

ORCA - Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:https://orca.cardiff.ac.uk/id/eprint/121778/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Evans, Nicola and Edwards, Deborah 2018. Admission and discharge criteria for adolescents requiring inpatient or residential mental health care: A scoping review protocol. JBI Database of Systematic Reviews and Implementation Reports 16 (10), 1906–1911. 10.11124/JBISRIR-2017-003790

Publishers page: http://dx.doi.org/10.11124/JBISRIR-2017-003790

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



1 Admission and discharge criteria for adolescents requiring inpatient or residential mental health

2 care: A scoping review

3

4 Introduction

5 This review will scope the literature relating to the admission and discharge criteria for adolescents over 6 eleven and under nineteen years old that receive inpatient or residential mental health care. For ease of 7 understanding the term 'adolescents' will be used but it is acknowledged that other terms, 'youth', 'young 8 adults' 'teenagers' and 'young people' are used within the literature. An inpatient service is defined as a 9 unit with 'hospital beds' that provides 24-hour nursing care.¹ Residential treatment centers usually house 10 youths with significant psychiatric, psychological, behavioral, or substance abuse problems for whom 11 outpatient treatment has been unsuccessful.²

12

13 In the United Kingdom (UK), it is estimated that one in ten children and adolescents aged between five 14 and sixteen has a diagnosable mental health problem.³ This is also an area of international concern.⁴ 15 Children and adolescents with the highest levels of need are cared for in hospital but there is a high 16 demand for these beds and a general lack of agreement regarding what are the criteria for admission to 17 such units. For example, there were 720 admissions during 2013 into Mc-Master Children's Hospital's 18 child and adolescent psychiatry unit, Ontario, Canada what are the criteria for admission to such units. 19 For example, there were 720 admissions during 2013 into Mc-Master Children's Hospital's child and 20 adolescent psychiatry unit, Ontario, Canada⁵ and a study in New Zealand⁶ showed an marked increase in 21 admissions by 80% for children aged 4-17 following the Canterbury earthquakes. In a European survey of 22 provision of child and adolescent mental health services it was found that there is a considerable 23 difference between 28 countries, with fewer than two beds per 100 000 adolescents in Portugal and 24 Sweden to more than 50 beds per 100 000 adolescents in Germany and the Netherlands.⁷ Typically, 25 decisions on who to admit to inpatient child and adolescent mental health services (CAMHS) in the UK 26 take place within limited bed capacity, with perceptions of 'risk' uppermost but can vary upon external 27 triggering factors and context for example suicidal attempts. Negotiating access to inpatient beds for 28 adolescents can be fraught with difficulties⁸ and with the development of effective community based 29 interventions for common mental health presentations in adolescents, the focus and function of inpatient 30 care is changing.⁹ Inpatient care is often currently selected because the round-the-clock availability of 31 nursing staff makes it possible to keep adolescents safe while assessments and interventions of their 32 mental health is addressed.

33

The Royal College of Psychiatrists in the UK is currently engaged in a piece of work to create a guidance document that can advise on the scope and criteria to warrant admissions to adolescent inpatient mental health units the UK. This will have international applicability given the challenges over access and demand for services are similar across Canada, Australasia and Europe.^{7,10} There are a number of sources of good practice to which CAMHS inpatients can refer^{11,12} but there is now an opportunity to
ensure that any further guidance documentation produced is supported by an underpinning robust
evidence base.

41

42 The Quality Network for Inpatient CAMHS (QNIC) standards, developed by the Royal College of 43 Psychiatrists were introduced in the UK 2001 and have been reviewed biannually since. They provide 44 service standards against which inpatient CAMHS units can elect to be audited.¹¹ One of the sections in 45 this audit document covers access and admission. Within this category, one statement is that senior 46 clinical staff members make decisions over the admission of an adolescent and this can be moderated if 47 safety or therapeutic activity will be affected in their view. There is a further statement that adolescents at 48 severe risk can be admitted as emergencies. There are standards relating to process for exceeding bed 49 capacity, for not admitting and for effective discharge planning. What is absent are specific criteria about 50 what adolescents present with that determine whether admission is required. Similarly there is a lack of 51 agreed criteria for when discharge is indicated.

