**Interventions to Reduce Compulsory Psychiatric Admissions: A Systematic Review and Meta-analysis**

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*Date of revision*

January 28th, 2016

*Word count*: 3449

**ABSTRACT**

*Importance:* Compulsory admissions, defined as admissions representing deprivation of personal liberty, have strong impact on psychiatric patients. In several Western countries the rate of such admissions is tending to rise. Its reduction is urgently needed.

*Objective:* To establish which interventions effectively reduce compulsory admissions in adult psychiatric patients in outpatient settings.

*Data sources:* A systematic computerized literature search was performed using Embase, Medline, Web-of-Science, PsycINFO, Cinahl, PubMed (not yet indexed for Medline), Cochrane Central, and Google Scholar. Every database was searched from its inception until April 30th, 2015.

*Study Selection:* Randomized controlled trials that studied any kind of intervention designed to reduce compulsory admission rates in adult psychiatric patients (18-65 years) in outpatient settings were eligible. Eligibility was independently assessed by two authors.

*Data Extraction and Synthesis:* Two investigators independently extracted relevant data. The Cochrane Collaboration’s tool was used for assessing risk of bias. Overall risk reduction (random-effect estimate) was calculated in four subgroups of intervention: advance statements, community treatment orders, compliance enhancement, and integrated treatment.

*Main Outcome and Measure:* Relative risk was calculated on the basis of the number of patients who had been compulsorily admitted.

*Results:* Our meta-analyses included 13 RCTs covering a total of 2970 psychiatric patients. Meta-analysis of the RCTs on advance statements showed a significant 23% risk reduction in compulsory admission (RR=0.77; 95% CI=0.60-0.98; I2=2.2%; N=1102). In contrast, the RCTs on community treatment orders (RR=0.95; 95% CI=0.81-1.10; I2=0.0%; N=742), compliance enhancement (RR=0.52; 95% CI=0.11-2.37; I2=55.7%; N=250), and integrated treatment (RR=0.71; 95% CI=0.49-1.02; I2=49.0%; N=876) showed no significant risk reduction in compulsory admission.

*Conclusion and Relevance:* The meta-analysis of the RCTs on advance statements showed a significant and clinically relevant 23% risk reduction of compulsory admissions in adult psychiatric patients, whereas the meta-analyses of the RCTs on community treatment orders, compliance enhancement, and integrated treatment showed no evidence of such a reduction. To date, only 13 RCTs have taken compulsory admissions as their primary or secondary outcome measure. This demonstrates the urgent need for more research in this field.

**INTRODUCTION**

*Rationale*

For various reasons, compulsory admissions of psychiatric patients should be prevented as far as possible. Being compulsorily admitted has a strong impact on patients and their relatives, and can be traumatic.1 Although the exact definition of compulsory admission might differ from country to country depending on the judicial context, it involves deprivation of personal liberty. A European multicenter study shows that 30-50% of patients who have been compulsorily admitted undergo coercive interventions, such as enforced medication, seclusion and restraint.2 Compulsory admission also conflicts with principles of autonomy, shared decision making, and recovery-focused care.3,4 Fear of coercion may keep patients away from treatment.5 But the consequences of compulsory admissions are not exclusively negative: it has also been associated with improvements in psychosocial functioning and better motivation for treatment.6 In cases of severe danger to self or others caused by a psychiatric condition, it is commonly seen as justified and required.7

Rates of compulsory admissions across the European Union range between only 6 per 100,000 in Portugal and just above 200 per 100,000 in Finland,8 but it is important to realise that differences in laws, regulations, and mental health care services make a direct comparison between the countries difficult. Although recent numbers for most countries are not available, rates in several European countries are tending to rise,8-10 albeit for reasons that are largely unknown. In England - where, as in many other countries, many patients have been moved from large institutions into the community - the reduction in the number of beds has been accompanied by a rise in compulsory admissions.11

In Western societies, tolerance of deviant behaviour by psychiatric patients in the community seems to be decreasing, parallel to an increasing emphasis on autonomy and rights of patients and to strictly defined and regulated coercive measures.12 Recently, the UN Convention on the Rights for Persons with Disabilities (CRPD) stated that “the existence of a disability shall in no case justify a deprivation of liberty”, and it has been argued that involuntary treatment, regardless of whether patients have a mental or physical illness, would be allowed only if a person’s decision-making capability for a specific treatment decision is impaired.13 Interventions that prevent patients from being compulsorily admitted are urgently needed.

