or MHA identified in the literature to be prevalent
 40 among the TBI population (addictions/substance use, problem gambling, mood and personality
 41 disorders, schizophrenia and psychosis, anxiety and depression, trauma and stress disorder, OCD,
 42 ADHD, conduct disorder);¹²⁻²³ OR
- 43 2. Screen or diagnosis for a TBI in a health service for MHA; OR
- 44 3. Screen or diagnosis for a MHA in a health service for TBI; AND
- 45 4. Quantitative, qualitative, or mixed method studies, or review papers that report primary research
 46 findings related to TBI and/or MHA care; AND
- 47 5. Full-text available.
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54 Articles that meet all of the above criteria will be included for the second screen, which will be a full-text
 55 screen. However, articles that are narrative, commentaries, or describe a theory or framework, and articles
 56

1
2
3 that look at the broader brain injury population (e.g., acquired brain injury, trauma patients) without
4 specific mention of TBI will be excluded.
5

6 Two reviewers will independently assess the full-text articles for fulfillment of the following pre-
7 determined inclusion criteria:
8

- 9 1. Describe or evaluate a (a) policy, (b) program, or (c) intervention/treatment at the health service
10 delivery level for individuals with TBI and MHA of interest OR
- 11 2. Screen or diagnosis for a TBI in a health service for MHA; OR
- 12 3. Screen or diagnosis for a MHA in a health service for TBI; AND
- 13 4. Describe or evaluate an actual, applied experience of integration.
14

15 The reference lists of included full-text articles will also be hand-searched for additional relevant articles.
16 The study selection process and the reasons for exclusions at the full-text level will be presented using the
17 Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) study flow diagram.
18
19

20 21 *Data Extraction*

22 The following data will be abstracted independently by two reviewers, with the goal of extracting
23 standardized information that describes the context of the integration activity and associated barriers and
24 facilitators:
25
26

- 27 1. Author and publication year
- 28 2. Country of study
- 29 3. Funding source (potential conflict of interest from funding? Y/N)
- 30 4. Research objective(s)
- 31 5. Study design
- 32 6. Overall and sex/gender specific participant characteristics and sample size – e.g.,
33 sociodemographics (age, race/ethnicity, and other SES), TBI (Y/N, severity, cause of injury, time
34 since injury), MHA (Y/N – specify condition(s), time since diagnosis), comorbidities
- 35 7. Description of integration activity
- 36 8. Results of integration activity (stratify by sex/gender, if available)
- 37 9. Barriers (stratify by sex/gender, if available)
- 38 10. Facilitators (stratify by sex/gender, if available)
- 39 11. Additional comments/notes from reviewers
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41
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46 *Quality Assessment*

47 Controlled intervention, observational cohort and cross-sectional, case-control, before-after (pre-post)
48 with no control group, and case series studies as well as systematic reviews and meta-analyses will be
49 assessed using quality assessment tools created specifically for each study design by the methodologists
50 from the National Institutes of Health and Research Triangle Institute International.³⁹ Qualitative studies
51 will be assessed using the *Critical Appraisal Skills Programme* (CASP) checklist.⁴⁰ Two reviewers will
52 independently assess each article that passes the full-text screen. In the case of rating discrepancies,
53 reviewers will either come to a consensus or a third, independent reviewer will evaluate the study and
54 resolve any disagreements.
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Data Synthesis

A narrative synthesis will be conducted using tools and techniques informed by the *Guidance on the Conduct of Narrative Synthesis in Systematic Reviews*.⁴¹ The extracted data elements described above and results from the quality assessment will be “tabulated”. Where data are available, the extracted data elements will be tabulated by sex (if the original study examined sex as it relates to the biological attributes associated with “physical and physiological features including chromosomes, gene expression, hormone levels and functions, and reproductive/sexual anatomy”)⁴² and gender (if the original study examined and intended to assess “the constructed roles, behaviours, expressions, and identifies of girls, women, boys, men, and gender diverse people”).⁴² These findings will be “grouped and clustered” into the five recommended strategies of the “Framework on Integrated Person-Centred Care”³³ and, where applicable, type/context of integrated care/activity. Finally, a “textual description” will summarize each included study, focusing on the type of integrated care/activity as it relates to the recommended strategies of the Framework, and associated sex/gender specific barriers and facilitators.

Ethics and Dissemination

Ethics review will not be required because only publicly available published data will be analyzed. Findings from the systematic review will be published in peer-reviewed journals, presented at scientific meetings, and summarized for stakeholders of the ‘Integrating Brain Injury, Mental Health, and Addictions Research Program’, funded by the Ontario Ministry of Health and Long-Term Care.⁴³

Strengths and Limitations

It is recognized that a major limitation of this systematic review is the exclusion of non-English language studies. Evidence on integrating TBI and MHA in jurisdictions where English is not a primary language may be missed, limiting the comprehensiveness of this systematic review. However, there are numerous strengths of this review, including those that aim to maximize the retrieval and inclusion of relevant data. The primary search strategy for this review will be supplemented with a secondary search, aimed to capture articles that describe integrations of healthcare but do not describe their study as such. This was added recognizing that some interventions, such as screening for a TBI among individuals with MHA, may not be described as a form of integration and would be missed in the primary search. This additional search will ensure that such forms of integrated care are captured in this review. Similarly, the title and abstract screen will be purposely broad to include articles that describe policy, programs, or interventions/treatments for individuals with TBI and/or MHA, recognizing that many abstracts may focus on describing data primarily for only the TBI or MHA populations. Including these articles for the full-text screen will reduce the risk of missing relevant articles that describe their study predominantly from the perspective of TBI or MHA. Finally, theses will also be searched to capture early work, such as pilots, of integrated care for TBI and MHA that may not be published in peer-reviewed journals.

Conclusions

To the best of our knowledge, this is the first protocol for a systematic review that describes the types of integrated care for TBI and MHA currently implemented, and identifies the barriers and facilitators to

1
2
3 integrating care for this population. Informed by the internationally adopted *Framework on Integrated*
4 *Person-Centred Health Services*,³³ findings hold the potential to impact policy and planning for integrated
5 care for TBI and MHA, and address a recognized gap in TBI care.
6
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8 9 **Acknowledgements**

10
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12 Toronto Rehabilitation Institute-University Health Network, for assistance in developing the search
13 strategy, and Dr. Tatyana Mollayeva for assistance in identifying appropriate quality appraisal tools for
14 this review.
15

16 17 **Author's Contributions**

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19 VC conceptualized the study, formulated the design, and drafted the manuscript. VC and DT collaborated
20 with JB (Information Specialist) to develop the search strategy. DT and AC critically reviewed the
21 manuscript, and all authors read and approved the final manuscript.
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23

24 25 **Funding Statement**

26
27 This study was conducted as part of the 2017/18 Health System Research Fund Program Awards.
28 'Integrating Brain Injury, Mental Health, and Addictions'. Ministry Grant #267.
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31 32 **Competing Interests**

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34 None declared
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SEARCH STRATEGIES

Database: Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE® Daily and Ovid MEDLINE<1946 to August 10, 2018>

Search Strategy:

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- 1 exp Brain Injuries/ (62332)
 - 2 exp Brain Injuries, Traumatic/ (9743)
 - 3 exp Brain Concussion/ (7389)
 - 4 Craniocerebral Trauma/ (21314)
 - 5 tbi*2.tw,kf. (22847)
 - 6 mtbi*2.tw,kf. (2223)
 - 7 wrTBI*2.tw,kf. (12)
 - 8 concuss*.tw,kf. (7606)
 - 9 postconcuss*.tw,kf. (1154)
 - 10 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag* or wound* or fracture* or contusion*).tw,kf. (128306)
 - 11 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*).tw,kf. (44556)
 - 12 "shaken baby".tw,kf. (605)
 - 13 or/1-12 (196484)
 - 14 exp Substance-Related Disorders/ (259829)
 - 15 gambling/ (4842)
 - 16 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*).tw,kf. (108773)
 - 17 gambli???.tw,kf. (8414)
 - 18 (alcoholi* or drinker* or drinking).tw,kf. (177792)
 - 19 or/14-18 (424000)
 - 20 13 and 19 (3854)
 - 21 Mental Health/ (31512)
 - 22 mental disorders/ or exp anxiety disorders/ or exp "bipolar and related disorders"/ or "disruptive, impulse control, and conduct disorders"/ or exp dissociative disorders/ or exp "feeding and eating disorders"/ or exp mood disorders/ or neurodevelopmental disorders/ or anxiety, separation/ or exp "attention deficit and disruptive behavior disorders"/ or child behavior disorders/ or exp child development disorders, pervasive/ or schizophrenia, childhood/ or exp

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4 personality disorders/ or exp "schizophrenia spectrum and other psychotic disorders"/ or exp
5 "trauma and stressor related disorders"/ (586165)
6
7 23 Depression/ (103355)
8 24 exp Depressive Disorder, Major/ (26327)
9 25 exp Depressive Disorder/ (99948)
10
11 26 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw,kf.
12 (241708)
13
14 27 anxiety.tw,kf. (163525)
15
16 28 PTSD.tw,kf. (20669)
17
18 29 post-traumatic stress disorder?.tw,kf. (9534)
19
20 30 obsessive compulsive.tw,kf. (15892)
21
22 31 (depression? or depressed or depressiv* or MDD).tw,kf. (392484)
23
24 32 Schizophreni*.tw,kf. (116454)
25
26 33 bipolar.tw,kf. (56704)
27
28 34 conduct disorder?.tw,kf. (4279)
29
30 35 attention deficit.tw,kf. (24841)
31
32 36 hoard*.tw,kf. (1461)
33
34 37 or/21-36 (1084130)
35
36 38 13 and 37 (13021)
37
38 39 20 or 38 (15916)
39
40 40 exp "Delivery of Health Care, Integrated"/ (11218)
41
42 41 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
43 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw,kf.
44 (452323)
45
46 42 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
47 psychotherap* or program*)).tw,kf. (33149)
48
49 43 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
50 psychotherap* or program*)).tw,kf. (4447)
51
52 44 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
53 psychotherap* or program*)).tw,kf. (14002)
54
55 45 or/40-44 (461475)
56
57 46 39 and 45 (574)
58
59 47 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
60 impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
predict* or hinder* or willingness).tw,kf. (6647308)
48 ((seek? or seeking) adj3 (help* or treatment? or care)).tw,kf. (31739)
49 47 or 48 (6661497)

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4 50 Community health services/ (30003)
5 51 exp Primary Health Care/ (139690)
6 52 Patient participation/ (22821)
7
8 53 Patient Care Team/ (60979)
9 54 case management/ (9554)
10
11 55 critical pathways/ (6019)
12 56 exp "continuity of patient care"/ (218438)
13
14 57 health education/ (57952)
15 58 health promotion/ (67033)
16
17 59 health planning/ (21288)
18 60 patient care management/ (3219)
19 61 comprehensive health care/ (6407)
20 62 exp "delivery of health care"/ (978727)
21
22 63 disease management/ (30690)
23
24 64 critical pathways/ (6019)
25 65 patient-centered care/ (16429)
26
27 66 exp "outcome and process assessment (health care)"/ (977104)
28 67 exp program evaluation/ (68936)
29
30 68 quality assurance, health care/ (54119)
31 69 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
32 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
33 healthcare or service? or treatment? or therap* or program*)).tw,kf. (38696)
34
35 70 (engagement or engage or engaging or empower* or participat*).tw,kf. (569356)
36
37 71 (governan* or accountab*).tw,kf. (25773)
38
39 72 (model adj2 care).tw,kf. (8943)
40
41 73 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw,kf. (4766860)
42
43 74 or/50-73 (6666001)
44
45 75 39 and 49 and 74 (2505)
46
47 76 46 or 75 (2867)
48
49 77 limit 76 to english language (2676)
50
51 78 77 not (exp animals/ not exp humans/) (2521)

