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SYSTEMATIC REVIEW

The Impact of Child and Adolescent Inpatient Psychiatric Admissions Out-of-Area or to Adult Wards: A Systematic Review

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Abstract

Aims/Background Child and adolescent psychiatric inpatient admissions out-of-area or to adult wards are frequently discussed in the national media. No previous systematic reviews have investigated the impact of such admissions.

Methods Systematic searches of MEDLINE, Embase, CINAHL, PsycINFO, PsycArticles, King's Fund, Google Scholar, The Health Foundation, Social Care Online, Cochrane Library, Royal College of Psychiatrists, Web of Science and Econ light databases were conducted alongside grey literature searches. All eligible studies investigating the impact of acute psychiatric inpatient admission out-of-area or to adult wards in children and adolescents were included. Risk of bias was assessed using an adapted version of the Hawker critical appraisal tool.

Results 18 studies were included (4 reported on out-of-area admissions, 13 on adult ward admissions, 1 study reported on both). Study quality was variable. Out-of-area admission impacts included longer emergency department waits, higher travel costs for families, and were described as 'time-inefficient'. For studies of admissions of under-18s to adult psychiatric wards the most commonly reported impact was on length of stay. Opinions from staff and young people of these types of admissions were mostly negative.

Conclusion Further studies looking at the full range of impacts of these admissions over the long term are needed.

Key words: psychiatry; Child and Adolescent Mental Health; inpatient admissions; health services; out-of-area

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Introduction

Psychiatric out-of-area admissions (i.e., outside their health-services region or more than 50 miles from their usual place of residence (NHS England CAMHS Tier 4 Steering Group, 2014)) are frequently discussed in the UK national media (Armistead, 2024; Iacobucci, 2019), in 'news' sections of medical journals such as the British Medical Journal (Owen, 2018) and in press releases by the Royal College of Psychiatrists (RCPSYCH, 2022; RCPSYCH, 2024). This is also true

when looking specifically at out-of-area admissions in Child and Adolescent Mental Health Services (CAMHS) (Owen, 2018); and adult psychiatric ward admissions for under 18-year-olds (Das, 2022; Mahase, 2019).

These admissions have also been criticised within policy documents and a number of reports have discussed how to eliminate these practices in order to ensure young people receive care in age-appropriate settings (Abrams, 2009). One previous scoping review in 2016 (Murcott, 2016) looked at the research investigating adult ward admissions for under 18-year-olds, finding that there was a lack of high-quality research in this area.

A psychiatric ward admission does not only affect the young person themselves; it will affect parents/carers (Blizzard et al, 2016; Clarke and Winsor, 2010), siblings (Sangha, 2019), extended family members, healthcare professionals looking after the young person on the ward and in the community (Frith, 2017) as well as wider professional networks including social care and education. Out-of-area and adult-ward admissions are often labelled as 'inappropriate' and are perceived as being more negative than admissions to a local child and adolescent psychiatry ward. However, the specific effects or impacts of admission out-of-area or to an adult ward are often not drawn out and described. To capture as many effects of these admissions as possible, the authors defined 'impact' as any aspect of the study reported which would have had an effect on the young person or those around them. A clear understanding of how these types of admission affect all those involved is important, it provides targets for change to try to improve experiences if such an admission is unavoidable, as well as an evidence base for changes in practice.

This is the first systematic review investigating the impact of child and adolescent inpatient psychiatric admissions out-of-area or to adult wards.

Methods

The systematic review was conducted in accordance with the Preferred Reporting Items For Systematic Reviews and Meta-analyses (PRISMA) guidance (see **Supplementary File 1** for the PRISMA checklist). The systematic review was registered with the International prospective register of systematic reviews (PROSPERO) in March 2021 (ID: CRD42021214714).

Search Strategy

We conducted a systematic search of: MEDLINE, Embase, CINAHL, PsycINFO, PsycArticles, King's Fund, Google Scholar, The Health Foundation, Social Care Online, Cochrane Library, Royal College of Psychiatrists, Web of Science and Econ light databases. Grey literature searches were conducted for completeness, as relevant literature could be found in policy reports or reports for research funders. The reference lists of relevant papers and policy articles were also searched during screening to identify any other potential studies. Initial searches covered all time points up to 1 January 2021. Updated searches following the same strategy were repeated on the 28 August 2022 and 4 April 2024 covering all time points up to the date of the search.