*Objectives*

In this systematic review and meta-analysis we wished to establish which interventions effectively reduce compulsory admissions in adult psychiatric patients in outpatient (i.e. all non-inpatient) settings.

**METHODS**

*Eligibility criteria*

The following studies were eligible: randomized controlled trials (RCTs) studying interventions of any kind that were designed to reduce compulsory admission rates in adult psychiatric patients (18-65 years) in outpatient settings. By “outpatient” we refer to any kind of non-inpatient services. A study was considered to be eligible only if it included compulsory admission as a primary or secondary outcome measure. The exact definition of compulsory admission might differ from country to country depending on the judicial context. In any case, it involves deprivation of personal liberty. So we chose to accept all articles with clear statements of “compulsory admission” (or related terms) as outcome measure. Papers studying compulsory admission *as an intervention* or any intervention *during hospitalization* were not eligible. Literature was searched from the inception of the databases up to April 30th, 2015.

*Information sources*

A computerized literature search was designed and performed by MHJ and an experienced biomedical information specialist (WB). The search was last updated on April 30th, 2015. A total of eight databases were searched: Embase (via embase.com), Medline (via Ovid), Web-of-Science, PsycINFO (via OvidSP), Cinahl (via EBSCOhost), and Cochrane Central (via Wiley). Additional articles were retrieved from PubMed by selecting only those articles that had not yet been indexed by Medline, and on the basis of the first 300 references from Google Scholar. As well as words in the title and abstracts for Embase, Medline, PsycINFO, and Cinahl, we used thesaurus terms when available. By scanning reference lists of key papers and review articles related to our subject, we also checked for records that might be missing.

*Search*

The search strategy involved two key elements: 1. compulsory admission and related terms (such as involuntary hospitalization etcetera); and 2. the outcomes measured, such as reduction, prevention, rate, or duration. The full search strategies for all databases are available in eAppendix 1.

*Study selection*

The EndNote X6 software package was used for record management.14 After deduplication and excluding records without abstract, one author (MHJ) screened the remaining records for eligibility on the basis of title and abstract. Independently, two researchers (MHJ and MO) then assessed the full texts of the remaining records for eligibility. After discussion, the panel of all authors made final decisions on disagreements between these independent researchers.

*Data collection process*

Data collection and reporting followed the PRISMA guidelines.15,16 Using a data-extraction form, two authors (MHJ and AMK) independently extracted data. Differences in extracted data were discussed by the panel of all authors. Due to inconclusive information we contacted four authors to verify whether the reported admissions were actually compulsory. A further author was contacted because several papers had been published on a single study. We also retrieved additional data from the database of one RCT accessible to AMK and CLM, by whom the RCT in question had been performed and published.

*Data items*

All the trial papers included were investigated and checked for the following: country of origin, inclusion criteria, type of intervention and control condition, risk of bias, and length of follow-up. As outcome measure, we extracted the number of patients who had been compulsorily admitted, and also the sample size in the intervention and control groups directly after randomization. Similarly, we extracted data on the number of compulsory admissions and on the number of patients as reported by the authors.

*Risk of bias in individual studies*

On the basis of the Cochrane Collaboration’s tool for assessing risk of bias,17 two reviewers (MHJ and AMK) independently assessed the risk of bias in all eligible studies. Six quality criteria were assessed: 1. random sequence generation, 2. allocation sequence concealment, 3. blinding of participants and personnel, 4. blinding of outcome assessment, 5. incomplete outcome data, and 6. selective reporting.

*Summary measures*

The RCTs we included described various types of intervention, which we divided into four subgroups, each consisting of comparable interventions. On these groups we performed meta-analyses, computing relative risk (RR) in order to estimate the effect of the intervention. Since the number of admissions could have been biased by various outliers (such as patients with many admissions during the follow-up period (the so-called revolving-door phenomenon), RR was calculated on the basis of the number of patients who had been compulsorily admitted (nominator) and of the sample size directly after randomization (denominator). In this way we estimated the effect sizes of the studies on a strict intention-to-treat basis.

*Synthesis of results*

With regard to the main analysis we used random-effect estimation and a 95% confidence interval (95% CI) to calculate the overall effect for all four subgroups of interventions. A Q-test was used to examine whether heterogeneity over the pooled studies was greater than would have been expected by chance. We used random-effect analysis, because if there is substantial heterogeneity, random-effects analysis produces a more reliable estimate of the overall admission rate than fixed effects analysis does.