52
53 Database: **Cochrane Central Register of Controlled Trials** <2014 to Present>

54 Search Strategy:
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- 1 exp Brain Injuries/ (1732)
- 2 exp Brain Injuries, Traumatic/ (1732)
- 3 exp Brain Concussion/ (241)
- 4 Craniocerebral Trauma/ (283)
- 5 tbi*2.tw,kf. (2040)
- 6 mtbi*2.tw,kf. (250)
- 7 wrTBI*2.tw,kf. (0)
- 8 concuss*.tw,kf. (408)
- 9 postconcuss*.tw,kf. (102)
- 10 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag* or wound* or fracture* or contusion*)).tw,kf. (6161)
- 11 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*)).tw,kf. (3526)
- 12 "shaken baby".tw,kf. (9)
- 13 or/1-12 (10514)
- 14 exp Substance-Related Disorders/ (13128)
- 15 gambling/ (298)
- 16 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*)).tw,kf. (10967)
- 17 gambli???.tw,kf. (623)
- 18 (alcoholi* or drinker* or drinking).tw,kf. (11000)
- 19 or/14-18 (26428)
- 20 13 and 19 (185)
- 21 Mental Health/ (1123)
- 22 mental disorders/ or exp anxiety disorders/ or exp "bipolar and related disorders"/ or "disruptive, impulse control, and conduct disorders"/ or exp dissociative disorders/ or exp "feeding and eating disorders"/ or exp mood disorders/ or neurodevelopmental disorders/ or anxiety, separation/ or exp "attention deficit and disruptive behavior disorders"/ or child behavior disorders/ or exp child development disorders, pervasive/ or schizophrenia, childhood/ or exp personality disorders/ or exp "schizophrenia spectrum and other psychotic disorders"/ or exp "trauma and stressor related disorders"/ (26375)
- 23 Depression/ (9417)
- 24 exp Depressive Disorder, Major/ (3972)
- 25 exp Depressive Disorder/ (10136)
- 26 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw,kf. (17190)

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4 27 anxiety.tw,kf. (28440)
5 28 PTSD.tw,kf. (2944)
6 29 post-traumatic stress disorder?.tw,kf. (994)
7
8 30 obsessive compulsive.tw,kf. (1950)
9 31 (depression? or depressed or depressiv* or MDD).tw,kf. (53605)
10 32 Schizophreni*.tw,kf. (12510)
11 33 bipolar.tw,kf. (5592)
12 34 conduct disorder?.tw,kf. (313)
13 35 attention deficit.tw,kf. (2995)
14 36 hoard*.tw,kf. (53)
15 37 or/21-36 (103330)
16 38 13 and 37 (847)
17 39 20 or 38 (939)
18 40 exp "Delivery of Health Care, Integrated"/ (314)
19 41 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
20 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw,kf.
21 (29535)
22 42 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
23 psychotherap* or program*)).tw,kf. (4849)
24 43 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
25 psychotherap* or program*)).tw,kf. (688)
26 44 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
27 psychotherap* or program*)).tw,kf. (1369)
28 45 or/40-44 (30171)
29 46 39 and 45 (88)
30 47 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
31 impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
32 predict* or hinder* or willingness).tw,kf. (311112)
33 48 ((seek? or seeking) adj3 (help* or treatment? or care)).tw,kf. (3523)
34 49 47 or 48 (312722)
35 50 Community health services/ (898)
36 51 exp Primary Health Care/ (4481)
37 52 Patient participation/ (1122)
38 53 Patient Care Team/ (1538)
39 54 case management/ (655)
40 55 critical pathways/ (171)
41 56 exp "continuity of patient care"/ (579)

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4 57 health education/ (3492)
5 58 health promotion/ (4893)
6 59 health planning/ (34)
7
8 60 patient care management/ (119)
9 61 comprehensive health care/ (67)
10 62 exp "delivery of health care"/ (38828)
11 63 disease management/ (804)
12 64 critical pathways/ (171)
13 65 patient-centered care/ (450)
14 66 exp "outcome and process assessment (health care)"/ (127732)
15 67 exp program evaluation/ (5433)
16 68 quality assurance, health care/ (612)
17 69 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
18 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
19 healthcare or service? or treatment? or therap* or program*)).tw,kf. (3163)
20 70 (engagement or engage or engaging or empower* or participat*).tw,kf. (73190)
21 71 (governan* or accountab*).tw,kf. (574)
22 72 (model adj2 care).tw,kf. (1606)
23 73 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw,kf. (428554)
24 74 or/50-73 (543646)
25 75 39 and 49 and 74 (292)
26 76 46 or 75 (336)
27 77 limit 76 to english language (187)
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41 Database: **Embase Classic+Embase** <1947 to 2018 August 20>

42 Search Strategy:
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- 45 -----
46 1 exp brain injury/ (170129)
47 2 head injury/ (50510)
48 3 tbi*2.tw. (37286)
49 4 mtbi*2.tw. (3458)
50 5 wrTBI*2.tw. (16)
51 6 concuss*.tw. (10071)
52 7 postconcuss*.tw. (1412)
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4 8 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag*
5 or wound* or fracture* or contusion*)).tw. (173261)
6
7 9 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or
8 extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*)).tw. (64309)
9
10 10 "shaken baby".tw. (743)
11
12 11 or/1-10 (329144)
13
14 12 addiction/ (51840)
15
16 13 exp drug dependence/ (227621)
17
18 14 pathological gambling/ (5577)
19
20 15 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or
21 cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*)).tw.
22 (146297)
23
24 16 gambl???.tw. (10917)
25
26 17 (alcoholi* or drinker* or drinking).tw. (248964)
27
28 18 or/12-17 (514147)
29
30 19 11 and 18 (6730)
31
32 20 exp mental health/ (132537)
33
34 21 mental disease/ (222219)
35
36 22 exp anxiety disorder/ (211380)
37
38 23 exp bipolar disorder/ (57278)
39
40 24 behavior disorder/ or attention deficit disorder/ or disruptive behavior/ or drug seeking
41 behavior/ or impulse control disorder/ (107231)
42
43 25 exp dissociative disorder/ (8226)
44
45 26 exp eating disorder/ (47110)
46
47 27 exp mood disorder/ (461687)
48
49 28 exp autism/ (57648)
50
51 29 exp schizophrenia/ (181763)
52
53 30 exp personality disorder/ (59926)
54
55 31 exp psychosis/ (284664)
56
57 32 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw.
58 (304770)
59
60 33 PTSD.tw. (25839)
34 post-traumatic stress disorder?.tw. (12129)
35 obsessive compulsive.tw. (20726)
36 (depression? or depressed or depressiv* or MDD).tw. (545145)
37 Schizophreni*.tw. (158068)
38 bipolar.tw. (81682)

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4 39 conduct disorder?.tw. (5392)
5 40 attention deficit.tw. (31286)
6 41 hoard*.tw. (1814)
7
8 42 or/20-41 (1531303)
9 43 11 and 42 (29736)
10 44 19 or 43 (34158)
11 45 integrated health care system/ (9873)
12 46 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
13 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw.
14 (624215)
15 47 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
16 psychotherap* or program*)).tw. (44675)
17
18 48 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
19 psychotherap* or program*)).tw. (6653)
20
21 49 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
22 psychotherap* or program*)).tw. (19801)
23
24 50 or/45-49 (634621)
25
26 51 44 and 50 (1382)
27
28 52 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
29 impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
30 predict* or hinder* or willingness).tw. (8662026)
31
32 53 ((seek? or seeking) adj3 (help* or treatment? or care)).tw. (40702)
33
34 54 52 or 53 (8679961)
35
36 55 exp community care/ (116494)
37
38 56 exp primary health care/ (147878)
39
40 57 patient participation/ (23829)
41
42 58 exp patient care/ (719197)
43
44 59 clinical pathway/ (7778)
45
46 60 exp health education/ (297823)
47
48 61 health care planning/ (94317)
49
50 62 exp health care delivery/ (2870808)
51
52 63 disease management/ (19050)
53
54 64 outcome assessment/ (432109)
55
56 65 exp health care quality/ (2772612)
57
58 66 exp program evaluation/ (17544)
59
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4 67 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
5 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
6 healthcare or service? or treatment? or therap* or program*)).tw. (64305)
7
8 68 (engagement or engage or engaging or empower* or participat*).tw. (743424)
9
10 69 (governan* or accountab*).tw. (31041)
11
12 70 (model adj2 care).tw. (12583)
13
14 71 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw. (6328902)
15
16 72 or/55-71 (10373343)
17
18 73 44 and 54 and 72 (7037)
19
20 74 51 or 73 (7854)
21
22 75 limit 74 to english language (7426)
23
24 76 75 not ((exp animals/ or exp animal experimentation/ or nonhuman/) not exp human/)
25 (6887)
26
27 77 limit 76 to conference abstracts (2365)
28
29 78 76 not 77 (4522)
30
31 79 78 not medline.cr. (4055)

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33 Database: **PsycINFO** <1806 to August Week 1 2018>

34 Search Strategy:

- 35 -----
36 1 exp traumatic brain injury/ (17391)
37 2 exp head injuries/ (5923)
38 3 tbi*2.tw. (9703)
39 4 mtbi*2.tw. (1562)
40 5 wrTBI*2.tw. (8)
41 6 concuss*.tw. (2850)
42 7 postconcuss*.tw. (796)
43 8 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag*
44 or wound* or fracture* or contusion*)).tw. (45163)
45 9 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or
46 extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*)).tw. (3211)
47 10 "shaken baby".tw. (185)
48 11 or/1-10 (49487)
49 12 exp drug abuse/ (105296)
50 13 "substance use disorder"/ (5723)
51
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4 14 addiction/ (9744)
5 15 exp gambling/ (7117)
6 16 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or
7 cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*
8).tw.
9 (95808)
10
11 17 gambler?.tw. (11158)
12 18 (alcoholi* or drinker* or drinking).tw. (71401)
13
14 19 or/12-18 (189802)
15 20 11 and 19 (1834)
16 21 mental health/ (57737)
17 22 mental disorders/ (78899)
18 23 exp anxiety disorders/ (77257)
19 24 exp affective disorders/ (151634)
20 25 exp impulse control disorders/ (1034)
21 26 conduct disorder/ (4163)
22 27 behavior disorders/ (9073)
23 28 exp dissociative disorders/ (5069)
24 29 exp eating disorders/ (28488)
25 30 neurodevelopmental disorders/ (1969)
26 31 autism spectrum disorders/ (38498)
27 32 exp separation anxiety/ (1529)
28 33 exp attention deficit disorder/ (24934)
29 34 exp psychosis/ (109127)
30 35 exp personality disorders/ (33271)
31 36 exp posttraumatic stress disorder/ (29576)
32 37 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw.
33 (306679)
34 38 anxiety.tw. (180502)
35 39 PTSD.tw. (29697)
36 40 post-traumatic stress disorder?.tw. (9443)
37 41 obsessive compulsive.tw. (19372)
38 42 (depression? or depressed or depressiv* or MDD).tw. (278508)
39 43 Schizophreni*.tw. (118127)
40 44 bipolar.tw. (37311)
41 45 conduct disorder?.tw. (7217)
42 46 attention deficit.tw. (29043)
43 47 hoard*.tw. (1855)