The searches combined search terms for children and adolescents' acute psychiatric inpatient admission and out-of-area or to an adult ward. The full search strategy is available in **Supplementary File 2**.

Inclusion and Exclusion Criteria

Studies included were observational studies of admissions of under-18-year-olds to acute psychiatric hospital either: out-of-area or to an adult psychiatric unit. Out-of-area admission was defined as more than 50 miles from the patient's usual residence (NHS England CAMHS Tier 4 Steering Group, 2014) or outside their health services region. Acute psychiatric admissions to specialist wards for Eating Disorders, Intellectual Disability, and Psychiatric Intensive Care Units were included. This review was interested in all impacts of acute psychiatric inpatient admissions out-of-area or to adult wards and, as such, no studies were excluded based on the outcomes measured. If any studies from non-traditional sources appeared to meet inclusion criteria, they were reviewed by the study team to assess for quality prior to inclusion. Non-peer-reviewed studies, such as policy reports or reports for research funders were included if they included adequate detail of their methodology and were of high quality.

Editorials and published material offering only commentary on admissions out-of-area or to adult wards without participant-level impact were excluded. Searches were limited to English language only. Conference abstracts were excluded unless authors judged the abstract to contain enough detail of the methodology and results to complete risk of bias scoring.

Screening

Following each search, all titles and abstracts were uploaded to Rayyan Systematic Review Software (https://www.rayyan.ai/). All abstracts were independently considered for inclusion by JH, HS-L, LL or JR. If there was disagreement in whether a study should be included based on the abstract, consensus was reached through discussion between the two researchers, and where needed, a third researcher.

Following abstract screening, full texts for all articles deemed acceptable were uploaded to Rayyan. These were reviewed for inclusion by JH, HS-L, LL or JR. If there was disagreement in whether a study should be included based on the whole text, consensus was again reached through discussion between the two researchers, and where needed, a third researcher.

All reference lists were checked by JH and where there were additional records identified these were sent to a second author to decide if they should be included, if there was conflict between the two decisions, the opinion of a third author was sought.

Risk of Bias

Studies were appraised using an adapted version of the Hawker critical appraisal tool (Hawker et al, 2002). This adapted version developed by Paul et al (2015) was used as this avoided bias against studies presented in a non-traditional

layout. This tool provided flexibility to appraise the quality of studies from a range of methodologies including qualitative methods. A second researcher independently applied the critical appraisal tool to ensure the reliability of the scores. Critical appraisal scores can be seen in Table 1.

Data Synthesis

The impacts presented in each eligible study were extracted independently by two researchers. Any effect of out-of-area or adult ward admissions was extracted. The researchers then met to ensure all relevant data had been extracted, these are presented in Table 1. The eligible studies were summarised using a narrative synthesis approach.

Results

Study Selection

The study selection process is shown in the PRISMA Flow Chart (Fig. 1).

