

# Best Evidence Summaries of Topics in Mental Healthcare

**BEST in MH** *clinical question-answering service*

## Question

“For adults who have been admitted to mental health inpatient settings, how effective is admission under the mental health act, compared to informal admission, for improving patient outcomes?”

## Clarification of question using PICO structure

*Patients:* Adults who have been admitted to mental health inpatient settings  
*Intervention:* Admission under the mental health act  
*Comparator:* Informal admission  
*Outcome:* Any

## **Clinical and research implications**

The evidence comes from one systematic review of mostly low quality studies which found that involuntary admitted patients tended to have worse outcomes than those who were voluntary admissions. Overall, involuntary patients had higher suicide rates, lower social functioning, longer length of stay, higher risks of readmission and were less satisfied with their treatment. The poor search strategy means that this might not fully reflect the current evidence, and as the authors suggest, further good quality research is needed in routine care settings.

### **What does the evidence say?**

#### ***Number of included studies/reviews (number of participants)***

One systematic review containing 41 studies was included.

#### ***Main Findings***

This found that there was no evidence of a difference in mortality rates between involuntary and voluntary admitted patients, but involuntary patients had higher suicide rates, and lower levels of social functioning although they had similar levels of general psychopathology to voluntary patients. The length of stay, risk of readmission, and of involuntary readmission were all higher for involuntary patients. Involuntary patients were also less likely to be satisfied with their treatment, although there was little difference between the groups in terms of treatment and medication compliance.

#### ***Authors Conclusions***

Due to the generally low methodological quality of the research in this important area of mental health there is a need for more methodologically sound studies in routine care settings. Further research should also clarify whether the legal admission status is valid for differentiating between groups in the measurement of acute hospitalisation.

#### ***Reliability of conclusions/Strength of evidence***

These conclusions are based on one moderate quality systematic review, however the studies within it were mostly judged to be of low quality. The search strategy was limited as it included only two databases and was restricted by language therefore relevant studies may have been missed. The authors themselves stated that the criteria for excluding papers may have significantly restricted the spectrum of mental disorders with available data on involuntary admissions. Therefore the overall strength of the evidence is low, and might not fully reflect differences between voluntary and involuntary admissions in practice.

### **What do guidelines say?**

Neither National Institute for Health and Care Excellence (NICE) nor Scottish Intercollegiate Guidelines Network (SIGN) guidelines comment upon differences in patient outcomes following involuntary admission compared to voluntary admission to inpatient mental health settings.

**Date question received:** 13/11/2014  
**Date searches conducted:** 04/12/2014  
**Date answer completed:** 09/12/2014

## References

Kallert, T. W., Glöckner, M., & Schützwohl, M. (2008). Involuntary vs. voluntary hospital admission. *European Archives of Psychiatry and Clinical Neuroscience*, 258(4), 195-209.

## Results

### Systematic Reviews

Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
Kallert et al. (2008)	03/2006	<p><i>Participants:</i> Patients in general psychiatric wards (excluding patients assessed in relation to addiction, eating disorders, forensic, geriatric or child and youth psychiatric wards). The patient, not a ward or hospital, had to be the unit of assessment.</p> <p><i>Intervention:</i> Involuntary admission.</p> <p><i>Comparator:</i> Voluntary admission.</p> <p><i>Outcomes:</i> Service-related outcomes (length of stay, readmission rate, or legal status of readmission); clinical and observer-based outcomes (mortality, suicide, social functioning, or psychopathology, treatment compliance, or medication compliance); subjective outcomes (treatment satisfaction, perceived need/justification for admission, or perceived coercion).</p> <p><i>Study designs:</i> longitudinal studies which made a statistical comparison between groups, or reported sufficient data to enable a comparison to be made.</p>	41 studies	<p>Most of the studies were performed in Western and Northern Europe, the US, Canada and Australia. They were in general psychiatric hospitals or psychiatric units of general or university hospitals, mostly in unselected groups. Eleven studies were restricted to patients with psychotic or schizophrenic disorders. Sample sizes ranged from 39 to 9,081. Outcomes were assessed between admission and up to 17 years after. The overall methodological quality of the studies was low.</p> <p>Mortality was assessed by only one study which found no difference between voluntary and involuntary admitted patients. Three studies recorded suicides and found a significant increase in suicides in the involuntary admitted patients (range 52% to 78%). Involuntary admitted patients had comparable or lower levels of social functioning both at</p>	<p>Moderate</p> <p>The inclusion criteria were clearly reported.</p> <p>The search strategy was limited to only two databases without searches for unpublished studies. Studies had to be in English or German and published in 1980 or later. This means some relevant studies may have been excluded.</p> <p>Titles and abstracts were only screened by one reviewer</p>