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4 48 or/21-47 (887448)
5 49 11 and 48 (9062)
6 50 20 or 49 (10045)
7
8 51 integrated services/ (3216)
9 52 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
10 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw.
11 (152611)
12
13 53 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
14 psychotherap* or program*)).tw. (20889)
15
16 54 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
17 psychotherap* or program*)).tw. (2818)
18
19 55 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
20 psychotherap* or program*)).tw. (5590)
21
22 56 or/51-55 (155650)
23
24 57 50 and 56 (576)
25
26 58 Treatment Barriers/ (4168)
27
28 59 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
29 impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
30 predict* or hinder* or willingness).tw. (1644346)
31
32 60 ((seek? or seeking) adj3 (help* or treatment? or care)).tw. (24738)
33
34 61 or/58-60 (1655245)
35
36 62 exp community services/ (31008)
37
38 63 primary health care/ (16770)
39
40 64 health care services/ (40379)
41
42 65 "continuum of care"/ (1628)
43
44 66 health care delivery/ (19878)
45
46 67 interdisciplinary treatment approach/ (6871)
47
48 68 client participation/ (1850)
49
50 69 exp case management/ (3343)
51
52 70 exp managed care/ (4298)
53
54 71 client centered therapy/ (3105)
55
56 72 exp "quality of services"/ (17955)
57
58 73 exp health education/ or client education/ (20686)
59
60 74 health promotion/ (22605)
75 exp treatment planning/ (6202)
76 disease management/ (6121)
77 exp program evaluation/ (19435)

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4 78 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
5 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
6 healthcare or service? or treatment? or therap* or program*)).tw. (11242)
7
8 79 (engagement or engage or engaging or empower* or participat*).tw. (374143)
9
10 80 (governan* or accountab*).tw. (25304)
11
12 81 (model adj2 care).tw. (3435)
13
14 82 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw. (1245279)
15
16 83 or/62-82 (1562608)
17
18 84 50 and 61 and 83 (1650)
19
20 85 57 or 84 (2011)
21
22 86 limit 85 to english language (1934)
23
24 87 limit 86 to animal (115)
25
26 88 limit 87 to human (33)
27
28 89 86 not (87 not 88) (1852)
29
30 90 limit 89 to ("0200 book" or "0240 authored book" or "0280 edited book" or "0300
31 encyclopedia") (458)
32
33 91 89 not 90 (1394)
34

Database: CINAHL (searched 2018.08.21)

#	Query	Limiters/Expanders	Results
S81	S80	Limiters - English Language Search modes - Boolean/Phrase	1,242
S80	S52 OR S79	Search modes - Boolean/Phrase	1,250
S79	S45 AND S55 AND S78	Search modes - Boolean/Phrase	1,123
S78	S56 OR S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63 OR S64 OR S65 OR S66 OR S67 OR S68 OR S69 OR S70 OR S71 OR S72 OR S73 OR S74 OR S75 OR S76 OR S77	Search modes - Boolean/Phrase	1,628,534
S77	(educat* or screen* or train* or transition* or evaluat* or coordinat*)	Search modes - Boolean/Phrase	1,128,349
S76	(model n2 care)	Search modes - Boolean/Phrase	11,356
S75	(governan* or accountab*)	Search modes - Boolean/Phrase	24,583
S74	(engagement or engage or engaging or empower* or participat*)	Search modes - Boolean/Phrase	175,276
S73	((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or multi-disciplin* or multiprofession* or multi-profession*) n3 (team or care or health care or healthcare	Search modes - Boolean/Phrase	39,697

	or service* or treatment* or therap* or program*))		
S72	(MH "Quality of Health Care+")	Search modes - Boolean/Phrase	413,487
S71	(MH "Program Development+")	Search modes - Boolean/Phrase	51,590
S70	(MH "Outcome Assessment")	Search modes - Boolean/Phrase	23,937
S69	(MH "Process Assessment (Health Care)+")	Search modes - Boolean/Phrase	5,750
S68	(MH "Patient Centered Care")	Search modes - Boolean/Phrase	18,429
S67	(MH "Disease Management+")	Search modes - Boolean/Phrase	11,760
S66	(MH "Health Care Delivery+")	Search modes - Boolean/Phrase	210,880
S65	(MH "Patient Care Plans+")	Search modes - Boolean/Phrase	6,852
S64	(MH "Health Promotion")	Search modes - Boolean/Phrase	39,646
S63	(MH "Health Education+")	Search modes - Boolean/Phrase	88,614
S62	(MH "Continuity of Patient Care+")	Search modes - Boolean/Phrase	12,938
S61	(MH "Critical Path")	Search modes - Boolean/Phrase	3,710
S60	(MH "Case Management")	Search modes - Boolean/Phrase	13,403
S59	(MH "Multidisciplinary Care Team")	Search modes - Boolean/Phrase	28,529
S58	(MH "Consumer Participation")	Search modes - Boolean/Phrase	12,214
S57	(MH "Primary Health Care")	Search modes - Boolean/Phrase	38,581
S56	(MH "Community Health Services")	Search modes - Boolean/Phrase	13,940
S55	S53 OR S54	Search modes - Boolean/Phrase	903,092
S54	((seek or seeks or seeking) n3 (help* or treatment* or care))	Search modes - Boolean/Phrase	13,303
S53	(barrier* or hurdle* or obstacle* or challeng* or incentiv* or obstruct* or refusal* or impedim* or promot* or facilitat* or support* or enabl* or cause* or reason* or encourag* or predict* or hinder* or willingness)	Search modes - Boolean/Phrase	897,161
S52	S45 AND S51	Search modes - Boolean/Phrase	240
S51	S46 OR S47 OR S48 OR S49 OR S50	Search modes - Boolean/Phrase	112,403
S50	(coordinat* n3 (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	6,957
S49	(connect* n3 (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	2,263
S48	(integrat* n3 (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	19,214
S47	((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	110,503
S46	(MH "Health Care Delivery, Integrated")	Search modes - Boolean/Phrase	6,478
S45	S19 OR S44	Search modes - Boolean/Phrase	4,356
S44	S12 AND S43	Search modes - Boolean/Phrase	3,562
S43	S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42	Search modes - Boolean/Phrase	295,552
S42	hoard*	Search modes - Boolean/Phrase	279

S41	attention deficit	Search modes - Boolean/Phrase	8,798
S40	conduct disorder*	Search modes - Boolean/Phrase	762
S39	bipolar	Search modes - Boolean/Phrase	7,852
S38	Schizophreni*	Search modes - Boolean/Phrase	13,979
S37	((depression* or depressed or depressiv* or MDD)	Search modes - Boolean/Phrase	92,716
S36	obsessive compulsive	Search modes - Boolean/Phrase	2,839
S35	post-traumatic stress disorder*	Search modes - Boolean/Phrase	2,651
S34	PTSD	Search modes - Boolean/Phrase	4,813
S33	anxiety	Search modes - Boolean/Phrase	48,239
S32	((mental or psych*) n1 (health* or illness* or disease* or condition* or disorder*))	Search modes - Boolean/Phrase	150,733
S31	(MH "Stress Disorders, Post-Traumatic")	Search modes - Boolean/Phrase	11,557
S30	(MH "Attention Deficit Hyperactivity Disorder") OR (MH "Mental Disorders Diagnosed in Childhood") OR (MH "Child Behavior Disorders+") OR (MH "Child Development Disorders+") OR (MH "Child Development Disorders, Pervasive+") OR (MH "Feeding and Eating Disorders of Childhood+")	Search modes - Boolean/Phrase	28,519
S29	(MH "Separation Anxiety")	Search modes - Boolean/Phrase	382
S28	(MH "Depression+")	Search modes - Boolean/Phrase	59,957
S27	(MH "Affective Disorders+")	Search modes - Boolean/Phrase	63,151
S26	(MH "Eating Disorders+")	Search modes - Boolean/Phrase	11,050
S25	(MH "Dissociative Disorders+")	Search modes - Boolean/Phrase	665
S24	(MH "Personality Disorders+")	Search modes - Boolean/Phrase	6,356
S23	(MH "Affective Disorders, Psychotic+") OR (MH "Psychotic Disorders") OR (MH "Schizoaffective Disorder") OR (MH "Schizophrenia+")	Search modes - Boolean/Phrase	19,775
S22	(MH "Anxiety Disorders+")	Search modes - Boolean/Phrase	21,620
S21	(MH "Mental Disorders")	Search modes - Boolean/Phrase	33,506
S20	(MH "Mental Health")	Search modes - Boolean/Phrase	18,412
S19	S12 AND S18	Search modes - Boolean/Phrase	1,098
S18	S13 OR S14 OR S15 OR S16 OR S17	Search modes - Boolean/Phrase	122,473
S17	alcoholi* or drinker* or drinking	Search modes - Boolean/Phrase	37,825
S16	(gamble* or gambling*)	Search modes - Boolean/Phrase	1,914
S15	((drug or substance* or alcohol or opioid* or amphetamine* or cocaine or marijuana or cannabis or phencyclidine or benzodiaz*) n2 (misuse or abuse* or addict* or depend*))	Search modes - Boolean/Phrase	56,272
S14	(MH "Gambling")	Search modes - Boolean/Phrase	1,265
S13	(MH "Substance Use Disorders+")	Search modes - Boolean/Phrase	93,525
S12	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11	Search modes - Boolean/Phrase	41,008
S11	shaken baby	Search modes - Boolean/Phrase	392
S10	((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or extradural*) n1 (haematoma* or hematoma* or hemorrhag* or haemorrhag*))	Search modes - Boolean/Phrase	9,061

S9	((brain or head* or cerebr* or crani* or skull* or intracran*) n2 (injur* or trauma* or damag* or wound* or fracture* or contusion*))	Search modes - Boolean/Phrase	30,635
S8	postconcuss*	Search modes - Boolean/Phrase	741
S7	concuss*	Search modes - Boolean/Phrase	3,360
S6	wrTBI*	Search modes - Boolean/Phrase	7
S5	mTBI*	Search modes - Boolean/Phrase	614
S4	TBI*	Search modes - Boolean/Phrase	5,222
S3	(MH "Head Injuries")	Search modes - Boolean/Phrase	4,698
S2	(MH "Brain Concussion+")	Search modes - Boolean/Phrase	2,888
S1	(MH "Brain Injuries+")	Search modes - Boolean/Phrase	18,914

Database: Sociological Abstracts

(noft(tbi* OR mtbi* OR concuss* OR postconcuss* OR "shaken baby") OR noft(((brain OR head* OR cerebr* OR crani* OR skull* OR intracran*) NEAR/2 (injur* OR trauma* OR damag* OR wound* OR fracture* OR contusion*)))) AND (noft(((drug OR substance? OR alcohol OR opioid? OR amphetamine? OR cocaine OR marijuana OR cannabis OR phencyclidine OR benzodiaz*) NEAR/2 (misuse OR abuse* OR addict* OR depend*))) OR noft(gambli???) OR noft((alcoholi* OR drinker* OR drinking)) OR noft(((mental OR psych*) NEAR/1 (health* OR illness* OR disease* OR condition* OR disorder?))) OR noft(anxiety OR PTSD OR "post-traumatic stress" OR "obsessive compulsive" OR depression? OR depressed OR depressiv* OR MDD OR Schizophreni* OR "attention deficit" OR hoard*) OR noft("conduct disorder" OR "conduct disorders"))