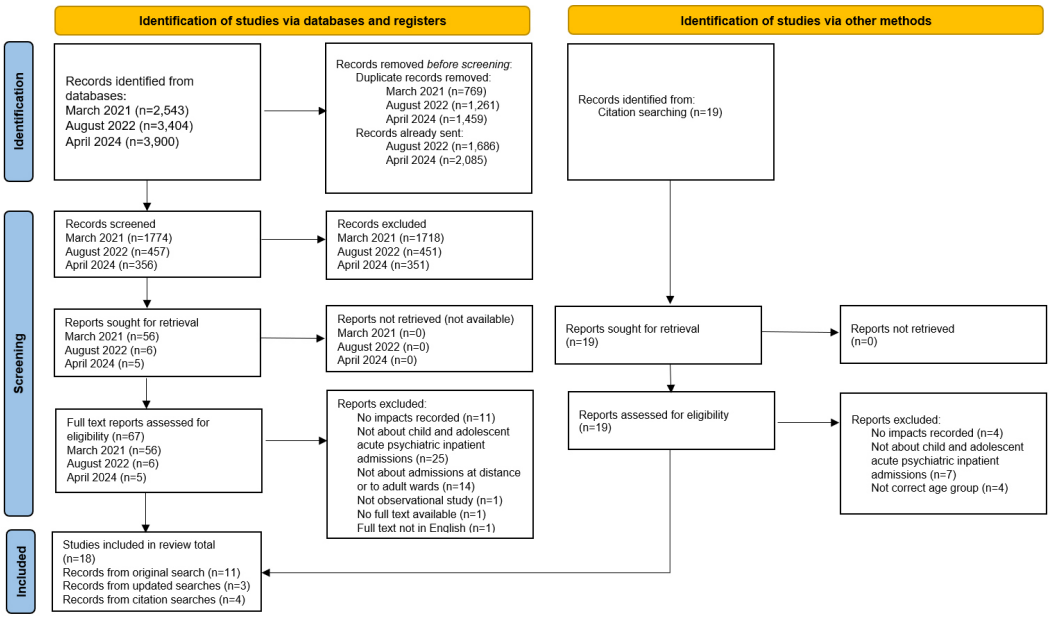

Fig. 1. PRISMA flow chart (Page et al, 2021).

A total of 18 studies were included. Initial searches in 2021 generated 2543 results, 1774 after duplicates were removed, 56 full texts were considered, from which 11 studies were included for review. The updated search performed in August 2022 generated 457 new results for consideration and resulted in two further studies being added to the review. The second updated search performed in April 2024 generated 356 results for consideration and resulted in one further study being included. Citation searching identified four studies for inclusion. There were no studies which appeared to meet the inclusion criteria but were later excluded.

Table 1 presents a summary of study characteristics and main findings.

Table 1. Study characteristics and main findings.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
Out-of-area	RCPSYCH (2015)	UK	Survey	370	November 2013 to December 2013	Child and adolescent psychiatrists working in community and inpatient settings	Survey of Royal College of Psychiatrists Child and Adolescent Psychiatry Faculty.	% of consultants that reported far-away admissions	89% of respondents reported a young person admitted to an out-of-area placement. 51% of respondents reported this as occurring 'often' or 'always'. The greatest distance was >500 miles.	32
							Estimated 30% response rate. 80.3% of responders were consultant psychiatrists	% of consultants that reported patients held in inappropriate settings	61.9% reported young people held in inappropriate settings whilst awaiting admission, e.g., adult wards, police cells, section 136 suites (a specialist holding suite usually located at an adult psychiatric hospital, designed to hold people for no longer than 24 hours while awaiting mental health act assessment).	
								Time burden	Time-inefficient for families and clinicians. Time taken to organize out-of-area placements takes clinicians away from clinical work.	
								Financial burden	Far away admissions were costly for travel.	
								Impact upon discharge and other admissions	Risk of delayed discharge. 'Affects the availability of beds for local children and adolescents and might in turn necessitate a further out-of-area placement'.	
Out-of-area	O'Neil et al (2016)	USA	Retrospective cohort study	2585 (510 <18's, 298 admitted, 54 out-of-area)	February 2013 to January 2014	Young people (<18 years) and adults presenting to Emergency Department	Retrospective cohort study of patients who received psychiatric consult during presentation to emergency department	Length of stay in emergency department	Young people who were transferred to an out-of-area inpatient facility had a significantly longer emergency department stay than those not transferred (15.9 hrs vs 4.6 hrs OR 1.18 $p < 0.001$).	27