52

In the national mapping of the CAMHS inpatient units across England¹² it was highlighted that there was 53 54 high demand and limited capacity to provide inpatient mental health care for this population, suggesting 55 as a solution for the patient flow the introduction of a pre-admission assessment. A preliminary search 56 for existing scoping and systematic reviews was conducted looking for admission criteria for adolescent 57 inpatient mental healthcare. The search was conducted on the following databases: Campbell 58 Collaboration Library of Systematic Reviews; Cochrane Database of Systematic Reviews, Evidence for 59 Policy and Practice Information Centre databases; JBI Database of Systematic Reviews and 60 Implementation Reports, International Prospective Register of Systematic Reviews (PROSPERO); Social 61 Care Institute for Excellence database; CINAHL and PsycINFO. There are two reviews registered on 62 PROSPERO that are looking at characteristics of inpatient CAMHS and treatment outcomes^{13,14} but 63 neither are addressing admission criteria. In the Campbell Collaboration database, there was one 64 published review looking at the effectiveness of treatment foster care for adolescents, but not specifically 65 criteria for admission.15 66 67 This proposed scoping review will therefore fill in the gap in the literature while at the same time providing

- 68 the evidence base for the Royal College of Psychiatrists guidance document.
- 69

70 Review Question

- 71 The question of this review is
- 72 What are the admission and discharge criteria for adolescents to mental health inpatient care?
- 73 The objectives will be
- To identify the criteria for admission to mental health inpatient or residential care for adolescents

75	• To identify the criteria for discharge from mental health inpatient or residential care for		
76	adolescents		
77	To identify the criteria for not admitting adolescents to mental health inpatient or residential care		
78			
79	Keywords		
80	Adolescents; mental health, admission, discharge		
81			
82	Inclusion Criteria		
83	Participants		
84			
85	nineteen years, presenting with mental health difficulties suggestive of meeting diagnostic criteria i.e DSM		
86	V and ICD 10 on admission to an inpatient mental health unit or residential treatment centres and is		
87	inclusive and may encompass psychosis, eating disorders and mood disorders.		
88			
89	Concept		
90	Reason for admission to inpatient mental health care; for example severe self-harming behaviour.		
91			
92	Reason for not admitting to inpatient mental health care, for example can be managed safely at home		
93			
94	Context		
95	This scoping review will consider studies that have been conducted in facilities that provide mental health		
96	inpatient or residential care for adolescents. This will include hospitals, independent health units and		
97	residential treatment centres.		
98			
99	Types of studies		
100	This scoping review will consider quantitative and qualitative and textual and opinion data		
101			
102	Quantitative		
103	This scoping review will consider both experimental and quasi-experimental study designs including		
104	randomized controlled trials, non-randomized controlled trials, before and after studies and interrupted		
105	time-series studies. In addition, analytical observational studies including prospective and retrospective		
106	cohort studies, case-control studies and analytical cross-sectional studies will be considered for inclusion		
107	This review will also consider descriptive observational study designs including case series, individual		
108	case reports and descriptive cross-sectional studies for inclusion.		
109			
110	Qualitative		

- 111 This scoping review will consider studies that focus on qualitative data including, but not limited to,
- designs such as phenomenology, grounded theory, ethnography, action research and feminist research.
- 113
- 114 Textual and opinion
- 115 This scoping review will consider standards for clinical care, consensus guidelines, narrative case reports,
- 116 literature reviews including expert opinion, published discussion papers, government policy reports or
- 117 reports accessed from web pages of professional organizations.
- 118
- 119 Studies published in the English language will be included. Studies published from 2009 to the present
- 120 will be included. In 2009 Kurtz published a review for the UK Department of Health identifying the
- 121 'Evidence Base for Tier 4 CAMHS' (inpatient provision) drawing on the evidence available at that point.¹³
- 122 In this review, Kurtz identified that the inpatient services were developing from not only inpatient services,
- but to develop complex outpatient 'wrap around services' for adolescents, and that the inpatient services
- should be reserved for 'highly specialist assessment in a controlled environment and away from the
- 125 family'. The review recognized that although there may be benefits in this approach, it would not
- 126 necessarily be the best intervention for all adolescents and recommended a comprehensive pre-
- 127 admission evaluation of the child's suitability for treatment in a psychiatric inpatient setting before
- 128 admission.¹⁶ This scoping review will consider studies published since the publication of this 2009
- 129 report.
- 130