With regard to the sensitivity analyses associations with categorical characteristics were assessed using random-effect estimation to calculate overall outcome per category. Fixed-effect estimation was used to compare differences over categories. Cochran’s Q-, I2-statistics, and significance levels are reported. Statistical analyses were performed using the “metan package” in Stata 13.18,19

*Risk of bias across studies*

A funnel plot was used to assess visually for publication bias, and Harbord´s test20 was used to assess formally whether the effect size decreased in proportion to increasing sample size. Plots with a symmetrical funnel shape are considered to occur only if there is little or no publication bias. An asymmetrical plot may suggest that studies with small sample sizes and non-significant results have been omitted.21

*Sensitivity analysis*

We used Cochran’s Q- and I2-statistics to quantify heterogeneity across studies. Heterogeneity was further explored by conducting sensitivity analyses. Therefore, we calculated the overall effect using both fixed- and random-effects modelling and evaluated the impact of the modelling procedure on the overall effect per subgroup of interventions. Next, we evaluated the impact of the outcome data used in the meta-analysis. Therefore, we repeated our analysis using the data as reported by the authors, and the numbers of compulsory admissions (in contrast to the number of compulsorily admitted patients) as outcome data. Furthermore, we compared overall effects based on the study quality criteria regarding random sequence generation, allocation sequence concealment, and blinding of outcome assessment. Also, we compared the overall effects based on whether compsulsory admissions were reported as primary or secondary outcome. In addition, we compared overall effects based on the country of origin, as the judicial context might impact the prevalence of compulsory admissions. Finally, analyses were repeated excluding studies with outlying results. I2-statistics were interpreted as follows: 0-40% not important, 30-60% moderate, 50-90% substantial, and 75-100% considerable heterogeneity.17

**RESULTS**

*Study selection (see also Figure 1)*

The database searches produced 14020 records. After deduplication, 7107 unique records were reviewed on the basis of title and abstract, 93 of which appeared to be of potential interest. Records were excluded for being not on topic or for not meeting the eligibility criteria applicable to participants, outcome measures, or study design. 13 of 93 records met full eligibility criteria. The main reasons for further exclusions were, that the study was not randomized on second view, that a paper was a study protocol rather than a study outcome paper, or that different outcome measures had been used. The interrater reliability was high (raw interrater agreement=96.8%, kappa=0.88, 95% CI=0.74-0.99).

*Study characteristics*

These 13 studies involved a total of 2970 participants, 1541 in the intervention groups and 1429 in the control groups. While follow-up ranged in length from six months to 12 years, in 10 studies it lay between 11 and 18 months. Study characteristics are listed in Table 1. Four studies investigated advance statements such as advance directives22 and joint crisis plans;23-25 three investigated community treatment orders;26-28 two investigated different types of compliance enhancement such as treatment-adherence therapy,29 and financial incentives for improving adherence to antipsychotic treatment.30 Finally, we included four studies in which the common characteristic of the interventions consisted of augmentation of standard care (integrated treatment): one on crisis resolution teams;31 two on integrated treatment in first-episode schizophrenia;32,33 and one on psycho-education combined with focused monitoring.34

All studies were two-arm RCTs except the study by Ruchlewska,25 that consisted of three arms. In that case we pooled two intervention arms together into one.

*Risk of bias within the studies*

eTable 1 lists the results of the Cochrane Collaboration’s tool for assessing risk of bias. Only five studies had low risk of bias in the two items regarding the randomization process (random sequence generation and allocation sequence concealment).22,24,28,30,33 All other studies had unclear risk of bias in one or both items, whereas one had high risk of bias in the item of allocation sequence concealment.29 All studies scored unclear risk of bias with regard to blinding of participants and personnel. In this research field it is impossible to blind participants and healthcare workers for the intervention condition, but it remains unclear, whether or not this awareness did lead to bias. The included studies mainly scored low risk and incidentally unclear risk of bias with regard to blinding of outcome assessment, incomplete outcome data, and selective outcome reporting.

*Results of individual studies (Figure 2)*

Figure 2 (forest plot) presents the results of the individual RCTs with regard to patients who had been compulsorily admitted.