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Table 1. Continued.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
Out-of-area	Jain et al (2016) abstract only	USA	Retrospective chart review	353 (243 admitted)	October 2015 and May 2016	Young people (<18 years) attending 'psychiatric' emergency department	Retrospective chart review of a consecutive sample group of patients	Length of stay in emergency department	Average length of stay in emergency department was 25 hours 7 minutes, for those awaiting a bed this was 59 hours 18 minutes.	27
								Average distance from parent's home	Average distance of the admitting hospital was 43.8 miles from parent's home.	
Out-of-area	Smith et al (2022)	UK	Census	1080 (254 held in psychiatric secure settings)	September 2016	Young people (age range not given) held in secure care (psychiatric, welfare, and youth justice system)	Census of all young people held in secure care in England	Multiple previous placements	There was an association between young people with multiple previous placements (psychiatric, welfare, and youth justice system) and being placed out-of-area.	35
								Psychiatric diagnosis	There was an association between psychiatric and neurodevelopmental disorders and being placed out-of-area.	
Out-of-area and Adult ward	Holland et al (2023)	UK	Qualitative/ questionnaires	290 (11 adult ward admissions, 279 out-of-area admissions) Data obtained for 288 (99%) of cases by 6-month follow up	February 2021 to February 2022	Young people (13–17 years) Admitted at-distance, out of area or to adult wards	Surveillance study over 13 months using Child and Adolescent Psychiatry Surveillance System including baseline and 6 month follow up questionnaires	Wait for bed	Over 41% of young people waited one week or more for a bed, 23.5% waited >10 days. 55% waited in general hospital settings, 10.7% waited in section 136 suites. All adult ward admissions were within area and <50 miles from home.	35
								Length of stay	Median length of stay was 36 days for those admitted to adult wards and 76 for those admitted at-distance. At 6-month follow up, 20% were still in hospital, the majority in at-distance placements, though <5 young people were still on an adult ward.	

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Table 1. Continued.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
									Delayed discharge was reported in 34% of the sample, most commonly due to distance from home limiting in-reach from local Child and Adolescent Mental Health Services (CAMHS) team, and difficulty organising local social care support.	
								Transfer to other units	36.4% of those on adult wards, and 18.3% of those at-distance were transferred to another ward during their admission. Of those who transferred, 27.3% were transferred to another out-of-area unit.	
Adult ward	Curran et al (2011)	Australia	Survey	108	November 2010 to March 2011	Clinical staff working in Northern Sydney Central Coast Area Health Services	A voluntary, anonymous, electronic survey distributed through staff emails to explore experiences of looking after adolescents on their adult psychiatry units	Ability to care for adolescents	83.2% of respondents had experience of looking after at least one adolescent on the ward. The majority rated their facility as "not at all" (30.7%) or "only a little" (57.4%) equipped to care for adolescents. The majority felt "moderately confident" or "very confident" to care for these patients. The main theme of concerns was around safety/vulnerability of the patients. Lack of resources, negative impact of unwell adult patients, the unsuitable environment and staff lacking training.	30
Adult ward	Park et al (2011)	New Zealand	Retrospective observational study	332	January 2002 to December 2007	Adolescents (12–18 year olds) admitted to an adult psychiatric unit	A retrospective clinical records audit to investigate patterns of admissions	Number of adolescents admitted	Around 50–60 adolescents were admitted to the unit each year.	34
								Length of stay	The average length of stay was 7.18 days.	
								% of adolescents requiring transfer	12% of those admitted required transfer to the regional CAMHS unit.	

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Table 1. Continued.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
Adult ward	Worrall et al (2004)	UK	Survey	54 (43 adult ward admissions)	July to December 1999	Under 18's admitted to adult psychiatric ward (aged 15–17) or paediatric ward for psychiatric reasons (aged 3–16)	Survey exploring 43 adult ward admissions and 11 paediatric ward admissions across 9 health authorities	Proportion of admissions judged to be inappropriate by treating clinician	Over half of admissions were judged to be inappropriate by the treating clinician.	24
								Length of stay	Median length of stay in adult wards was 12 days.	
Adult ward	Hazell et al (2016)	Australia	Retrospective observational study	22,615 (9543 adult ward admissions)	January 2002 to December 2013	Admissions to paediatric medical (aged 0–17 yrs), child psychiatric (aged 4–17 yrs) and adult psychiatric wards for mental health reasons (aged 11–17 yrs)	Comparison of admission numbers to paediatric medical, child psychiatric and adult psychiatric wards for mental health reasons across 17 local health districts.	Trend in number of admissions	The number of admissions for mental health reasons in under 18-year-olds rose significantly across the period studied. There was no overall difference in the increase in adult ward admissions between districts with and without a CAMHS units. Analyses showed that in the years subsequent to opening a CAMHS unit the adult ward admissions in the area increased and paediatric wards decreased.	33
								Length of stay	Average length of stay was 6.99 days for adult units and 19.03 days for CAMHS units.	
Adult ward	McRae et al (2022)	Canada	Retrospective cohort study	16,998 (3837 to adult psych units)	2007 to 2011	Young people (12–17 years) who experienced inpatient psychiatric admission	Database study using Ontario mental health reporting system and Discharge Abstract Database	Admission rate by area	Young people living in a rural area were more likely to be admitted to an adult psychiatric ward compared to those in an urban area.	33
								Admission rate by diagnosis	Those with non-affective psychosis and personality disorder were more likely to be admitted to an adult psychiatric ward. Those who had involuntary status were more than twice as likely to be admitted to an adult psychiatric unit.	