131 Exclusion Criteria

- 132 The exclusion criteria for this scoping review are as follows:
- 133 Papers that do not report empirical studies.
- 134 Studies that focus primarily on children (under the age of eleven) or adults (over the age of nineteen).
- 135 Studies that focus on alternatives to inpatient care.
- 136 Services specifically for learning disabilities only and forensic services
- 137
- 138

139 Methods

- 140 The proposed scoping review will be conducted in accordance with the Joanna Briggs Institute
- 141 methodology for scoping reviews.¹⁷
- 142

143 Search Strategy

- 144 The search strategy will aim to locate both published and unpublished studies. An initial limited search of
- 145 PsycINFO and CINAHL has been undertaken followed by analysis of the text words contained in the titles
- and abstract, and of index terms used to describe the articles. This informed the development of a search
- 147 strategy which will be tailored for each information source. A full search strategy for PsycINFO is detailed

- 148 in Appendix I. The search strategy, including all identified keywords and index terms will be adapted for
- each included information source. The reference list of all included studies selected for will be screened
- 150 for additional studies.
- 151

152 Information Sources:

- 153 The databases to be searched will include:
- 154 On the OVID platform:
- 155 MEDLINE
- 156 EMBASE
- 157 PsycINFO
- 158
- 159 On the EBSCO platform:
- 160 CINAHL
- 161 ERIC
- 162
- 163 On the ProQuest platform
- 164 British Nursing index
- 165 ASSIA
- 166 ProQuest Dissertations & Thesis
- 167
- 168 The trial registers to be searched include:
- 169 Cochrane Central Register of Controlled Trials
- 170
- 171 The search for unpublished studies and other gray literature will include:
- 172 OpenGrey
- 173 e-thesis online service for the British Library (Ethos)
- 174 Websites of professional organisations; for example Royal College of Psychiatrists, Royal College of
- 175 Nursing, International Society for Psychiatric Nursing, Headspace, Canadian Mental Health Association.
- 176
- 177 Contacting authors, experts and organisations active within the phenomenon of interest to attempt to
- identify further published, un-published and ongoing studies.
- 179

180 Study Selection

- 181 Following the search, all identified citations will loaded into Endnote V7.7.1 (Clarivate Analytics, PA, USA)
- 182 and duplicates removed. Titles and abstracts will then be screened by two independent reviewers for
- 183 assessment against the inclusion criteria for the review. Potentially relevant studies will be retrieved in full
- and their citation details imported into the Joanna Briggs Institute's System for the Unified Management,

- 185 Assessment and Review of Information (JBI SUMARI; The Joanna Briggs Institute, Adelaide, Australia).
- 186 The full text of selected citations will be assessed in detail against the inclusion criteria by two
- 187 independent reviewers. Reasons for exclusion of full text studies that do not meet the inclusion criteria will
- 188 be recorded and reported in the scoping review. Any disagreements that arise between the reviewers at
- 189 each stage of the study selection process will be resolved through discussion, or with a third reviewer.
- 190 The results of the search will be reported in full in the final report and presented in a Preferred Reporting
- 191 Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram,¹⁸ or will be replaced with
- 192 PRISMA-ScR checklist when it becomes available.¹⁷
- 193