Limits applied

- Language: English
- Exclude: Books; Magazines

Database: ProQuest Dissertations & Theses Global

((noft(tbi* OR mtbi* OR concuss* OR postconcuss* OR "shaken baby") OR noft(((brain OR head* OR cerebr* OR crani* OR skull* OR intracran*) NEAR/2 (injur* OR trauma* OR damag* OR wound* OR fracture* OR contusion*)))) AND (noft(((drug OR substance? OR alcohol OR opioid? OR amphetamine? OR cocaine OR marijuana OR cannabis OR phencyclidine OR benzodiaz*) NEAR/2 (misuse OR abuse* OR addict* OR depend*))) OR

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 3 noft(gambl???) OR noft((alcoholi* OR drinker* OR drinking)) OR noft(((mental OR psych*)
 4 NEAR/1 (health* OR illness* OR disease* OR condition* OR disorder?))) OR noft(anxiety OR
 5 PTSD OR "post-traumatic stress" OR "obsessive compulsive" OR depression? OR
 6 depressed OR depressiv* OR MDD OR Schizophreni* OR "attention deficit" OR hoard*) OR
 7 noft("conduct disorder" OR "conduct disorders")) AND ((noft(barrier* OR hurdle* OR
 8 obstacle* OR challeng* OR incentiv* OR obstruct* OR refusal* OR impedim* OR promot* OR
 9 facilitat* OR support* OR enabl* OR cause* OR reason* OR encourag* OR predict* OR
 10 hinder* OR willingness) OR noft(seek* NEAR/3 help*) OR noft(seek* NEAR/3 treatment*)
 11 OR noft(seek* NEAR/3 care)) AND (noft((interdisciplin* OR inter-disciplin* OR
 12 interprofession* OR inter-profession* OR multidisciplin* OR multi-disciplin* OR
 13 multiprofession* OR multi-profession*)) OR noft(engagement OR engage OR engaging OR
 14 empower* OR participat*) OR noft(governan* OR accountab*) OR noft(model NEAR/2 care)
 15 OR noft(educat* OR screen* OR train* OR transition* OR evaluat* OR coordinat*)) OR
 16 (((noft(tbi* OR mtbi* OR concuss* OR postconcuss* OR "shaken baby") OR noft(((brain OR
 17 head* OR cerebr* OR crani* OR skull* OR intracran*) NEAR/2 (injur* OR trauma* OR
 18 damag* OR wound* OR fracture* OR contusion*)))) AND (noft(((drug OR substance? OR
 19 alcohol OR opioid? OR amphetamine? OR cocaine OR marijuana OR cannabis OR
 20 phencyclidine OR benzodiaz*) NEAR/2 (misuse OR abuse* OR addict* OR depend*))) OR
 21 noft(gambl???) OR noft((alcoholi* OR drinker* OR drinking)) OR noft(((mental OR psych*)
 22 NEAR/1 (health* OR illness* OR disease* OR condition* OR disorder?))) OR noft(anxiety OR
 23 PTSD OR "post-traumatic stress" OR "obsessive compulsive" OR depression? OR
 24 depressed OR depressiv* OR MDD OR Schizophreni* OR "attention deficit" OR hoard*) OR
 25 noft("conduct disorder" OR "conduct disorders")) AND ((noft((vertical OR horizontal OR
 26 integrat* OR coordinat* OR co-ordinat* OR link*)) AND noft((care OR health care OR
 27 healthcare OR service* OR treatment* OR therap* OR psychotherap* OR program*)) OR
 28 (noft((integrat*) NEAR/3 (care)) OR noft((integrat*) NEAR/3 ("health care")) OR
 29 noft((integrat*) NEAR/3 (healthcare)) OR noft((integrat*) NEAR/3 (healthcare)) OR
 30 noft((integrat*) NEAR/3 (service*)) OR noft((integrat*) NEAR/3 (treatment*)) OR
 31 noft((integrat*) NEAR/3 (therap*)) OR noft((integrat*) NEAR/3 (psychotherap*)) OR
 32 noft((integrat*) NEAR/3 (program*)) OR noft((coordinat*) NEAR/3 (care)) OR
 33 noft((coordinat*) NEAR/3 ("health care")) OR noft((coordinat*) NEAR/3 (healthcare)) OR
 34 noft((coordinat*) NEAR/3 (healthcare)) OR noft((coordinat*) NEAR/3 (service*)) OR
 35 noft((coordinat*) NEAR/3 (treatment*)) OR noft((coordinat*) NEAR/3 (therap*)) OR
 36 noft((coordinat*) NEAR/3 (psychotherap*)) OR noft((coordinat*) NEAR/3 (program*)) OR
 37 noft((connect*) NEAR/3 (care)) OR noft((connect*) NEAR/3 ("health care")) OR
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3 noft((connect*) NEAR/3 (healthcare)) OR noft((connect*) NEAR/3 (healthcare)) OR
4 noft((connect*) NEAR/3 (service*)) OR noft((connect*) NEAR/3 (treatment*)) OR
5 noft((connect*) NEAR/3 (therap*)) OR noft((connect*) NEAR/3 (psychotherap*)) OR
6 noft((connect*) NEAR/3 (program*))))Limits applied
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11 Limits applied:

- 12 • Language: English
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PRISMA-P (Preferred Reporting Items for Systematic review and Meta-Analysis Protocols) 2015 checklist: recommended items to address in a systematic review protocol*

Section and topic	Item No	Checklist item
ADMINISTRATIVE INFORMATION		
Title:		
Identification	1a	Identify the report as a protocol of a systematic review (PAGE 1)
Update	1b	If the protocol is for an update of a previous systematic review, identify as such (N/A)
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number (PAGE 2)
Authors:		
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author (PAGE 1)
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review (PAGE 8)
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments (N/A)
Support:		
Sources	5a	Indicate sources of financial or other support for the review (PAGE 8)
Sponsor	5b	Provide name for the review funder and/or sponsor (PAGE 8)
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol (PAGE 8)
INTRODUCTION		
Rationale	6	Describe the rationale for the review in the context of what is already known (PAGE 4)
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO) (PAGE 4)
METHODS		
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review (PAGES 5-6)
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage (PAGES 5)
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated (PAGE 5)
Study records:		
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review (PAGE 5)

Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis) (PAGE 5-6)
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators (PAGE 6)
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications (PAGE 6)
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale (PAGE 5-6)
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis (PAGE 6)
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised (N/A)
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2 , Kendall's τ) (N/A)
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression) (PAGE 7)
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned (PAGE 7)
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies) (N/A)
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE) (PAGE 6)

*** It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items. Amendments to a review protocol should be tracked and dated. The copyright for PRISMA-P (including checklist) is held by the PRISMA-P Group and is distributed under a Creative Commons Attribution Licence 4.0.**

From: Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart L, PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2015 Jan 2;349(jan02 1):g7647.

BMJ Open

A systematic review protocol for facilitators and barriers to integrating health services for traumatic brain injury and mental health or addictions

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Primary Subject Heading:	Health services research
Secondary Subject Heading:	Public health
Keywords:	Neurological injury < NEUROLOGY, MENTAL HEALTH, Organisation of health services < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, Integration of health services, Traumatic brain injury, Addictions

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Manuscripts

A systematic review protocol for facilitators and barriers to integrating health services for traumatic brain injury and mental health or addictions

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Abstract

Introduction

In the most populous province of Canada, one in five adults and one in six students report a lifetime history of traumatic brain injury (TBI). These individuals were also more likely to report elevated psychological distress and use illicit substances compared to those without TBI. The need for integrated health services has been recognized globally, yet efforts to develop more comprehensive and effective care for TBI and mental health and/or addictions (MHA) continue to be challenged by the siloing of the two systems. This protocol is for a systematic review that describes the current types of integrated care for TBI and MHA, and identifies the barriers and facilitators to integrating health care for these populations.

Methods and Analyses

This review will systematically search MEDLINE, EMBASE, PsycINFO, CINAHL, Cochrane Central Register of Controlled Trials, Sociological Abstracts, and Dissertations and Theses Global. References of eligible articles will also be searched for additional relevant studies. The search strategy will include the use of text words and subject headings relevant to the concepts 'TBI', 'substance abuse, gambling, or mental health', 'integrated healthcare', 'barriers and facilitators', and 'healthcare access'. Two reviewers will independently screen all articles based on pre-determined inclusion and exclusion criteria, and perform quality assessment on eligible studies. A narrative synthesis will be conducted using the data abstracted by the two reviewers.

Ethics and dissemination

Findings from the systematic review will be published in peer-reviewed journals, presented at scientific meetings, and summarized for key stakeholders in the field of TBI and/or MHA. This protocol will form a systematic review that holds the potential to impact policy and planning to develop integrated person-centred care for TBI and MHA, and addresses a recognized gap in TBI care.

Registration

CRD42018108343

Article Summary

Strengths and Limitations of this Study

- The exclusion of non-English language studies, thereby omitting evidence on integrating TBI and MHA in jurisdictions where findings are not published in English, limits the comprehensiveness of the systematic review
- Recognizing not all studies will explicitly describe a policy, intervention, service delivery, or program as integrating TBI and MHA care, the primary search strategy (TBI, MHA, and integrated care) will be supplemented with an additional search that aims to capture articles describing barriers and facilitators to healthcare for TBI and MHA (TBI, MHA, barriers and facilitators, and healthcare access) to maximize the return of relevant articles
- At both screening stages, a random selection of articles will first be selected for independent review to enable the reviewers to meet and to establish and document a common extraction and interpretation technique; the reviewers will also meet regularly to review the articles that are included/excluded to ensure consistency in the interpretation of the pre-determined inclusion criteria

A systematic review protocol for facilitators and barriers to integrating health services for traumatic brain injury and mental health or addictions

Introduction

Traumatic brain injury (TBI) has been defined as “an alteration in brain function, or other evidence of brain pathology, caused by an external force”.¹ It is more common than breast cancer, HIV/AIDS, spinal cord injury, and multiple sclerosis combined,²⁻⁵ and the indirect economic costs due to a TBI is projected to be \$8.2 billion by 2031 in Canada alone. This exceeds costs of other common neurological conditions, including epilepsy, multiple sclerosis, and dementias including Alzheimer’s.⁶ In Ontario, Canada, home to 39% of Canadians,⁷ one in six adults⁸ and one in five students⁹ report a lifetime history of TBI. These individuals were also at least 52% more likely to have elevated psychological distress,¹⁰ 100% more likely to use cannabis,¹¹ 93% more likely to experience suicidal ideation,¹⁰ and 239% more likely to have attempted suicide¹⁰ compared to those without a history of TBI. Literature exploring the relationship between TBI and mental health and/or addictions (MHA) has found that MHA is prevalent after TBI across the lifespan, particularly diagnoses of schizophrenia, depression, anxiety, substance use disorder, post-traumatic stress disorder, obsessive-compulsive disorder (OCD), and attention deficit hyperactivity disorder (ADHD).¹²⁻²² It is noteworthy that among individuals with a MHA, a history of TBI is also common.¹²⁻²³

Despite these alarming statistics and the plethora of research establishing a relationship between TBI and MHA, a systems analysis of community and health services for TBI in Ontario identified a lack of appropriate services and community support for individuals with a TBI and MHA.²⁴ Efforts to develop more effective and early intervention and care continue to be challenged by the current siloing of the TBI and MHA systems. This need for integrated healthcare has been recognized globally²⁵⁻²⁶ and across many health conditions and settings.²⁷⁻³² Most recently, the World Health Assembly adopted the “Framework on Integrated People-Centred Health Services”³³ with the vision that “all people have equal access to quality health services that are co-produced in a way that meets their life course needs and respects social preferences, are coordinated across the continuum of care, and are comprehensive, safe, effective, timely, efficient and acceptable; and all carers are motivated, skilled and operate in a supportive environment”.³³ Such integrated care is attractive, as it holds the potential to enable the health systems to provide care that addresses the priorities and needs of persons with lived experience, and improve their experiences in transitions across their continuum of care, to positively impact patient outcome and quality of life.