*Synthesis of results*

The meta-analysis of the pooled RCTs studying advance statements showed that the risk of compulsory admission had been reduced significantly, by 23% (RR=0.77; 95% CI=0.60-0.98; I2=2.2%). The meta-analysis of the pooled RCTs studying community treatment orders (RR=0.95; 95% CI=0.81-1.10; I2=0.0%), the meta-analyses of the pooled RCTs studying compliance enhancement (RR=0.52; 95% CI=0.11-2.37), and the meta-analysis of the pooled RCTs studying integrated treatment (RR=0.71; 95% CI=0.49-1.02) showed no evidence that the risk of compulsory admission had been reduced. In the meta-analyses regarding compliance enhancement and integrated treatment, we found indications for moderate to substantial heterogeneity (I2=55.7% and I2=49.0% respectively).

*Risk of bias across studies*

The funnel plot (figure 3) is asymmetrical and shows one small study with a large positive effect size, i.e. the study by Staring et al.29 The corresponding Harbord’s test shows the significant presence of the small-study effect (intercept: -2.09; 95% CI=-4.06-(-0.11); p=0.040). When Staring’s study was excluded, the effect was no longer significant (intercept: -1.86; 95% CI=-4.40-0.69; p=0.135). The result of the study by Lay34 lies on the margin of the 95% pseudo-confidence area.

*Sensitivity analysis*

Modelling procedure:

Bias and potential sources of heterogeneity were tested in sensitivity analyses, which showed that neither modelling procedure had an impact in the following cases:

* advance statements (fixed: RR=0.77; 95% CI=0.60-0.98; random: RR=0.77; 95% CI=0.60-0.98),
* community treatment orders (fixed: RR=0.95; 95% CI=0.81-1.11; random: RR=0.95; 95% CI=0.81-1.10),
* integrated treatment (fixed: RR=0.72; 95% CI=0.56-0.93; random: RR=0.71; 95% CI=0.49-1.02).

However, with regard to compliance enhancement, the modelling procedures had a considerable impact: (fixed: RR=0.67; 95% CI=0.37-1.23; random: RR=0.52; 95% CI=0.11-2.37).

Intention-to-treat versus results as reported

The effect sizes calculated on the basis of the results reported by the authors produced RRs that were similar to those produced by strict intention-to-treat analysis:

* advance statements (RR=0.78; 95% CI=0.60-1.01; I2=11.9%),
* community treatment orders (RR=0.95; 95% CI=0.81-1.10; I2=0.0%),
* compliance enhancement (RR=0.48; 95% CI=0.10-2.30; I2=54.9%),
* integrated treatment (RR=0.74; 95% CI=0.54-1.01; I2=35.2%).

Outcome measure:

Pooling of the only four studies that also reported the total number of compulsory admissions (in contrast to the number of compulsorily admitted patients) produced an non-significant RR of 0.76 (95% CI=0.54-1.06). Heterogeneity in this subgroup of four studies was considerable (I2=87.6%).

Subgroup analyses

Potential sources of heterogeneity were further assessed in subgroup analyses. No significant difference in the overall effect was shown based on study quality criteria regarding random sequence generation and allocation sequence concealment (Q=0.06; df=1; p=0.802), blinding of assessors (Q=0.55; df=1; p=0.458), or reporting of the outcome as primary versus secondary outcome (Q=2.11; df=1; p=0.146). Country of origin (judicial context) did not result in difference in overall effect (Q=6.81; df=4; p=0.146). Finally, exclusion of the study by Staring,29 which had shown an outlying result for the effect of compliance enhancement, resulted in an overall intervention effect of RR=0.84 (95% CI=0.73-0.96; I2=19.3%). This was similar to the overall intervention effect calculated for the full set of inclusions (RR=0.83; 95% CI=0.72-0.96; I2= 25.9%).

**DISCUSSION**

*Summary of evidence*

We found only 13 RCTs whose intention to reduce compulsory admission was its first or secondary outcome measure. As compulsory admissions have an impact on patients and their relatives, and also compromise the human right to freedom, this number is both small and disappointing.

With regard to the subgroups of intervention, studies on advance statements showed a statistically significant reduction (23%) in the risk of compulsory admission (with unimportant heterogeneity). In the light of human rights and the impact compulsory admissions have on psychiatric patients, we consider this figure of 23% as clinically relevant. This result highlights the fact that, by advocating patients’ wishes and preferences regarding a future crisis, and by involving family and friends, advance treatment planning is an important and helpful process for psychiatric patients.