194 Data Extraction

- 195 The data extracted will include specific details about the populations, study methods and outcomes of
- 196 significance to the review question and specific objectives. The template data extraction instrument from
- 197 the JBI Reviewers Handbook chapter on scoping reviews will be adapted to suit this scoping review.¹⁷
- 198 This is in line with charting the data as outlined in stage four of Arksey and O'Malley's²¹ framework for
- 199 conducting scoping reviewers and updated by Levac et al.²² Any disagreements that arise between the
- 200 reviewers will be resolved through discussion or with a third reviewer. Authors of papers will be contacted
- 201 to request missing or additional data where required.
- 202

203 Data Presentation

- Findings, where possible, will be synthesised and presented in a tabular summary with the aid of
 narrative and figures where appropriate. The approach described by Arksey and O"Malley²¹ and Levac et
 al.²² will be followed with an overview of all the included material which will be summarized in tables and
- 207 charts which map the literature. Literature will be tabulated using the following headings related to
- research design, geographical location, year of publication, characteristics of study population and the
- 209 research outcomes. A narrative summary will accompany the tabulated results,²¹ this will describe how
- 210 the results relate to the review objectives and question.¹⁷
- 211

212 Conflicts of Interest

- 213 There is no conflict of interest to report regarding this scoping review.
- 214

215 References

- 216 1. The NHS Confederation. Defining mental health services. Promoting effective commissioning and
- 217 supporting QIPP. The NHS Confederation, 2012 [Internet]. [cited 2018 May 16] Available from
- 218 http://www.nhsconfed.org/~/media/Confederation/Files/Publications/Documents/Defining_mental_hea
- 219 Ith_services.pdf

- 220 2. Office of Juvenille and Delinquency Prevention. *Literature review*. Residential treatment centers.
- Office of Juvenille and Delinquency Prevention, 2011. [Internet]. [cited 2018 May 16] Available from
 https://www.ojidp.gov/mpg/litreviews/Residential Treatment Centers.pdf
- 223 3. Green J, McGinnity A, Meltzer H, Ford T. Inpatient treatment in child and adolescent psychiatry--a
- prospective study of health gain and costs. J Child Psychol Psychiatry. 2007;48(12):1259–67.
- 4. World Health Organisation. Mental health action plan 2013-2020. 2013. World Health Organisation,
- 226 2013. [Internet]. [cited 2018 February 27]. Available from
- 227 http://www.who.int/mental_health/publications/action_plan/en/
- 5. Chow E, Zangeneh-Kazemi A, Aintan O, Chow-Tung E, Eppel A, Boylan K. Prescribing Practices of
- 229 Quetiapine for Insomnia at a Tertiary Care Inpatient Child and Adolescent Psychiatry Unit: A
- 230 Continuous Quality Improvement Project. J Can Acad Child Adolesc Psychiatry. 2017;26(2):98–103.
- 231 6. Beaglehole B, Frampton C, Boden J, Mulder R, Bell C. An evaluation of Health of the Nation
- Outcome Scales data to inform psychiatric morbidity following the Canterbury earthquakes. Aust NZ J
 Psychiatry. 2017;51(11):1098–105.
- 234 7. Signorini G, Singh SP, Boricevic-Marsanic V, Dieleman G, Dodig-Ćurković K, Franic T, et al.
- Architecture and functioning of child and adolescent mental health services: a 28-country survey in
- 236 Europe. Lancet Psychiatry. 2017;4(9):715–24.
- Stanton J, Lahdenperä V, Braun V. Adolescent Inpatient Unit: The Experiences and Views of
 Community Mental Health Referrers. Qual Health Res. 2017;27(11):1664–74.
- 239 9. Lamb C. Alternatives to admission for children and adolescents: providing intensive mental
- 240 healthcare services at home and in communities: what works? Curr. Opin. Psychiatry. 2009: 22(4):
- 241 345–50.
- 242 10. Stewart L, Hirdes, J. Identifying mental health symptoms in children and youth in residential and in243 patient care settings. Healthc Manage Forum. 2015; 28(4):150–6.
- 244 11. Thompson P, Harriet C. Service standards. Eight Edition. Quality Network for Inpatient CAMHS
- 245 Service Standards. Royal College of Psychiatrists. 2016. [Internet]. [cited 2018 February 27].
- 246 Available from https://www.rcpsych.ac.uk/pdf/QNIC_Standards_2016_AW.pdf