Building on this vision, this protocol is for a systematic review that (1) describes the current types of integrated care for TBI and MHA, including access to MHA services for the TBI population and access to TBI services for the MHA population, and (2) identifies the barriers and facilitators to integrating health services for individuals with TBI and MHA. It is recognized that there are numerous concepts and definitions of integration that is currently applied in the literature,³³⁻³⁴ as many factors impact the delivery of health services in any given setting,³⁴⁻³⁵ making it difficult to identify one definition of health service integration. As such, this protocol will form a systematic review that aims to identify all forms of integration of care (e.g., vertical, horizontal, clinical, functional integration) to inform policy and programs to develop integrated care for TBI and MHA.

Methods and Analysis

Search Strategy

The following databases will be searched for relevant articles:

1. MEDLINE In-Process and Other Non-Indexed Citations and MEDLINE;
2. EMBASE;
3. PsycINFO;
4. CINAHL;
5. Cochrane Central Register of Controlled Trials;
6. Sociological Abstracts; and
7. Dissertations & Theses Global.

The search strategy for this protocol is available through the online supplementary additional file 1. This search strategy will include the use of text words and subject headings (e.g., MeSH, Emtree) related to the following concepts:

- A. TBI;
- B. Substance abuse, gambling, or mental health;
- C. Integrated healthcare;
- D. Barrier and facilitator; and
- E. Healthcare access.

The primary search strategy (concepts A + B + C) will identify papers that discuss integrated healthcare in a population with TBI and MHA. To complement this primary search strategy, an additional search (concepts A + B + D + E) will be included, based on the search strategies of other published reviews^{27 31 32 36-38} and the “Framework on Integrated People-Centred Health Services”, adopted by the World Health Organization in 2016.³³ These two searches will be combined with an “OR” statement to complete the strategy for each of the databases searched, with the exception of the database Sociological Abstracts, where the strategy will be reduced (concepts A + B) due to paucity of results.

Searches will be limited to English language publications and exclude animal studies when possible. Additional limits and search fields will be applied, when applicable, to exclude conference abstracts, magazines, books, and encyclopedias. Records returned from this search strategy will be managed in EndNote.

Study Selection

For all databases, a first screen will be conducted by two reviewers who will independently assess all titles and abstracts for eligibility based on pre-determined inclusion criteria:

1. Describe or evaluate a (a) policy, (b) program, or (c) intervention/treatment at the health service delivery level for individuals with TBI and/or MHA identified in the literature to be prevalent among the TBI population (addictions/substance use, problem gambling, mood and personality disorders, schizophrenia and psychosis, anxiety and depression, trauma and stress disorder, OCD, ADHD, conduct disorder);¹²⁻²³ OR
2. Screen or diagnosis for a TBI in a health service for MHA; OR
3. Screen or diagnosis for a MHA in a health service for TBI; AND
4. Quantitative, qualitative, or mixed method studies, or review papers that report primary research findings related to TBI and/or MHA care; AND

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3 5. Full-text available.
4

5 Articles that meet all of the above criteria will be included for the second screen, which will be a full-text
6 screen. However, articles that are narrative, commentaries, or describe a theory or framework, and articles
7 that look at the broader brain injury population (e.g., acquired brain injury, trauma patients) without
8 specific mention of TBI will be excluded.
9

10 Recognizing that reviewers may interpret the above pre-determined inclusion criteria differently, a
11 random selection of abstracts and titles will first be selected for independent review so the reviewers can
12 meet to establish and document a common extraction and interpretation technique. The reviewers will
13 then meet regularly to review the abstracts that are included/excluded to ensure consistency in the
14 interpretation of the pre-determined inclusion criteria.
15

16 Two reviewers will independently assess the full-text articles for fulfillment of the following pre-
17 determined inclusion criteria:
18

- 19 1. Describe or evaluate a (a) policy, (b) program, or (c) intervention/treatment at the health service
20 delivery level for individuals with TBI and MHA of interest OR
- 21 2. Screen or diagnosis for a TBI in a health service for MHA; OR
- 22 3. Screen or diagnosis for a MHA in a health service for TBI; AND
- 23 4. Describe or evaluate an actual, applied experience of integration.
24
25

26 The reference lists of included full-text articles will also be hand-searched for additional relevant articles.
27 The study selection process and the reasons for exclusions at the full-text level will be presented using the
28 Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) study flow diagram.
29 Similar to the title and abstract screen, the reviewers will first review a random selection of articles to
30 establish a common extraction and interpretation technique, and will meet regularly to ensure consistency
31 in the interpretation of the inclusion criteria.
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35 *Data Extraction*
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37 The following data will be abstracted independently by two reviewers, with the goal of extracting
38 standardized information that describes the context of the integration activity and associated barriers and
39 facilitators:
40

- 41 1. Author and publication year
- 42 2. Country of study
- 43 3. Funding source (potential conflict of interest from funding? Y/N)
- 44 4. Research objective(s)
- 45 5. Study design
- 46 6. Overall and sex/gender specific participant characteristics and sample size – e.g.,
47 sociodemographics (age, race/ethnicity, and other SES), TBI (Y/N, severity, cause of injury, time
48 since injury), MHA (Y/N – specify condition(s), time since diagnosis), comorbidities
- 49 7. Description of integration activity
- 50 8. Results of integration activity (stratify by sex/gender, if available)
- 51 9. Barriers (stratify by sex/gender, if available)
- 52 10. Facilitators (stratify by sex/gender, if available)
- 53 11. Additional comments/notes from reviewers
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3 Similar to the study selection process, the reviewers will first conduct data extraction on a select articles
4 to establish a common interpretation and extraction technique, and will meet regularly to ensure
5 consistency in the data extracted.
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8 9 *Quality Assessment*

10 Controlled intervention, observational cohort and cross-sectional, case-control, before-after (pre-post)
11 with no control group, and case series studies as well as systematic reviews and meta-analyses will be
12 assessed using quality assessment tools created specifically for each study design by the methodologists
13 from the National Institutes of Health and Research Triangle Institute International.³⁹ Qualitative studies
14 will be assessed using the *Critical Appraisal Skills Programme (CASP)* checklist.⁴⁰ Two reviewers will
15 independently assess each article that passes the full-text screen. In the case of rating discrepancies,
16 reviewers will either come to a consensus or a third, independent reviewer will evaluate the study and
17 resolve any disagreements.
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20 21 22 *Data Synthesis*

23
24 A narrative synthesis will be conducted using tools and techniques informed by the *Guidance on the*
25 *Conduct of Narrative Synthesis in Systematic Reviews*.⁴¹ The extracted data elements described above and
26 results from the quality assessment will be “tabulated”. Where data are available, the extracted data
27 elements will be tabulated by sex (if the original study examined sex as it relates to the biological
28 attributes associated with “physical and physiological features including chromosomes, gene expression,
29 hormone levels and functions, and reproductive/sexual anatomy”)⁴² and gender (if the original study
30 examined and intended to assess “the constructed roles, behaviours, expressions, and identifies of girls,
31 women, boys, men, and gender diverse people”).⁴² These findings will be “grouped and clustered” into
32 the five recommended strategies of the “Framework on Integrated Person-Centred Care”³³ and, where
33 applicable, type/context of integrated care/activity. Finally, a “textual description” will summarize each
34 included study, focusing on the type of integrated care/activity as it relates to the recommended strategies
35 of the Framework, and associated sex/gender specific barriers and facilitators.
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40 41 *Patient and Public Involvement*

42 Patients and public were not involved in the creation of this systematic review protocol.
43

44 However, this work is part of a larger program of research entitled ‘Integrating Brain Injury, Mental
45 Health, and Addiction’, funded by the Ontario Ministry of Health and Long-Term Care, that received
46 input from individuals with lived experience and representatives of organizations that serve the TBI,
47 MHA, housing, criminal justice, and violence against women sectors.
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50 51 **Ethics and Dissemination**

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53 Ethics review will not be required because only publicly available published data will be analyzed.
54 Findings from the systematic review will be published in a peer-reviewed journal, presented at scientific
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meetings, and summarized for stakeholders of the ‘Integrating Brain Injury, Mental Health, and Addictions Research Program’, funded by the Ontario Ministry of Health and Long-Term Care.⁴³

Strengths and Limitations

It is recognized that a major limitation of this systematic review is the exclusion of non-English language studies. Evidence on integrating TBI and MHA in jurisdictions where English is not a primary language may be missed, limiting the comprehensiveness of this systematic review. Of note is that unpublished results will not be identified in our systematic review, further limiting the comprehensiveness of this review. Recognizing the value of results of integrated activities that are not published in peer-reviewed journals, this protocol includes the process to systematically identify reports and theses to maximize the capture of findings related to integrated care for the TBI and MHA populations.

However, there are numerous strengths of this review, including those that aim to maximize the retrieval and inclusion of relevant data. The primary search strategy for this review will be supplemented with a secondary search, aimed to capture articles that describe integrations of healthcare but do not describe their study as such. This was added, recognizing that some non-specific treatments and interventions, such as screening for a TBI among individuals with MHA, may not be described as a form of integration and would be missed in the primary search. This additional search will ensure that non-specific treatments and integrated care are captured in this review. Similarly, the title and abstract screen will be purposely broad to include articles that describe policy, programs, or interventions/treatments for individuals with TBI and/or MHA, recognizing that many abstracts may focus on describing data primarily for only the TBI or MHA populations. Including these articles for the full-text screen will reduce the risk of missing relevant articles that describe their study predominantly from the perspective of TBI or MHA. Finally, theses will also be searched to capture early work, such as pilots, of integrated care for TBI and MHA that may not be published in peer-reviewed journals.

To the best of our knowledge, this is the first protocol for a systematic review that describes the types of integrated care for TBI and MHA currently implemented, and identifies the barriers and facilitators to integrating care for this population. Informed by the internationally adopted *Framework on Integrated Person-Centred Health Services*,³³ findings hold the potential to impact policy and planning for integrated care for TBI and MHA, and address a recognized gap in TBI care.

Acknowledgements

The authors would like to acknowledge the support of Ms. Jessica Babineau, Information Specialist at the Toronto Rehabilitation Institute-University Health Network, for assistance in developing the search strategy, and Dr. Tatyana Mollayeva for assistance in identifying appropriate quality appraisal tools for this review.

Author’s Contributions

VC conceptualized the study, formulated the design, and drafted the manuscript. VC and DT collaborated with JB (Information Specialist) to develop the search strategy. DT and AC critically reviewed the manuscript, and all authors read and approved the final manuscript.