The studies on community treatment orders showed no evidence of a reduction in compulsory admissions (no heterogeneity). This finding is consistent with the existing literature on community treatment orders.35 Also the studies on compliance enhancement showed no evidence of a lower risk of compulsory admission (with substantial heterogeneity). While compliance is such a key issue, especially in the treatment of psychosis, it is surprising that so few studies have been conducted on this topic. Although there was no statistically significant risk reduction in the subgroup of integrated treatment (with moderate heterogeneity), it showed a potential clinically relevant risk reduction of 29%. This subgroup of interventions might be most promising for further research and development. None of these findings were affected by sensitivity analyses.

As our study includes all available RCTs in this important field and also provides meta-analyses of the efficacy of several types of interventions, it presents a complete overview of all available RCT-derived evidence on the reduction of compulsory admissions. To our knowledge, it is also the first study to do so.

The lack of effect of three out of four subgroups of interventions is remarkable, especially since the primary or secondary aim of the interventions is to reduce compulsory admissions. For example, the negative result with regard to community treatment orders is very clear and does rule out a substantial effect. Although there was no evidence of selection bias in the RCTs on community treatment orders,36 we do not rule out the possibility of selection bias in the other subgroups of interventions, especially regarding the most severely mentally ill patients who most risk being compulsorily admitted. To address the methodological problem of potential selection bias, we may need to add new elements into the standard RCT design, for example Zelen’s RCT design, in which patients are randomized to either the treatment or the control group before giving informed consent.37,38

A decision with regard to a compulsory admission is the result of a complex set of patient-related, environmental, and healthcare-related determinants.39 Interventions such as advance statements and integrated care that target the healthcare process as a whole are probably more effective than those such as community treatment orders and compliance enhancement, which target one specific element of the healthcare process. As this is consistent with our findings, we should be encouraged to invest in research that combines several specific interventions and thereby provides the most vulnerable patients with integrated treatment.

*Limitations*

Although more studies may provide data on compulsory admissions - not as a primary or secondary outcome measure, but possibly as a side effect of the intervention being researched - our objective was to focus on studies whose titles or abstracts identified compulsory admission as their outcome measure. Despite this, we are very unlikely to have missed a complete subgroup of interventions. Although meta-analysis is a method to increase power, some subgroups of interventions might be underpowered to provide significant evidence of smaller treatment effects.

The types of intervention included in our meta-analysis varied considerably. Although we were able to pool the interventions into four meaningful subgroups consisting of similar interventions, the integrated treatment subgroup was relatively heterogeneous with regard not only to interventions (crisis resolution, integrated care, and psycho-education with focused monitoring), but also to patient-inclusion criteria (crisis severe enough to consider admission, recent onset psychosis, and earlier compulsory admission). Such clinical and statistical heterogeneity means that the effect of these interventions on reducing compulsory admissions should be interpreted with caution.

In this review we have also focused specifically on *compulsory* admissions, thereby excluding *voluntary* admissions. Though voluntary admission is an important outcome measure, the human right issues and the rise in compulsory admissions in several western countries lead us to view compulsory admissions as those that most urgently need to be prevented.

It might be argued that, as an outcome measure, compulsory admission is not necessarily determined by the intervention we have researched, as admissions also depend on clinical decision-making. While this is indeed the case, it does not invalidate positive and negative results with regard to compulsory admissions, especially in randomized studies, in which all circumstances but the intervention are supposed to be the same. It is also important to realise that, in itself, the outcome measure of compulsory admission is just a matter of counting and cannot be biased by interpretation.

In the meta-analyses, the most reliable basis for calculating the outcome measure of compulsory admission was the number of patients who have been compulsorily admitted at least once. This choice might have led the effect to be underestimated, at least in revolving-door patients. However, sensitivity analysis of the effects on number of admissions did not significantly change the results.

*Conclusion*

The meta-analysis of the RCTs on advance statements showed a significant and clinically relevant 23% reduction of compulsory admissions in adult psychiatric patients, In contrast, the meta-analysis of the RCTs on community treatment orders, compliance enhancement, and integrated treatment showed no evidence of such a reduction. There was, however, substantial heterogeneity among subgroups of interventions studies.