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Table 1. Continued.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
								Admission rate by previous admissions	Patients who had previous psychiatric admissions were less likely to be admitted to an adult psychiatric unit.	
								Length of stay	There was no difference in length of stay between adolescents admitted to adult units and 'other' inpatient units (paediatric psychiatry unit, paediatric medical unit, or other adult medical unit) but adolescents were more likely to discharge against medical advice.	
								Readmission	The proportion of adolescents readmitted within 30 days was 8%. There was no association between admission to an adult unit and 30-day readmission.	
Adult ward	Paruk et al (2009)	South Africa	Retrospective chart review	70	July 2005 to June 2007	Young people (13–18 years) with psychotic symptoms admitted to an adult psychiatric unit	Descriptive retrospective chart review	Length of stay	The average length of stay was 27.8 days.	28
								% of admissions that were involuntary	94.3% were admitted as involuntary mental health care users.	
Adult ward	McGilloway et al (2000)	UK	Retrospective database study, case note review, and interviews	443	1994 to 1997	All young people (13–18 years) admitted to one adult psychiatric hospital 1994–1997	Retrospective Database study. Case note review. Interviews	Length of stay	Length of stay was 32 days for females and 25 days for males. 6% stayed >3 months.	35
								Discharge location	14% discharged to regional adolescent unit.	
Adult ward	Molnar and Bernardo (1981)	Canada	Case note review	107	July 1977 to June 1980	Young people (12–18 years) admitted to an adult psychiatric ward	Case note review of all adolescent admissions	Incident reports	Adolescents had 3× as many incident reports each as adult patients (Incident report refers to an unexpected or unintended incident which could have or did lead to patient harm). Self-injuries were 10× more frequent.	19

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Table 1. Continued.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
								Challenges to management	A committee identified five areas in the management of adolescents: inappropriate admission, unworkable treatment plans, control and management of acting out, disposition and staff attitudes.	
Adult ward	Scott and Donnelly (2001)	UK	Mixed methods	443 case-note reviews, 7 interviews	1989 to 1997	Young people (under 18 when admitted) with experience of adult ward admission	In depth semi-structured interviews and quantitative data from case note review	Pre-conceptions before admission	Negative pre-conceptions of the hospital before admission.	26
								Opinion of admission	Unwell adult patients presented a source of stress to the young people. Young people felt they had only vague involvement in their treatment and overall the majority were disappointed. Majority had a structured discharge.	
Adult ward	Duffy and Skeldon (2013)	UK	Case notes review	27 admissions to adult wards 270 admissions to adolescent inpatient wards	Adult ward admissions: April 2009 to June 2011 Adolescent ward admissions: 2007 to June 2011	Young people (9–17 years) admitted to adult or adolescent psychiatric wards	Review of referral to Intensive Treatment service	Trend in admissions	Significant reduction in admissions of young people to adult wards in the year of the study with the introduction of intensive treatment service (7 vs 20 the previous year).	26
								Length of stay (LOS)	Adult ward admissions: April 2009 to April 2010 average LOS = 6.5 days (SD 2.4) April 2010 to April 2011 average LOS = 1.9 days (SD 1.8) Adolescent unit admissions: April 2009 to April 2010 average LOS = 28 days (range 0–221) April 2010 to April 2011 average LOS 1 = 5 days (range 0–111)	