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Competing Interests

None declared

For peer review only

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SEARCH STRATEGIES

Database: Ovid MEDLINE: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE® Daily and Ovid MEDLINE<1946 to August 10, 2018>

Search Strategy:

-
- 1 exp Brain Injuries/ (62332)
 - 2 exp Brain Injuries, Traumatic/ (9743)
 - 3 exp Brain Concussion/ (7389)
 - 4 Craniocerebral Trauma/ (21314)
 - 5 tbi*2.tw,kf. (22847)
 - 6 mtbi*2.tw,kf. (2223)
 - 7 wrTBI*2.tw,kf. (12)
 - 8 concuss*.tw,kf. (7606)
 - 9 postconcuss*.tw,kf. (1154)
 - 10 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag* or wound* or fracture* or contusion*).tw,kf. (128306)
 - 11 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*).tw,kf. (44556)
 - 12 "shaken baby".tw,kf. (605)
 - 13 or/1-12 (196484)
 - 14 exp Substance-Related Disorders/ (259829)
 - 15 gambling/ (4842)
 - 16 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*).tw,kf. (108773)
 - 17 gambl???.tw,kf. (8414)
 - 18 (alcoholi* or drinker* or drinking).tw,kf. (177792)
 - 19 or/14-18 (424000)
 - 20 13 and 19 (3854)
 - 21 Mental Health/ (31512)
 - 22 mental disorders/ or exp anxiety disorders/ or exp "bipolar and related disorders"/ or "disruptive, impulse control, and conduct disorders"/ or exp dissociative disorders/ or exp "feeding and eating disorders"/ or exp mood disorders/ or neurodevelopmental disorders/ or anxiety, separation/ or exp "attention deficit and disruptive behavior disorders"/ or child behavior disorders/ or exp child development disorders, pervasive/ or schizophrenia, childhood/ or exp

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2
3 personality disorders/ or exp "schizophrenia spectrum and other psychotic disorders"/ or exp
4 "trauma and stressor related disorders"/ (586165)
5
6 23 Depression/ (103355)
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8 24 exp Depressive Disorder, Major/ (26327)
9
10 25 exp Depressive Disorder/ (99948)
11
12 26 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw,kf.
13 (241708)
14
15 27 anxiety.tw,kf. (163525)
16
17 28 PTSD.tw,kf. (20669)
18
19 29 post-traumatic stress disorder?.tw,kf. (9534)
20
21 30 obsessive compulsive.tw,kf. (15892)
22
23 31 (depression? or depressed or depressiv* or MDD).tw,kf. (392484)
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25 32 Schizophreni*.tw,kf. (116454)
26
27 33 bipolar.tw,kf. (56704)
28
29 34 conduct disorder?.tw,kf. (4279)
30
31 35 attention deficit.tw,kf. (24841)
32
33 36 hoard*.tw,kf. (1461)
34
35 37 or/21-36 (1084130)
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37 38 13 and 37 (13021)
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39 39 20 or 38 (15916)
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41 40 exp "Delivery of Health Care, Integrated"/ (11218)
42
43 41 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
44 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw,kf.
45 (452323)
46
47 42 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
48 psychotherap* or program*)).tw,kf. (33149)
49
50 43 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
51 psychotherap* or program*)).tw,kf. (4447)
52
53 44 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
54 psychotherap* or program*)).tw,kf. (14002)
55
56 45 or/40-44 (461475)
57
58 46 39 and 45 (574)
59
60 47 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
predict* or hinder* or willingness).tw,kf. (6647308)
48 ((seek? or seeking) adj3 (help* or treatment? or care)).tw,kf. (31739)
49 47 or 48 (6661497)

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4 50 Community health services/ (30003)
5 51 exp Primary Health Care/ (139690)
6 52 Patient participation/ (22821)
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8 53 Patient Care Team/ (60979)
9 54 case management/ (9554)
10 55 critical pathways/ (6019)
11
12 56 exp "continuity of patient care"/ (218438)
13
14 57 health education/ (57952)
15 58 health promotion/ (67033)
16 59 health planning/ (21288)
17
18 60 patient care management/ (3219)
19 61 comprehensive health care/ (6407)
20
21 62 exp "delivery of health care"/ (978727)
22 63 disease management/ (30690)
23
24 64 critical pathways/ (6019)
25 65 patient-centered care/ (16429)
26
27 66 exp "outcome and process assessment (health care)"/ (977104)
28 67 exp program evaluation/ (68936)
29
30 68 quality assurance, health care/ (54119)
31 69 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
32 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
33 healthcare or service? or treatment? or therap* or program*)).tw,kf. (38696)
34 70 (engagement or engage or engaging or empower* or participat*).tw,kf. (569356)
35 71 (governan* or accountab*).tw,kf. (25773)
36 72 (model adj2 care).tw,kf. (8943)
37 73 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw,kf. (4766860)
38 74 or/50-73 (6666001)
39 75 39 and 49 and 74 (2505)
40 76 46 or 75 (2867)
41 77 limit 76 to english language (2676)
42 78 77 not (exp animals/ not exp humans/) (2521)
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53 Database: **Cochrane Central Register of Controlled Trials** <2014 to Present>

54 Search Strategy:
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- 1 exp Brain Injuries/ (1732)
- 2 exp Brain Injuries, Traumatic/ (1732)
- 3 exp Brain Concussion/ (241)
- 4 Craniocerebral Trauma/ (283)
- 5 tbi*2.tw,kf. (2040)
- 6 mtbi*2.tw,kf. (250)
- 7 wrTBI*2.tw,kf. (0)
- 8 concuss*.tw,kf. (408)
- 9 postconcuss*.tw,kf. (102)
- 10 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag* or wound* or fracture* or contusion*)).tw,kf. (6161)
- 11 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*)).tw,kf. (3526)
- 12 "shaken baby".tw,kf. (9)
- 13 or/1-12 (10514)
- 14 exp Substance-Related Disorders/ (13128)
- 15 gambling/ (298)
- 16 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*)).tw,kf. (10967)
- 17 gambli???.tw,kf. (623)
- 18 (alcoholi* or drinker* or drinking).tw,kf. (11000)
- 19 or/14-18 (26428)
- 20 13 and 19 (185)
- 21 Mental Health/ (1123)
- 22 mental disorders/ or exp anxiety disorders/ or exp "bipolar and related disorders"/ or "disruptive, impulse control, and conduct disorders"/ or exp dissociative disorders/ or exp "feeding and eating disorders"/ or exp mood disorders/ or neurodevelopmental disorders/ or anxiety, separation/ or exp "attention deficit and disruptive behavior disorders"/ or child behavior disorders/ or exp child development disorders, pervasive/ or schizophrenia, childhood/ or exp personality disorders/ or exp "schizophrenia spectrum and other psychotic disorders"/ or exp "trauma and stressor related disorders"/ (26375)
- 23 Depression/ (9417)
- 24 exp Depressive Disorder, Major/ (3972)
- 25 exp Depressive Disorder/ (10136)
- 26 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw,kf. (17190)

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2
3 27 anxiety.tw,kf. (28440)
4 28 PTSD.tw,kf. (2944)
5 29 post-traumatic stress disorder?.tw,kf. (994)
6 30 obsessive compulsive.tw,kf. (1950)
7 31 (depression? or depressed or depressiv* or MDD).tw,kf. (53605)
8 32 Schizophreni*.tw,kf. (12510)
9 33 bipolar.tw,kf. (5592)
10 34 conduct disorder?.tw,kf. (313)
11 35 attention deficit.tw,kf. (2995)
12 36 hoard*.tw,kf. (53)
13 37 or/21-36 (103330)
14 38 13 and 37 (847)
15 39 20 or 38 (939)
16 40 exp "Delivery of Health Care, Integrated"/ (314)
17 41 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
18 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw,kf.
19 (29535)
20 42 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
21 psychotherap* or program*)).tw,kf. (4849)
22 43 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
23 psychotherap* or program*)).tw,kf. (688)
24 44 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
25 psychotherap* or program*)).tw,kf. (1369)
26 45 or/40-44 (30171)
27 46 39 and 45 (88)
28 47 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
29 impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
30 predict* or hinder* or willingness).tw,kf. (311112)
31 48 ((seek? or seeking) adj3 (help* or treatment? or care)).tw,kf. (3523)
32 49 47 or 48 (312722)
33 50 Community health services/ (898)
34 51 exp Primary Health Care/ (4481)
35 52 Patient participation/ (1122)
36 53 Patient Care Team/ (1538)
37 54 case management/ (655)
38 55 critical pathways/ (171)
39 56 exp "continuity of patient care"/ (579)
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3 57 health education/ (3492)
4 58 health promotion/ (4893)
5 59 health planning/ (34)
6 60 patient care management/ (119)
7 61 comprehensive health care/ (67)
8 62 exp "delivery of health care"/ (38828)
9 63 disease management/ (804)
10 64 critical pathways/ (171)
11 65 patient-centered care/ (450)
12 66 exp "outcome and process assessment (health care)"/ (127732)
13 67 exp program evaluation/ (5433)
14 68 quality assurance, health care/ (612)
15 69 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
16 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
17 healthcare or service? or treatment? or therap* or program*)).tw,kf. (3163)
18 70 (engagement or engage or engaging or empower* or participat*).tw,kf. (73190)
19 71 (governan* or accountab*).tw,kf. (574)
20 72 (model adj2 care).tw,kf. (1606)
21 73 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw,kf. (428554)
22 74 or/50-73 (543646)
23 75 39 and 49 and 74 (292)
24 76 46 or 75 (336)
25 77 limit 76 to english language (187)
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41 Database: **Embase Classic+Embase** <1947 to 2018 August 20>

42 Search Strategy:
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- 45 -----
46 1 exp brain injury/ (170129)
47 2 head injury/ (50510)
48 3 tbi*2.tw. (37286)
49 4 mtbi*2.tw. (3458)
50 5 wrTBI*2.tw. (16)
51 6 concuss*.tw. (10071)
52 7 postconcuss*.tw. (1412)
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4 8 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag*
5 or wound* or fracture* or contusion*)).tw. (173261)
6
7 9 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or
8 extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*)).tw. (64309)
9
10 10 "shaken baby".tw. (743)
11
12 11 or/1-10 (329144)
13
14 12 addiction/ (51840)
15
16 13 exp drug dependence/ (227621)
17
18 14 pathological gambling/ (5577)
19
20 15 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or
21 cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*)).tw.
22 (146297)
23
24 16 gambl???.tw. (10917)
25
26 17 (alcoholi* or drinker* or drinking).tw. (248964)
27
28 18 or/12-17 (514147)
29
30 19 11 and 18 (6730)
31
32 20 exp mental health/ (132537)
33
34 21 mental disease/ (222219)
35
36 22 exp anxiety disorder/ (211380)
37
38 23 exp bipolar disorder/ (57278)
39
40 24 behavior disorder/ or attention deficit disorder/ or disruptive behavior/ or drug seeking
41 behavior/ or impulse control disorder/ (107231)
42
43 25 exp dissociative disorder/ (8226)
44
45 26 exp eating disorder/ (47110)
46
47 27 exp mood disorder/ (461687)
48
49 28 exp autism/ (57648)
50
51 29 exp schizophrenia/ (181763)
52
53 30 exp personality disorder/ (59926)
54
55 31 exp psychosis/ (284664)
56
57 32 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw.
58 (304770)
59
60 33 PTSD.tw. (25839)
34 post-traumatic stress disorder?.tw. (12129)
35 obsessive compulsive.tw. (20726)
36 (depression? or depressed or depressiv* or MDD).tw. (545145)
37 Schizophreni*.tw. (158068)
38 bipolar.tw. (81682)

