



# CEPHOS-LINK

## Psychiatric re-hospitalisation in Europe: room for improvement in service provision and performance monitoring

### Key recommendations:

- Access to psychiatric aftercare should be improved during the critical first weeks after discharge
- Quality and interoperability of health care registers in European countries should be improved to allow for monitoring of quality, benchmarking comparisons and health service research
- Views from people with lived experience of psychiatric re-hospitalisation indicate the importance of providing good quality hospital care during the first hospitalisation and avoiding involuntary care

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### Re-hospitalisation

The aim of any hospitalisation is to promote a person's health and wellbeing. Frequent unplanned re-hospitalisations may indicate failure of the health system to achieve this goal.

Underlying shortcomings of the health care system may stem from inadequate hospital treatment, a failure to provide a successful transition to outpatient care or insufficient follow-up treatment and support. Unplanned re-hospitalisations are often disruptive for the patient and constitute a strain on limited health care resources. Unplanned re-hospitalisations may be preventable through a multifaceted approach taking into account individual and health care system factors.

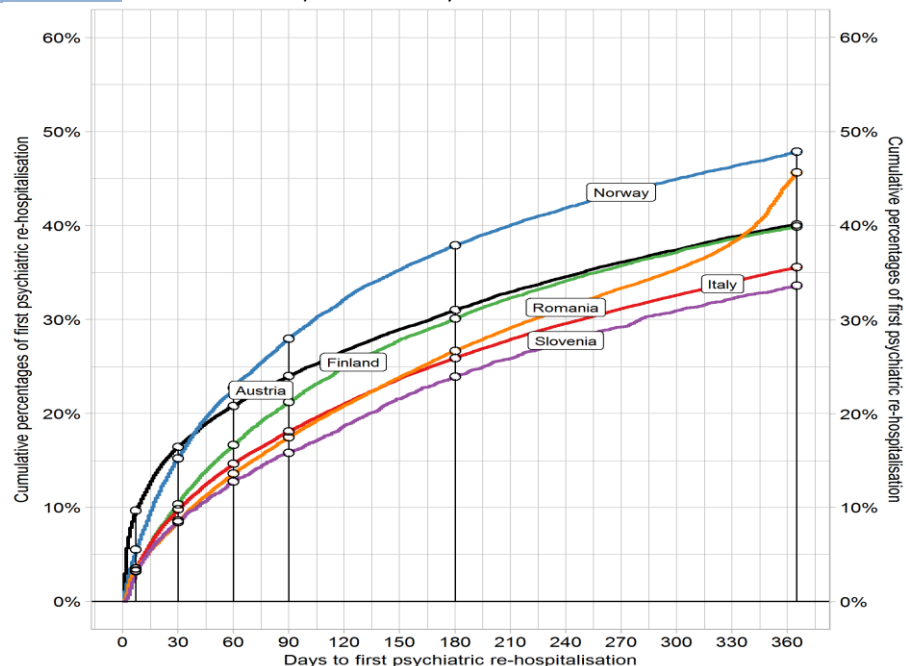
### Re-hospitalisation as indicator of performance

Performance indicators have been developed to monitor and assess performance of mental health care. In international comparisons, re-hospitalisation within 30 days after discharge from a psychiatric ward is used as a performance indicator of mental health services. The indicator is complex, difficult to interpret and prone to artefacts. Psychiatric re-hospitalisation rates also depend on incentives built into hospital payment mechanisms and further research should be carried out on this topic.

### The CEPHOS-LINK project

The CEPHOS-LINK (Comparative Effectiveness Research on Psychiatric Hospitalisation by Record Linkage of Large Administrative Data Sets) compared re-hospitalisation and its predictors in six different European countries, based on retrospective cohort studies with data from country specific large electronic health care registries. Extensive efforts were made to be sure that results reflect are not determined by artefacts in registers.

Figure 1. Cumulative percentages of first psychiatric re-hospitalisation up to 365 days for the six CEPHOS-LINK partner country cohorts



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## Main health registers used:

- Austria: GAP-DRG
- Finland: Terveystietojärjestelmä
- Italy: SDO
- Norway: NPR
- Romania: DRG
- Slovenia: e-SBO

## Re-hospitalisation in Europe

A substantial proportion of first re-hospitalisations occur very early on after the index discharge, especially in Austria (41% within 30 days) and Norway (32%). Also in Italy, Finland and Slovenia more than 25% of re-hospitalisations occur within the first month. In Romania, the increase in re-hospitalisation rates in the last few months of the follow-up period is most probably linked to a regulation that for the continuation of disability pension benefits at least one hospitalisation must take place over a one year period. Gender differences in re-hospitalisation rates did not occur.