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Table 1. Continued.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
Adult ward	O'Herlihy et al (1999)	UK	Survey	274	April 1999 to December 2000	Child and adolescent mental health inpatient units	Survey of child and adolescent psychiatric in-patient units. Review of admissions to general adult psychiatric wards	Proportion of admissions judged to be inappropriate by psychiatrist	Of the 9 health authorities investigated for admissions to adult wards, 18 wards reported a total of 43 under 18s admitted to adult ward beds, 26 were reported to be inappropriate.	35
								Length of stay	Mean length of stay on an adult ward was 20 days, and where the admission was deemed inappropriate the mean length of stay was 13 days.	
								Reasons given for not transferring	Reasons given for not transferring to a more appropriate facility included: The non availability of an appropriate facility (15 cases); or the appropriate facility was either full or would not accept the patient (10 cases).	
Adult ward	Office of the Children's Commissioner (2007)	UK	Qualitative interviews	28	2006	Adult psychiatric ward admissions	Consultation with 16 young people (13–19), seven parents and five members of staff around admission	Five key themes emerged	(1) Inadequate response to crises. (2) Lack of information and involvement in care planning. (3) Nothing to do no one to talk to. (4) Lack of safety, security or therapeutic care. (5) Disorganised discharge arrangements.	30

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Table 1. Continued.

Admission type	Study	Country	Study type	Sample size	Data collection period	Study population and setting	Methods	Impact(s) measured	Results and main findings	Critical appraisal/36
Adult ward	Mental Welfare Commission for Scotland (2008)	UK	Case study	1	December 2006 to August 2007	16-year-old admitted to an adult psychiatric ward	Summary report of an investigation into deficiencies in the care and treatment of a 16-year-old admitted to an adult psychiatric ward	Input from specialist services	The issues in the care received were highlighted including 'little to no input from specialist services for younger people'.	21
								Education	Failure to re-engage with education	
								Understanding of adolescent presentation	Lack of understanding of adolescent presentations of mental disorder.	
								Safety of young person	Young person reported feeling unsafe and had been offered drugs and alcohol by other patients.	

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Studies Investigating the Impacts of Out-of-Area Admissions

Five studies reported an impact of out-of-area admission in CAMHS (Holland et al, 2023; Jain et al, 2016; O'Neil et al, 2016; RCPSYCH, 2015; Smith et al, 2022). Two of these studies looked at transfers out of emergency departments in the USA (Jain et al, 2016; O'Neil et al, 2016). They found that young people who were transferred to psychiatric units further away had a longer wait within the emergency department than those admitted locally and were more likely to need to be transported by an external company. A third study was a survey of child and adolescent psychiatrists, respondents reported the impact of these admissions on themselves and the families they have observed, labelling these admissions as 'time-inefficient' and 'incurring high travel costs for families' (RCPSYCH, 2015). A further study reported median length of stay for out-of-area admissions as 76 days and that there was a delay to discharge in over 1/3 of these admissions (Holland et al, 2023). The final study looked at all young people in secure care, including psychiatric hospital admissions, secure social care placements and youth justice. They found a link between being far from home and multiple secure placements, however authors comment that the nature of this relationship is not fully understood based on their data (Smith et al, 2022).

The applied critical appraisal tool judged all of these studies to be of either fair or good quality. The studies of data from single emergency departments are site specific and lack generalisability. Whilst census data are able to provide a very complete dataset of the number of young people, it is cross-sectional in nature, it is difficult to understand the complex temporal dynamics of variables and the individual treatment journeys of these patients.

Studies Investigating the Impacts of Adult Ward Admissions

Fourteen studies reported on impacts of admissions of young people under 18-year-olds to adult psychiatric wards. These studies were from several different countries including: eight from the UK, two from Australia, one from New Zealand, two from Canada and one from South Africa. One was a case investigation summary (Mental Welfare Commission for Scotland, 2008), one used qualitative interviews (Office of the Children's Commissioner, 2007), three used surveys (Curran et al, 2011; Holland et al, 2023; Worrall et al, 2004), one was a review of changes in admission following the introduction of an intensive treatment service (Duffy and Skeldon, 2013), five were retrospective case note or healthcare database studies (Hazell et al, 2016; McRae et al, 2022; Molnar and Bernardo, 1981; Park et al, 2011; Paruk et al, 2009), two used mixed methods (McGilloway et al, 2000; Scott and Donnelly, 2001), and one was a government report investigating all inpatient units in England and Wales (O'Herlihy et al, 1999).