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4 39 conduct disorder?.tw. (5392)
5 40 attention deficit.tw. (31286)
6 41 hoard*.tw. (1814)
7
8 42 or/20-41 (1531303)
9 43 11 and 42 (29736)
10 44 19 or 43 (34158)
11 45 integrated health care system/ (9873)
12 46 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
13 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw.
14 (624215)
15 47 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
16 psychotherap* or program*)).tw. (44675)
17 48 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
18 psychotherap* or program*)).tw. (6653)
19 49 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
20 psychotherap* or program*)).tw. (19801)
21 50 or/45-49 (634621)
22 51 44 and 50 (1382)
23 52 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
24 impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
25 predict* or hinder* or willingness).tw. (8662026)
26 53 ((seek? or seeking) adj3 (help* or treatment? or care)).tw. (40702)
27 54 52 or 53 (8679961)
28 55 exp community care/ (116494)
29 56 exp primary health care/ (147878)
30 57 patient participation/ (23829)
31 58 exp patient care/ (719197)
32 59 clinical pathway/ (7778)
33 60 exp health education/ (297823)
34 61 health care planning/ (94317)
35 62 exp health care delivery/ (2870808)
36 63 disease management/ (19050)
37 64 outcome assessment/ (432109)
38 65 exp health care quality/ (2772612)
39 66 exp program evaluation/ (17544)
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3 67 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
4 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
5 healthcare or service? or treatment? or therap* or program*)).tw. (64305)
6
7
8 68 (engagement or engage or engaging or empower* or participat*).tw. (743424)
9
10 69 (governan* or accountab*).tw. (31041)
11
12 70 (model adj2 care).tw. (12583)
13
14 71 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw. (6328902)
15
16 72 or/55-71 (10373343)
17
18 73 44 and 54 and 72 (7037)
19
20 74 51 or 73 (7854)
21
22 75 limit 74 to english language (7426)
23
24 76 75 not ((exp animals/ or exp animal experimentation/ or nonhuman/) not exp human/)
25 (6887)
26
27 77 limit 76 to conference abstracts (2365)
28
29 78 76 not 77 (4522)
30
31 79 78 not medline.cr. (4055)

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33 Database: **PsycINFO** <1806 to August Week 1 2018>

34 Search Strategy:

- 35 -----
36 1 exp traumatic brain injury/ (17391)
37 2 exp head injuries/ (5923)
38 3 tbi*2.tw. (9703)
39 4 mtbi*2.tw. (1562)
40 5 wrTBI*2.tw. (8)
41 6 concuss*.tw. (2850)
42 7 postconcuss*.tw. (796)
43 8 ((brain or head* or cerebr* or crani* or skull* or intracran*) adj2 (injur* or trauma* or damag*
44 or wound* or fracture* or contusion*)).tw. (45163)
45 9 ((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or
46 extradural*) adj (haematoma* or hematoma* or hemorrhag* or haemorrhag*)).tw. (3211)
47 10 "shaken baby".tw. (185)
48 11 or/1-10 (49487)
49 12 exp drug abuse/ (105296)
50 13 "substance use disorder"/ (5723)
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4 14 addiction/ (9744)
5 15 exp gambling/ (7117)
6 16 ((drug or substance? or alcohol or opioid? or amphetamine? or cocaine or marijuana or
7 cannabis or phencyclidine or benzodiaz*) adj2 (misuse or abuse* or addict* or depend*)).tw.
8 (95808)
9
10 17 gambli???.tw. (11158)
11
12 18 (alcoholi* or drinker* or drinking).tw. (71401)
13
14 19 or/12-18 (189802)
15
16 20 11 and 19 (1834)
17
18 21 mental health/ (57737)
19
20 22 mental disorders/ (78899)
21
22 23 exp anxiety disorders/ (77257)
23
24 24 exp affective disorders/ (151634)
25
26 25 exp impulse control disorders/ (1034)
27
28 26 conduct disorder/ (4163)
29
30 27 behavior disorders/ (9073)
31
32 28 exp dissociative disorders/ (5069)
33
34 29 exp eating disorders/ (28488)
35
36 30 neurodevelopmental disorders/ (1969)
37
38 31 autism spectrum disorders/ (38498)
39
40 32 exp separation anxiety/ (1529)
41
42 33 exp attention deficit disorder/ (24934)
43
44 34 exp psychosis/ (109127)
45
46 35 exp personality disorders/ (33271)
47
48 36 exp posttraumatic stress disorder/ (29576)
49
50 37 ((mental or psych*) adj (health* or illness* or disease* or condition* or disorder?)).tw.
51 (306679)
52
53 38 anxiety.tw. (180502)
54
55 39 PTSD.tw. (29697)
56
57 40 post-traumatic stress disorder?.tw. (9443)
58
59 41 obsessive compulsive.tw. (19372)
60
42 (depression? or depressed or depressiv* or MDD).tw. (278508)
43 Schizophreni*.tw. (118127)
44 bipolar.tw. (37311)
45 conduct disorder?.tw. (7217)
46 attention deficit.tw. (29043)
47 hoard*.tw. (1855)

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4 48 or/21-47 (887448)
5 49 11 and 48 (9062)
6 50 20 or 49 (10045)
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8 51 integrated services/ (3216)
9 52 ((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health
10 care or healthcare or service? or treatment? or therap* or psychotherap* or program*)).tw.
11 (152611)
12
13 53 (integrat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
14 psychotherap* or program*)).tw. (20889)
15
16 54 (connect* adj3 (care or health care or healthcare or service? or treatment? or therap* or
17 psychotherap* or program*)).tw. (2818)
18
19 55 (coordinat* adj3 (care or health care or healthcare or service? or treatment? or therap* or
20 psychotherap* or program*)).tw. (5590)
21
22 56 or/51-55 (155650)
23
24 57 50 and 56 (576)
25
26 58 Treatment Barriers/ (4168)
27
28 59 (barrier? or hurdle? or obstacle? or challeng* or incentiv* or obstruct* or refusal? or
29 impedim* or promot* or facilitat* or support* or enabl* or cause? or reason? or encourag* or
30 predict* or hinder* or willingness).tw. (1644346)
31
32 60 ((seek? or seeking) adj3 (help* or treatment? or care)).tw. (24738)
33
34 61 or/58-60 (1655245)
35
36 62 exp community services/ (31008)
37
38 63 primary health care/ (16770)
39
40 64 health care services/ (40379)
41
42 65 "continuum of care"/ (1628)
43
44 66 health care delivery/ (19878)
45
46 67 interdisciplinary treatment approach/ (6871)
47
48 68 client participation/ (1850)
49
50 69 exp case management/ (3343)
51
52 70 exp managed care/ (4298)
53
54 71 client centered therapy/ (3105)
55
56 72 exp "quality of services"/ (17955)
57
58 73 exp health education/ or client education/ (20686)
59
60 74 health promotion/ (22605)
61
62 75 exp treatment planning/ (6202)
63
64 76 disease management/ (6121)
65
66 77 exp program evaluation/ (19435)
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4 78 ((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or
5 multi-disciplin* or multiprofession* or multi-profession*) adj3 (team or care or health care or
6 healthcare or service? or treatment? or therap* or program*)).tw. (11242)
7
8 79 (engagement or engage or engaging or empower* or participat*).tw. (374143)
9
10 80 (governan* or accountab*).tw. (25304)
11
12 81 (model adj2 care).tw. (3435)
13
14 82 (educat* or screen* or train* or transition* or evaluat* or coordinat*).tw. (1245279)
15
16 83 or/62-82 (1562608)
17
18 84 50 and 61 and 83 (1650)
19
20 85 57 or 84 (2011)
21
22 86 limit 85 to english language (1934)
23
24 87 limit 86 to animal (115)
25
26 88 limit 87 to human (33)
27
28 89 86 not (87 not 88) (1852)
29
30 90 limit 89 to ("0200 book" or "0240 authored book" or "0280 edited book" or "0300
31 encyclopedia") (458)
32
33 91 89 not 90 (1394)
34

Database: CINAHL (searched 2018.08.21)

#	Query	Limiters/Expanders	Results
S81	S80	Limiters - English Language Search modes - Boolean/Phrase	1,242
S80	S52 OR S79	Search modes - Boolean/Phrase	1,250
S79	S45 AND S55 AND S78	Search modes - Boolean/Phrase	1,123
S78	S56 OR S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63 OR S64 OR S65 OR S66 OR S67 OR S68 OR S69 OR S70 OR S71 OR S72 OR S73 OR S74 OR S75 OR S76 OR S77	Search modes - Boolean/Phrase	1,628,534
S77	(educat* or screen* or train* or transition* or evaluat* or coordinat*)	Search modes - Boolean/Phrase	1,128,349
S76	(model n2 care)	Search modes - Boolean/Phrase	11,356
S75	(governan* or accountab*)	Search modes - Boolean/Phrase	24,583
S74	(engagement or engage or engaging or empower* or participat*)	Search modes - Boolean/Phrase	175,276
S73	((interdisciplin* or inter-disciplin* or interprofession* or inter-profession* or multidisciplin* or multi-disciplin* or multiprofession* or multi-profession*) n3 (team or care or health care or healthcare	Search modes - Boolean/Phrase	39,697

	or service* or treatment* or therap* or program*))		
S72	(MH "Quality of Health Care+")	Search modes - Boolean/Phrase	413,487
S71	(MH "Program Development+")	Search modes - Boolean/Phrase	51,590
S70	(MH "Outcome Assessment")	Search modes - Boolean/Phrase	23,937
S69	(MH "Process Assessment (Health Care)+")	Search modes - Boolean/Phrase	5,750
S68	(MH "Patient Centered Care")	Search modes - Boolean/Phrase	18,429
S67	(MH "Disease Management+")	Search modes - Boolean/Phrase	11,760
S66	(MH "Health Care Delivery+")	Search modes - Boolean/Phrase	210,880
S65	(MH "Patient Care Plans+")	Search modes - Boolean/Phrase	6,852
S64	(MH "Health Promotion")	Search modes - Boolean/Phrase	39,646
S63	(MH "Health Education+")	Search modes - Boolean/Phrase	88,614
S62	(MH "Continuity of Patient Care+")	Search modes - Boolean/Phrase	12,938
S61	(MH "Critical Path")	Search modes - Boolean/Phrase	3,710
S60	(MH "Case Management")	Search modes - Boolean/Phrase	13,403
S59	(MH "Multidisciplinary Care Team")	Search modes - Boolean/Phrase	28,529
S58	(MH "Consumer Participation")	Search modes - Boolean/Phrase	12,214
S57	(MH "Primary Health Care")	Search modes - Boolean/Phrase	38,581
S56	(MH "Community Health Services")	Search modes - Boolean/Phrase	13,940
S55	S53 OR S54	Search modes - Boolean/Phrase	903,092
S54	((seek or seeks or seeking) n3 (help* or treatment* or care))	Search modes - Boolean/Phrase	13,303
S53	(barrier* or hurdle* or obstacle* or challeng* or incentiv* or obstruct* or refusal* or impedim* or promot* or facilitat* or support* or enabl* or cause* or reason* or encourag* or predict* or hinder* or willingness)	Search modes - Boolean/Phrase	897,161
S52	S45 AND S51	Search modes - Boolean/Phrase	240
S51	S46 OR S47 OR S48 OR S49 OR S50	Search modes - Boolean/Phrase	112,403
S50	(coordinat* n3 (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	6,957
S49	(connect* n3 (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	2,263
S48	(integrat* n3 (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	19,214
S47	((vertical or horizontal or integrat* or coordinat* or co-ordinat* or link*) and (care or health care or healthcare or service* or treatment* or therap* or psychotherap* or program*))	Search modes - Boolean/Phrase	110,503
S46	(MH "Health Care Delivery, Integrated")	Search modes - Boolean/Phrase	6,478
S45	S19 OR S44	Search modes - Boolean/Phrase	4,356
S44	S12 AND S43	Search modes - Boolean/Phrase	3,562
S43	S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42	Search modes - Boolean/Phrase	295,552
S42	hoard*	Search modes - Boolean/Phrase	279