To date, only 13 RCTs have taken compulsory admission as their primary or secondary outcome measure when investigating this issue. This demonstrates the urgent need for developing interventions based on knowledge of risk factors for compulsory admission (advance statements are most promising) and using modified RCT designs, for example in which informed consent is requested after randomisation.

**ACKNOWLEDGEMENTS**

*Conflict of interest*

We (all authors) are unaware of any financial or other relationship that might lead to a conflict of interest.

*Funding*

All funding came from the respective employers of the contributing authors, as listed in the authors affiliations. These institutions did not have any role in design and conduct of the study; collection, management, analysis, and interpretation of the data; and preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

*Access to data and data analysis*

Mark de Jong and Astrid Kamperman had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

**TABLE AND FIGURE DESCRIPTION**

*Tabel 1*

Title: Study characteristics of all included studies

Legend: SMI = severe mental illness

*eTabel 1*

Title: Risk of bias summary (Cochrane Collaboration’s tool)

Legend: + Low risk of bias ? Unclear risk of bias – High risk of bias

\* Since we were interested in the outcome “compulsory admission”, we have evaluated “selective outcome reporting” only with regard to this outcome measure

*Figure 1*

Title: Flow chart showing the study-selection process

*Figure 2*

Title: Relative risk of compulsory admission, per subgroup of intervention (forest plot)

Legend: Black diamonds represent relative risks of individual RCTs, grey squares represent weights, horizontal lines or arrows represent 95% CIs, blue diamonds represent total relative risk per type of intervention and 95% CIs

*Figure 3*

Title: Visual assessment of risk of bias across studies (funnel plot with pseudo 95% confidence limits)

Legend:



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**Table 1: Study characteristics of all included studies**

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| --- | --- | --- | --- | --- | --- | --- |
| **Type of intervention** | **Author (year)** | **Country** | **Main inclusion criteria** | **Intervention**  **(N)** | **Control**  **(N)** | **Follow-up** |
| **ADVANCE DIRECTIVES** | Papageorgiou  (2002)22 | UK | Inpatient compulsory treatment | Advance directive  (80) | Standard multidisciplinary community care  (81) | 12 months |
| Henderson  (2004)23 | UK | SMI and ≥ 1 admission in past 2 years | Joint crisis plan  (80) | Local community mental health team  (80) | 15 months |
| Thornicroft  (2013)24 | UK | Relapsing psychotic disorder, ≥ 1 admission in last 2 years | Joint crisis plan  (285) | Standard multidisciplinary care  (284) | 18 months |
| Ruchlewska  (2014)25 | Netherlands | Outpatient, psychotic / bipolar disorder, ≥ 1 crisis /admission in last 2 years | Crisis plan (2 arms)  (139) | Flexible Assertive Community Treatment  (73) | 18 months |
| **COMMUNITY TREATMENT ORDER** | Swartz  (1999)26 | US | SMI >1 yr, 🡫 GAF, intensive treatment for 2 year | Community treatment order  (129) | Case management, without community treatment order  (135) | 12 months |
| Steadman  (2001)27 | US | Referral to outpatient commitment program | Community treatment order  (78) | Standard care, without community treatment order  (64) | 11 months |
| Burns  (2013)28 | UK | Currently detained with psychosis | Community treatment order  (167) | Standard outpatient care, without community treatment order  (169) | 12 months |
| **COMPLIANCE ENHANCEMENT** | Staring  (2010)29 | Netherlands | Outpatient, SMI, problems with service engagement | Treatment adherence therapy  (54) | Standard community mental health care  (55) | 12 months |
| Priebe  (2013)30 | UK | SMI, receiving 75% or less of prescribed depot | Financial incentives  (78) | Community mental health care  (63) | 12 months |
| **INTEGRATED TREATMENT** | Johnson  (2005)31 | UK | Crisis severe enough to consider admission | Crisis resolution teams  (135) | Standard crisis care  (125) | 6 months |
| Ohlenschlaeger  (2008)32 | Denmark | First episode schizophrenia spectrum disorder | Integrated care  (167) | Standard community mental health care  (161) | 12 months |
| Sigrunarson  (2013)33 | Norway | Recent onset psychosis (symptoms ≤ 2 years) | Integrated treatment  (30) | Case management  (20) | 12 years |
| Lay  (2015)34 | Switzerland | ≥ 1 compulsory admission in past 2 years | Psycho-education + focused monitoring  (119) | Standard community mental health care  (119) | 12 months |

SMI = severe mental illness