Slovenia had the longest median length of stay which may be due to payment mechanism of psychiatric hospital stays, where with a given number of psychiatric beds the payment contract with the social health insurance requires a specific number of patients to be admitted over a one year period. Interestingly, Slovenia also had the lowest rate of re-hospitalisation of the participating countries.

People with a diagnosis of psychotic disorder consistently showed a higher rate of re-hospitalisation than people with other psychiatric diagnoses. Old people were less often re-hospitalised compared to young adults. In countries with outpatient data available for analysis, a minority of patients had an outpatient visit within a week after discharge.

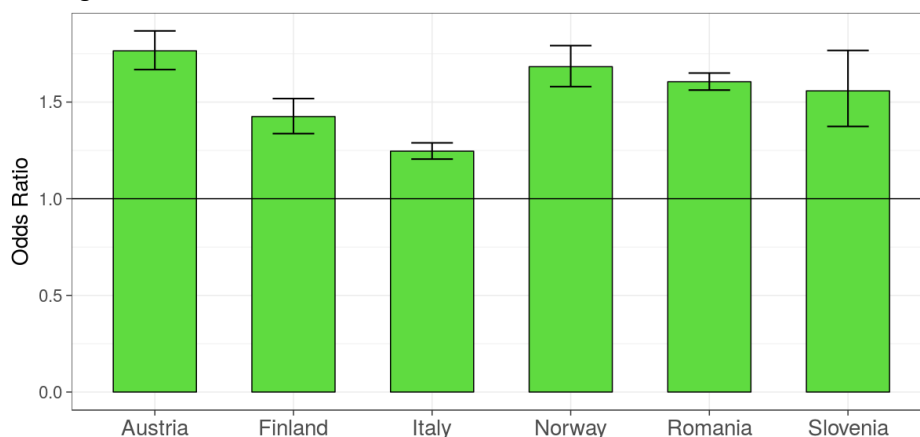


Figure 2. A main diagnosis “psychosis” increases the risk of psychiatric re-hospitalisation after 365 days in all partner countries (results of multiple logistic regression)

## Additional reading from CEPHOS-LINK:

Urach C et al. Statistical methods and modelling techniques for analysing hospital readmission of discharged psychiatric patients: a systematic literature review. *BMC Psychiatry* 16:413, 2016.

Kalseth J et al. Psychiatric readmissions and their association with environmental and health system characteristics: a systematic review of the literature. *BMC Psychiatry* 16:376, 2016.

Donisi V et al. Pre-discharge factors predicting readmissions of psychiatric patients: A systematic review of the literature. *BMC Psychiatry*, 16:449, 2016.

Šprah L et al. Psychiatric readmissions and their association with physical comorbidity: A systematic literature review. *BMC Psychiatry* 17:2, 2017.

## Service user views

People with lived experience of psychiatric hospitalisations indicated the importance of providing good quality hospital care during the first hospitalisation and avoidance of involuntary care as means to avoid re-hospitalisations. The results also indicated that, for avoiding re-hospitalisation, follow-up and monitoring are needed to cover the patient’s social and activity needs. Ideally, this should be facilitated as a close collaboration between the hospital, municipality/primary care and mental health service user.

## Clinical conclusions

The results highlight considerable variance in performance of mental health service systems. More specifically, our results point out the need for seamless patient-centered transfers from psychiatric hospital services to community care. In spite of re-hospitalisation risk being at its peak during the first week, few discharged patients were seen in outpatient psychiatric services during this critical period.

## Conclusions for health registers

Rendering large national electronic health care databases interoperable and thus comparable across countries is essential for comparing patterns of pathways of health service utilisation in different countries. Hospital data registers need to include harmonised and standardised data on psychiatric hospitalisations, such as data on type of admission (involuntary, unplanned or planned) and data on discharge transfer to other institutions, to enable more detailed and valid cross-country comparisons on mental health care.