A number of published studies focused on measuring the frequency of these admissions, without any measure of impact and so were excluded from this review. The most commonly presented impact of these admissions was length of stay (9 studies) (Duffy and Skeldon, 2013; Hazell et al, 2016; Holland et al, 2023; McGilloway et al, 2000; McRae et al, 2022; O'Herlihy et al, 1999; Park et al, 2011; Paruk et al, 2009; Worrall et al, 2004), which our review included as an impact of the

admission. The average length of stay of young people on adult wards appeared to vary significantly (1.9 to 36 days). However, without a comparative length of stay of a young person on a CAMHS ward it is difficult to utilise this as a measure of impact. Since each of these lengths of stay was presented in isolation, it is not clear whether these variations of stay are due to unit-level or national-level differences in clinical practice or changes in practice over time. These average lengths of stay, however, are notably lower than the average stay on CAMHS inpatient wards, as reported by NHS Benchmarking for 2018/19 (62 days for general admission, 107 days for eating disorders and 273 days for secure admissions) (NIHR, 2021). Furthermore, the 'Getting It Right First Time' report found that length of stay in CAMHS was less than 60 days in only 39% of cases (Northover, 2022). The authors hypothesize that the shorter length of stay on adult wards compared to CAMHS wards may be due to the strong focus on rapid re-integration into the community within adult mental health. For some young people the adult ward admission may have been viewed as a holding place until the young person can be transferred to a CAMHS unit and therefore the quoted length of stay may only represent a subset of time the young person spent in hospital during that admission. Holland et al (2023) found 36.4% of young people on adult wards were transferred to another ward during their admission, and Park et al (2011) found 12% of young people on adult wards were transferred to their regional CAMHS unit.

Where study asked staff opinions of adult-ward admissions (O'Herlihy et al, 1999), responses tended to find there was a negative impact on staff. Although they may have felt confident to care for these young people, staff felt under-resourced, and that the environment was inappropriate. Similarly, where the experiences and opinions of young people were gathered, many negative aspects of these admissions were highlighted including the lack of age-appropriate activities and education, and the presence of unwell adult patients who presented a source of stress (Office of the Children's Commissioner, 2007; Scott and Donnelly, 2001).

The applied critical appraisal tool (Paul et al, 2015) found the quality of these studies to be variable. Scores are shown in Table 1.

Discussion

This systematic review identified and included 18 studies, 4 of which investigated out-of-area admissions, 13 focused on adult ward admissions experienced by under 18-year-olds, and one study addressed both out-of-area and adult ward admissions.

To be as inclusive as possible, the authors carefully reviewed full text documents for any outcomes that could be recorded as impacts of an admission. However, during the full text screening process it was noted that several studies provided information about the number of young people being sent far from home (Trueland, 2008) or to adult wards (McDougall and Scott, 2008; McDougall et al, 2009) but did not offer any details about the impacts of these admissions, and so were excluded from further review. Similarly, some articles offered commentary around reports

or policy documents (Milavic, 2008) but there was no research into the impacts of these admissions beyond the authors' opinions.

The finding of only five studies reporting data-based impacts of out-of-area admissions is striking and highlights the current lack of empirical research into this issue. When clinicians were asked about these admissions, they were able to name a number of impacts affecting both clinicians and parents/carers, but this was only explored from the clinicians' point of view (Holland et al, 2023; RCPSYCH, 2015).

The studies that provided data on the management of these patients in the emergency department highlight some important issues, including the fact that a young person who requires admission to an out-of-area psychiatric ward has their experience altered even before they are admitted; it increases the length of time they spend waiting in the emergency department (15.9 hrs vs 4.6 hrs (O'Neil et al, 2016) and 59 hrs vs 25 hrs (Jain et al, 2016)). This is notably longer than the commonly used definition for prolonged emergency department length of stay of 6- or 12-hours (Nash et al, 2021; Smith et al, 2019).