- 12. CAMHS Tier 4 Steering Group. Child and Adolescent Mental Health Services (CAMHS) Tier 4
- 248 Report. 2014. NHS England. [Internet]. [cited 2018 February 27]. Available from
- 249 https://www.england.nhs.uk/wp-content/uploads/2014/07/camhs-tier-4-rep.pdf
- 250 13. Simons C, Hopwood M, Simmons M, Hayes C. Inside generic adolescent inpatient units: descriptions
- 251 of settings. 2017. PROSPERO International prospective register of systematic reviews. [Internet].
- 252 [cited 2018 February 27]. Available from
- 253 https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=80288
- 14. Hayes C, Simmons M, Hopwood M, Simons C. Measuring effectiveness of generic adolescent
- 255 inpatient mental health units. 2017. PROSPERO International prospective register of systematic
- 256 reviews. 2017. [Internet]. [cited 2018 February 27]. Available from
- 257 http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42017058506
- 258 15. Macdonald G, Turner W. Treatment foster care (TFC) for improving outcomes in children and young
- 259 people. Campbell Systematic Reviews. 2008. [Internet]. [cited 2018 February 27]. Available from
- 260 https://www.campbellcollaboration.org/media/k2/attachments/1031_R.pdf
- 16. Kurtz Z. The evidence base to guide development of tier 4 CAMHS. (Department of Health. 2009).
- 262 17. Peters M, Godfrey C, Kahlil H, McInerney P, Baldini Soares, C, Parker D. Chapter 11: Scoping
- 263 Reviews. In Joanna Briggs Institute Reviewer's Manual. In Aromataris E, Munn Z. (Editors). Joanna
- 264 Briggs Institute Reviewer's Manual. The Joanna Briggs Institute, 2017. [cited 2018 Feb 27] Available
- 265 from https://reviewersmanual.joannabriggs.org/
- 18. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and
 meta-analyses: the PRISMA statement. Ann Intern Med. 2009;151(4): 264–69.
- 19. Godfrey C, Harrison M, Graham I, Ross-White A. Utilisation of theoretical models and frameworks in
 the process of evidence synthesis. JBI Libr Syst Rev. 2010;8(18):730–51.
- 270 20. Armstrong R, Hall BJ, Doyle J, Waters E. Cochrane Update 'Scoping the scope' of a Cochrane
- 271 review. J Public Health. 2011;33(1):147–50.
- 272 21. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. Int J Soc Res
- 273 Methodol. 2005;8(1):19–32.

- 274 22. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. Implement Sci.
- 275 2010;5(1):1-9.
- 276
- 277

Question part	Question term	Search terms	
		((Adolescen* OR Teen* OR Youth OR) AND	
	Adolescents	(Mental adj1 health OR Mental adj1 illness OR	
Population	presenting with mental	Psychiatr* OR Mental Disorders/MESH OR	
	health difficulties	Mental Health/MESH) OR adolescent	
		psychiatry/MESH OR child psychiatry/MESH)	
AND			
		Admit* OR Admission* OR Discharge* OR	
		Facility admission/MESH OR Hospital	
		Admission/MESH OR Psychiatric Hospital	
Concept	Reason for admission	Admission/MESH or Facility Discharge /MESH	
	or discharge	OR Hospital Discharge/MESH OR Psychiatric	
		Hospital Discharge/MESH OR Discharge	
		Planning/MESH)	
AND			
	ext rext adolescents	Inpatient OR In-patient OR Residen* OR	
		Psychiatric Hospitalization/MESH OR	
		Psychiatric Hospitals/Mental Health	
Context		Services/MESH OR Residential Care	
		Institutions OR Community Mental Health	
	audiescents	Services/MESH OR treatment facilities/MESH	

278 Appendix I – Initial search strategy for PsycINFO

279 280