				<p>admission and at discharge (seven studies). One small study suggested that involuntary admitted patients had more severe treatment-related traumatic symptoms.</p> <p>For medication compliance, one study found that involuntary admitted patients were significantly less likely to take their psychotropic medicine at the one-year follow-up. However other studies found no differences regarding medication or treatment compliance. Involuntary admitted patients were less satisfied with their treatment (five studies). Voluntary admitted patients were more likely to feel that they needed hospital treatment (four studies). Only one study assessed perceived coercion and found no correlation between the legal status of admission and perceived coercion.</p> <p>Length of stay was longer (nine studies), readmission rates were higher (five studies) and the risk of being involuntarily readmitted was also higher (four studies) for involuntary admitted patients.</p>	<p>and it was not reported how data were extracted.</p> <p>Quality was assessed by three reviewers independently but reported as an overall score which is less informative.</p> <p>Results were reported narratively by outcome type which was appropriate given the variation between the studies.</p>
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**Risk of Bias:**

**SRs**

Author (year)	RISK OF BIAS				
	Inclusion criteria	Searches	Review Process	Quality assessment	Synthesis
Kallert et al. (2008)					

 Low Risk

 High Risk

 Unclear Risk

## Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
<b><i>SRs and Guidelines</i></b>			
NICE	voluntary admission mental health act	83	0
DARE	1 MeSH DESCRIPTOR Inpatients EXPLODE ALL TREES 180 Delete 2 (inpatient* OR (psychiatric adj1 hospital*)) IN DARE 359 Delete 3 #1 OR #2 459 Delete	459	1
<b><i>Primary studies</i></b>			
CENTRAL	#1 MeSH descriptor: [Patient Admission] explode all trees 572 #2 voluntary admission 309 #3 #1 or #2 871 #4 mental health 14469 #5 MeSH descriptor: [Mental Health] explode all trees 675 #6 #4 or #5 14469 #7 #3 and #6	58	0
PsycINFO	29. PsycINFO; exp *HOSPITAL ADMISSION/ OR exp *HOSPITAL ADMITTANCE/; 3363 results. 30. PsycINFO; exp *HOSPITALISED PATIENTS/ OR exp *HOSPITALIZATION/; 14883 results. 31. PsycINFO; (voluntary adj3 admi*).ti,ab; 348 results. 32. PsycINFO; (voluntary adj3 hospital*).ti,ab; 207 results. 33. PsycINFO; 29 OR 30 OR 31 OR 32; 15218 results. 34. PsycINFO; MENTAL HEALTH/; 41958 results.	199	0

	<p>35. PsycINFO; (mental AND health).ti,ab; 134738 results.</p> <p>36. PsycINFO; 34 OR 35; 142491 results.</p> <p>37. PsycINFO; 33 AND 36; 2348 results.</p> <p>38. PsycINFO; CLINICAL TRIALS/ [Limit to: Publication Year 1860-2014]; 8137 results.</p> <p>39. PsycINFO; random*.ti,ab [Limit to: Publication Year 1860-2014]; 135791 results.</p> <p>40. PsycINFO; (doubl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 18771 results.</p> <p>41. PsycINFO; (singl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 1716 results.</p> <p>42. PsycINFO; EXPERIMENTAL DESIGN/ [Limit to: Publication Year 1860-2014]; 9375 results.</p> <p>43. PsycINFO; controlled.ti,ab [Limit to: Publication Year 1860-2014]; 84087 results.</p> <p>44. PsycINFO; (clinical adj3 study).ti,ab [Limit to: Publication Year 1860-2014]; 8229 results.</p> <p>45. PsycINFO; trial.ti,ab [Limit to: Publication Year 1860-2014]; 71361 results.</p> <p>46. PsycINFO; "treatment outcome clinical trial".md [Limit to: Publication Year 1860-2014]; 28342 results.</p> <p>47. PsycINFO; 38 OR 39 OR 40 OR 41 OR 42 OR 43 OR 44 OR 45 OR 46 [Limit to: Publication Year 1860-2014]; 257847 results.</p> <p>48. PsycINFO; 37 AND 47 [Limit to: Publication Year 1860-2014]; 199 results.</p>		
Embase	<p>1. PsycINFO; exp *HOSPITAL ADMISSION/ OR exp *HOSPITAL ADMITTANCE/; 3363 results.</p> <p>3. PsycINFO; (voluntary adj3 admi*).ti,ab; 348 results.</p> <p>4. PsycINFO; (voluntary adj3 hospital*).ti,ab; 207 results.</p>	644	0