In the investigation by Smith et al (2022), of young people within secure placements, they highlight the important issue that young people being placed out-of-area is not unique to psychiatric admissions but also affects young people in secure youth justice placements and secure welfare placements due to similar issues of low numbers of beds and uneven spread throughout the country.

There were a greater number of studies investigating the impacts of adult ward admissions than those focused on out-of-area admissions, though there was still a lack of large studies in this area. The findings from Molnar and Bernado from over 40 years ago (Molnar and Bernardo, 1981) echo the findings of other studies that collected staff opinions, that the mental health presentations of young people are often different from those of adults, and this presents difficulties for staff trying to care for both patient groups on the same ward (O'Herlihy et al, 1999; Mental Welfare Commission for Scotland, 2008). Several of the studies also investigated whether clinicians judged an admission to an adult ward to be 'inappropriate' (O'Herlihy et al, 1999; Worrall et al, 2004). This is an ill-defined category since whether an admission is deemed to be inappropriate is likely to be affected by the beliefs held by the clinicians themselves, the presentation of the young person and the current patient mix on a ward. The fact that not all admissions to adult wards were judged to be inappropriate (O'Herlihy et al, 1999; Worrall et al, 2004) is also an important point. There may be occasional young people for whom an adult psychiatric ward admission feels appropriate, e.g., a young person who is almost 18 or a young person who lives independently. For these young people, their presenting needs may be more aligned with those of an adult patient and therefore might fit the expertise of an adult ward better than that of a CAMHS ward.

The findings from our review echo those of Murcott and colleagues' scoping review (Murcott, 2016), suggesting that this is an area that would benefit from further high-quality research. Future studies looking at a range of impacts of these admissions on the young people themselves, parents/carers, and clinicians involved are needed.

Strengths and Limitations

A strength of this study is its inclusivity. The inclusion of papers covering specialist and non-specialist inpatient psychiatric wards ensured that the authors did not miss any potentially applicable studies. The inclusion of papers from all timepoints also added to this, one study was from over 40 years ago, which highlights the long-standing nature of this issue and the parallel difficulties experienced then as today. The inclusion of grey literature also ensured that studies which may have been published through non-traditional sources were not missed. However, a limitation of this systematic review is the heterogeneity in the included studies, which prevented meta-analysis.

Future Directions

This systematic review has highlighted the paucity of research investigating the impacts of these admissions. Further research investigating the longer-term impacts on young people and their families, including clinical outcomes, would help us to understand the effects of these admissions more completely.

Conclusion

This review underscores ongoing and current concerns surrounding the impacts of out-of-area or adult ward admissions in CAMHS. There is, however, a lack of empirical research into this issue. Further studies examining the range of impacts of these admissions are needed.

Key Points

- There is a lack of research investigating the impacts of out-of-area admissions in Child and Adolescent Mental Health Services.
- Studies of out-of-area admissions have highlighted how distance can negatively affect the admission including increased length of stay and delays to discharges.
- The research investigating the impacts of admitting under-18s to adult psychiatric wards is of variable quality and would benefit from further research.
- Research investigating admissions of under-18s to adult psychiatric wards highlight the negative aspects of these admissions including a lack of education provision and exposure to distressing events.

Availability of Data and Materials

Data are available upon reasonable request from the corresponding author.

Author Contributions

JH, HS-L, AW, JR and KS were involved with study design and search strategy design. JH, HS-L, AW, JR and LL were involved in abstract and full text screen-

ing. JH and LL completed risk of bias scoring. JH and LL wrote the initial draft of the manuscript. All authors contributed to important editorial changes in the manuscript. All authors agreed the final version of the manuscript and agreed to be accountable for all aspects of the work.

Ethics Approval and Consent to Participate

Not applicable.

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Conflict of Interest

The authors declare no conflict of interest.

Supplementary Material

Supplementary material associated with this article can be found, in the online version, at https://www.magonlinelibrary.com/doi/suppl/10.12968/hmed.2024.0466.

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