S41	attention deficit	Search modes - Boolean/Phrase	8,798
S40	conduct disorder*	Search modes - Boolean/Phrase	762
S39	bipolar	Search modes - Boolean/Phrase	7,852
S38	Schizophreni*	Search modes - Boolean/Phrase	13,979
S37	((depression* or depressed or depressiv* or MDD)	Search modes - Boolean/Phrase	92,716
S36	obsessive compulsive	Search modes - Boolean/Phrase	2,839
S35	post-traumatic stress disorder*	Search modes - Boolean/Phrase	2,651
S34	PTSD	Search modes - Boolean/Phrase	4,813
S33	anxiety	Search modes - Boolean/Phrase	48,239
S32	((mental or psych*) n1 (health* or illness* or disease* or condition* or disorder*))	Search modes - Boolean/Phrase	150,733
S31	(MH "Stress Disorders, Post-Traumatic")	Search modes - Boolean/Phrase	11,557
S30	(MH "Attention Deficit Hyperactivity Disorder") OR (MH "Mental Disorders Diagnosed in Childhood") OR (MH "Child Behavior Disorders+") OR (MH "Child Development Disorders+") OR (MH "Child Development Disorders, Pervasive+") OR (MH "Feeding and Eating Disorders of Childhood+")	Search modes - Boolean/Phrase	28,519
S29	(MH "Separation Anxiety")	Search modes - Boolean/Phrase	382
S28	(MH "Depression+")	Search modes - Boolean/Phrase	59,957
S27	(MH "Affective Disorders+")	Search modes - Boolean/Phrase	63,151
S26	(MH "Eating Disorders+")	Search modes - Boolean/Phrase	11,050
S25	(MH "Dissociative Disorders+")	Search modes - Boolean/Phrase	665
S24	(MH "Personality Disorders+")	Search modes - Boolean/Phrase	6,356
S23	(MH "Affective Disorders, Psychotic+") OR (MH "Psychotic Disorders") OR (MH "Schizoaffective Disorder") OR (MH "Schizophrenia+")	Search modes - Boolean/Phrase	19,775
S22	(MH "Anxiety Disorders+")	Search modes - Boolean/Phrase	21,620
S21	(MH "Mental Disorders")	Search modes - Boolean/Phrase	33,506
S20	(MH "Mental Health")	Search modes - Boolean/Phrase	18,412
S19	S12 AND S18	Search modes - Boolean/Phrase	1,098
S18	S13 OR S14 OR S15 OR S16 OR S17	Search modes - Boolean/Phrase	122,473
S17	alcoholi* or drinker* or drinking	Search modes - Boolean/Phrase	37,825
S16	(gamble* or gambling*)	Search modes - Boolean/Phrase	1,914
S15	((drug or substance* or alcohol or opioid* or amphetamine* or cocaine or marijuana or cannabis or phencyclidine or benzodiaz*) n2 (misuse or abuse* or addict* or depend*))	Search modes - Boolean/Phrase	56,272
S14	(MH "Gambling")	Search modes - Boolean/Phrase	1,265
S13	(MH "Substance Use Disorders+")	Search modes - Boolean/Phrase	93,525
S12	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11	Search modes - Boolean/Phrase	41,008
S11	shaken baby	Search modes - Boolean/Phrase	392
S10	((brain* or cerebr* or intracerebr* or crani* or intracran* or head* or subdural* or epidural* or extradural*) n1 (haematoma* or hematoma* or hemorrhag* or haemorrhag*))	Search modes - Boolean/Phrase	9,061

S9	((brain or head* or cerebr* or crani* or skull* or intracran*) n2 (injur* or trauma* or damag* or wound* or fracture* or contusion*))	Search modes - Boolean/Phrase	30,635
S8	postconcuss*	Search modes - Boolean/Phrase	741
S7	concuss*	Search modes - Boolean/Phrase	3,360
S6	wrTBI*	Search modes - Boolean/Phrase	7
S5	mTBI*	Search modes - Boolean/Phrase	614
S4	TBI*	Search modes - Boolean/Phrase	5,222
S3	(MH "Head Injuries")	Search modes - Boolean/Phrase	4,698
S2	(MH "Brain Concussion+")	Search modes - Boolean/Phrase	2,888
S1	(MH "Brain Injuries+")	Search modes - Boolean/Phrase	18,914

Database: **Sociological Abstracts**

(noft(tbi* OR mtbi* OR concuss* OR postconcuss* OR "shaken baby") OR noft(((brain OR head* OR cerebr* OR crani* OR skull* OR intracran*) NEAR/2 (injur* OR trauma* OR damag* OR wound* OR fracture* OR contusion*)))) AND (noft(((drug OR substance? OR alcohol OR opioid? OR amphetamine? OR cocaine OR marijuana OR cannabis OR phencyclidine OR benzodiaz*) NEAR/2 (misuse OR abuse* OR addict* OR depend*))) OR noft(gambl???) OR noft((alcoholi* OR drinker* OR drinking)) OR noft(((mental OR psych*) NEAR/1 (health* OR illness* OR disease* OR condition* OR disorder?))) OR noft(anxiety OR PTSD OR "post-traumatic stress" OR "obsessive compulsive" OR depression? OR depressed OR depressiv* OR MDD OR Schizophreni* OR "attention deficit" OR hoard*) OR noft("conduct disorder" OR "conduct disorders"))

Limits applied

- Language: English
- Exclude: Books; Magazines

Database: **ProQuest Dissertations & Theses Global**

((noft(tbi* OR mtbi* OR concuss* OR postconcuss* OR "shaken baby") OR noft(((brain OR head* OR cerebr* OR crani* OR skull* OR intracran*) NEAR/2 (injur* OR trauma* OR damag* OR wound* OR fracture* OR contusion*)))) AND (noft(((drug OR substance? OR alcohol OR opioid? OR amphetamine? OR cocaine OR marijuana OR cannabis OR phencyclidine OR benzodiaz*) NEAR/2 (misuse OR abuse* OR addict* OR depend*))) OR noft(gambl???) OR noft((alcoholi* OR drinker* OR drinking)) OR noft(((mental OR psych*) NEAR/1 (health* OR illness* OR disease* OR condition* OR disorder?))) OR noft(anxiety OR PTSD OR "post-traumatic stress" OR "obsessive compulsive" OR depression? OR depressed OR depressiv* OR MDD OR Schizophreni* OR "attention deficit" OR hoard*) OR noft("conduct disorder" OR "conduct disorders")) AND ((noft(barrier* OR hurdle* OR obstacle* OR challeng* OR incentiv* OR obstruct* OR refusal* OR impedim* OR promot* OR facilitat* OR support* OR enabl* OR cause* OR reason* OR encourag* OR predict* OR hinder* OR willingness) OR noft(seek* NEAR/3 help*) OR noft(seek* NEAR/3 treatment*) OR noft(seek* NEAR/3 care)) AND (noft((interdisciplin* OR inter-disciplin* OR interprofession* OR inter-profession* OR multidisciplin* OR multi-disciplin* OR multiprofession* OR multi-profession*)) OR noft(engagement OR engage OR engaging OR

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 3 empower* OR participat*) OR noft(governan* OR accountab*) OR noft(model NEAR/2 care)
 4 OR noft(educat* OR screen* OR train* OR transition* OR evaluat* OR coordinat*)) OR
 5 (((noft(tbi* OR mtbi* OR concuss* OR postconcuss* OR "shaken baby") OR noft(((brain OR
 6 head* OR cerebr* OR crani* OR skull* OR intracran*) NEAR/2 (injur* OR trauma* OR
 7 damag* OR wound* OR fracture* OR contusion*)))) AND (noft(((drug OR substance? OR
 8 alcohol OR opioid? OR amphetamine? OR cocaine OR marijuana OR cannabis OR
 9 phencyclidine OR benzodiaz*) NEAR/2 (misuse OR abuse* OR addict* OR depend*)) OR
 10 noft(gambl???) OR noft((alcoholi* OR drinker* OR drinking)) OR noft(((mental OR psych*)
 11 NEAR/1 (health* OR illness* OR disease* OR condition* OR disorder?)) OR noft(anxiety OR
 12 PTSD OR "post-traumatic stress" OR "obsessive compulsive" OR depression? OR
 13 depressed OR depressiv* OR MDD OR Schizophreni* OR "attention deficit" OR hoard*) OR
 14 noft("conduct disorder" OR "conduct disorders")) AND ((noft((vertical OR horizontal OR
 15 integrat* OR coordinat* OR co-ordinat* OR link*)) AND noft((care OR health care OR
 16 healthcare OR service* OR treatment* OR therap* OR psychotherap* OR program*)) OR
 17 (noft((integrat*) NEAR/3 (care)) OR noft((integrat*) NEAR/3 ("health care")) OR
 18 noft((integrat*) NEAR/3 (healthcare)) OR noft((integrat*) NEAR/3 (healthcare)) OR
 19 noft((integrat*) NEAR/3 (service*)) OR noft((integrat*) NEAR/3 (treatment*)) OR
 20 noft((integrat*) NEAR/3 (therap*)) OR noft((integrat*) NEAR/3 (psychotherap*)) OR
 21 noft((integrat*) NEAR/3 (program*)) OR noft((coordinat*) NEAR/3 (care)) OR
 22 noft((coordinat*) NEAR/3 ("health care")) OR noft((coordinat*) NEAR/3 (healthcare)) OR
 23 noft((coordinat*) NEAR/3 (healthcare)) OR noft((coordinat*) NEAR/3 (service*)) OR
 24 noft((coordinat*) NEAR/3 (treatment*)) OR noft((coordinat*) NEAR/3 (therap*)) OR
 25 noft((coordinat*) NEAR/3 (psychotherap*)) OR noft((coordinat*) NEAR/3 (program*)) OR
 26 noft((connect*) NEAR/3 (care)) OR noft((connect*) NEAR/3 ("health care")) OR
 27 noft((connect*) NEAR/3 (healthcare)) OR noft((connect*) NEAR/3 (healthcare)) OR
 28 noft((connect*) NEAR/3 (service*)) OR noft((connect*) NEAR/3 (treatment*)) OR
 29 noft((connect*) NEAR/3 (therap*)) OR noft((connect*) NEAR/3 (psychotherap*)) OR
 30 noft((connect*) NEAR/3 (program*))))Limits applied
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33 Limits applied:

- 34 • Language: English
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PRISMA-P (Preferred Reporting Items for Systematic review and Meta-Analysis Protocols) 2015 checklist: recommended items to address in a systematic review protocol*

Section and topic	Item No	Checklist item
ADMINISTRATIVE INFORMATION		
Title:		
Identification	1a	Identify the report as a protocol of a systematic review (PAGE 1)
Update	1b	If the protocol is for an update of a previous systematic review, identify as such (N/A)
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number (PAGE 2)
Authors:		
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author (PAGE 1)
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review (PAGE 8)
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments (N/A)
Support:		
Sources	5a	Indicate sources of financial or other support for the review (PAGE 8)
Sponsor	5b	Provide name for the review funder and/or sponsor (PAGE 8)
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol (PAGE 8)
INTRODUCTION		
Rationale	6	Describe the rationale for the review in the context of what is already known (PAGE 4)
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO) (PAGE 4)
METHODS		
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review (PAGES 5-6)
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage (PAGES 5)
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated (PAGE 5)
Study records:		
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review (PAGE 5)

Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis) (PAGE 5-6)
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators (PAGE 6)
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications (PAGE 6)
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale (PAGE 5-6)
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis (PAGE 6)
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised (N/A)
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2 , Kendall's τ) (N/A)
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression) (PAGE 7)
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned (PAGE 7)
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies) (N/A)
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE) (PAGE 6)

*** It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items. Amendments to a review protocol should be tracked and dated. The copyright for PRISMA-P (including checklist) is held by the PRISMA-P Group and is distributed under a Creative Commons Attribution Licence 4.0.**

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