	<p>6. PsycINFO; MENTAL HEALTH/; 41958 results.</p> <p>7. PsycINFO; (mental AND health).ti,ab; 134738 results.</p> <p>8. PsycINFO; 1 OR 3 OR 4; 3811 results.</p> <p>9. PsycINFO; 6 OR 7; 142491 results.</p> <p>10. PsycINFO; 8 AND 9; 644 results.</p>		
Cinahl	<p>38. CINAHL; exp *HOSPITAL ADMISSION/ OR exp *HOSPITAL ADMITTANCE/; 0 results.</p> <p>39. CINAHL; exp *HOSPITALISED PATIENTS/ OR exp *HOSPITALIZATION/; 8668 results.</p> <p>40. CINAHL; (voluntary adj3 admi*).ti,ab; 75 results.</p> <p>41. CINAHL; (voluntary adj3 hospital*).ti,ab; 100 results.</p> <p>42. CINAHL; 38 OR 39 OR 40 OR 41; 8830 results.</p> <p>43. CINAHL; MENTAL HEALTH/; 12040 results.</p> <p>44. CINAHL; (mental AND health).ti,ab; 46490 results.</p> <p>45. CINAHL; 43 OR 44; 51938 results.</p> <p>46. CINAHL; 42 AND 45; 209 results.</p>	209	0
Medline	<p>20. MEDLINE; exp *HOSPITAL ADMISSION/ OR exp *HOSPITAL ADMITTANCE/; 0 results.</p> <p>21. MEDLINE; exp *HOSPITALISED PATIENTS/ OR exp *HOSPITALIZATION/; 56259 results.</p> <p>22. MEDLINE; (voluntary adj3 admi*).ti,ab; 379 results.</p> <p>23. MEDLINE; (voluntary adj3 hospital*).ti,ab; 619 results.</p> <p>24. MEDLINE; 20 OR 21 OR 22 OR 23; 57133 results.</p> <p>25. MEDLINE; MENTAL HEALTH/; 23325 results.</p> <p>26. MEDLINE; (mental AND health).ti,ab; 103967 results.</p> <p>27. MEDLINE; 25 OR 26; 113794 results.</p> <p>28. MEDLINE; 24 AND 27; 1642 results.</p> <p>29. MEDLINE; RANDOMIZED CONTROLLED TRIALS AS TOPIC/; 100107 results.</p> <p>30. MEDLINE; RANDOMIZED CONTROLLED TRIAL/; 401552 results.</p> <p>31. MEDLINE; RANDOM ALLOCATION/; 84222 results.</p>	96	0

	<p>32. MEDLINE; DOUBLE-BLIND METHOD/; 132775 results.</p> <p>33. MEDLINE; SINGLE-BLIND METHOD/; 20696 results.</p> <p>34. MEDLINE; CLINICAL TRIAL/; 501893 results.</p> <p>35. MEDLINE; "clinical trial, phase i".pt; 15391 results.</p> <p>36. MEDLINE; "clinical trial, phase ii".pt; 24644 results.</p> <p>37. MEDLINE; "clinical trial, phase iii".pt; 10102 results.</p> <p>38. MEDLINE; "clinical trial, phase iv".pt; 1040 results.</p> <p>39. MEDLINE; "controlled clinical trial".pt; 90822 results.</p> <p>40. MEDLINE; "randomized controlled trial".pt; 401552 results.</p> <p>41. MEDLINE; "clinical trial".pt; 501893 results.</p> <p>42. MEDLINE; exp CLINICAL TRIALS AS TOPIC/; 295658 results.</p> <p>43. MEDLINE; (single\$ ADJ blind\$).ti,ab; 12438 results.</p> <p>44. MEDLINE; (doubl\$ ADJ blind\$).ti,ab; 123063 results.</p> <p>45. MEDLINE; (treb\$ ADJ blind\$).ti,ab; 0 results.</p> <p>46. MEDLINE; (trip\$ ADJ blind\$).ti,ab; 369 results.</p> <p>47. MEDLINE; (single\$ ADJ mask\$).ti,ab; 336 results.</p> <p>48. MEDLINE; (doub\$ ADJ mask\$).ti,ab; 2805 results.</p> <p>49. MEDLINE; (treb\$ ADJ mask\$).ti,ab; 0 results.</p> <p>50. MEDLINE; (trip\$ ADJ mask\$).ti,ab; 43 results.</p> <p>51. MEDLINE; PLACEBOS/; 34060 results.</p> <p>52. MEDLINE; placebo\$.ti,ab; 170060 results.</p> <p>53. MEDLINE; "randomly allocated".ti,ab; 18367 results.</p> <p>54. MEDLINE; (allocated adj2 random\$).ti,ab; 21048 results.</p> <p>55. MEDLINE; 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42; 998633 results.</p> <p>56. MEDLINE; 43 OR 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54; 251151 results.</p> <p>57. MEDLINE; 55 OR 56; 1048153 results.</p> <p>58. MEDLINE; "case report".ti,ab; 216868 results.</p> <p>59. MEDLINE; LETTER/; 888074 results.</p> <p>60. MEDLINE; HISTORICAL ARTICLE/; 313126 results.</p> <p>61. MEDLINE; 58 OR 59 OR 60; 1405835 results.</p>		
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	62. MEDLINE; 57 not 61; 1019399 results. 63. MEDLINE; 28 AND 62; 96 results.		
<b>Summary</b>	<b>NA</b>	<b>NA</b>	

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