

Service Characteristics and Geographical Variation in Compulsory Hospitalisation

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Background

Compulsory hospitalisation is contested and should only be used as a last resort. Geographical variation could indicate that some areas employ compulsory hospitalisation more frequently than strictly necessary. Explaining variation in compulsory hospitalisation might contribute to improve service delivery, but research on associations with service characteristics remains patchy.

Objectives

- Explore associations between compulsory hospitalisation, as measured by counts of patients and admissions¹, and characteristics of primary mental health care.
- Estimate the amount of variance explained by groups of explanatory variables.

Method

- The Norwegian Patient Register provides data on all compulsory hospitalisations in Norway from 2015 to 2018.
- Random effects Poisson regression of 461 municipalities/city districts, nested within 72 community mental health centre catchment areas (N = 1828).
- The between-effect compares cross-sectional municipality averages, while the within-effect compares each municipality to itself at different time points.

Results

- **Within-area increases of general practitioners, mental health nurses and total labour-years in municipal mental health care per population are associated with lower levels of compulsory hospitalisations, as measured by both inpatients and hospitalisations.**
- Areas that on average have more general practitioners and public housing per population have lower levels of compulsory hospitalisation,
- Higher levels of compulsory hospitalisation are seen in areas with a longer history of employment support and the inclusion of service users' perspectives.
- In combination all variables explained 39-40% of the variation, with 5-6% resulting from municipal mental health services.

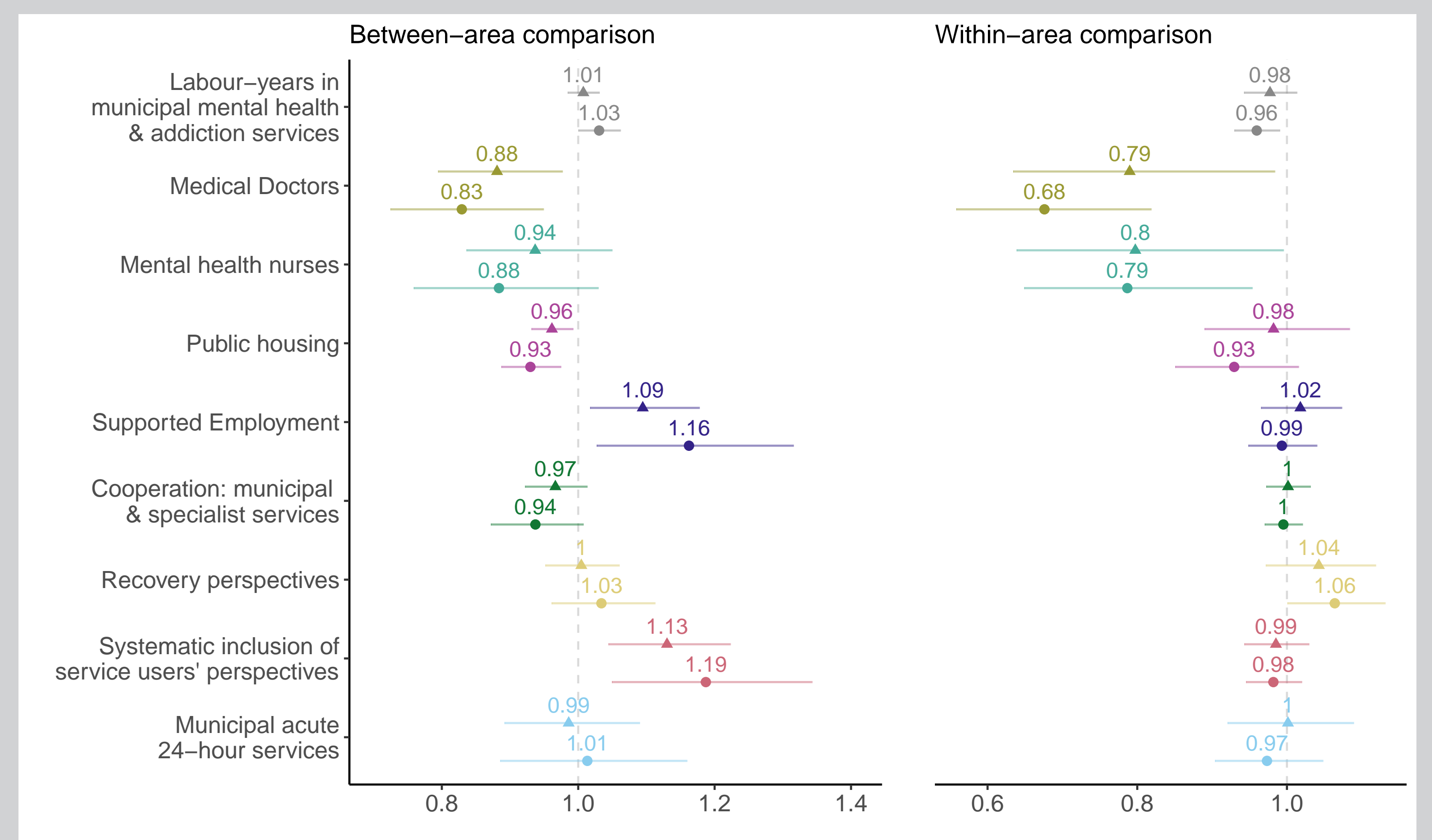


Figure 1: Between- and within-area associations of compulsory hospitalisation & municipal mental health service in Norway 2015-2018. Rate ratios with 95% confidence intervals, adjusted for area demographics, socio-economic status and prevalence of severe mental illness. ▲ = Patients ● = Hospitalisations.

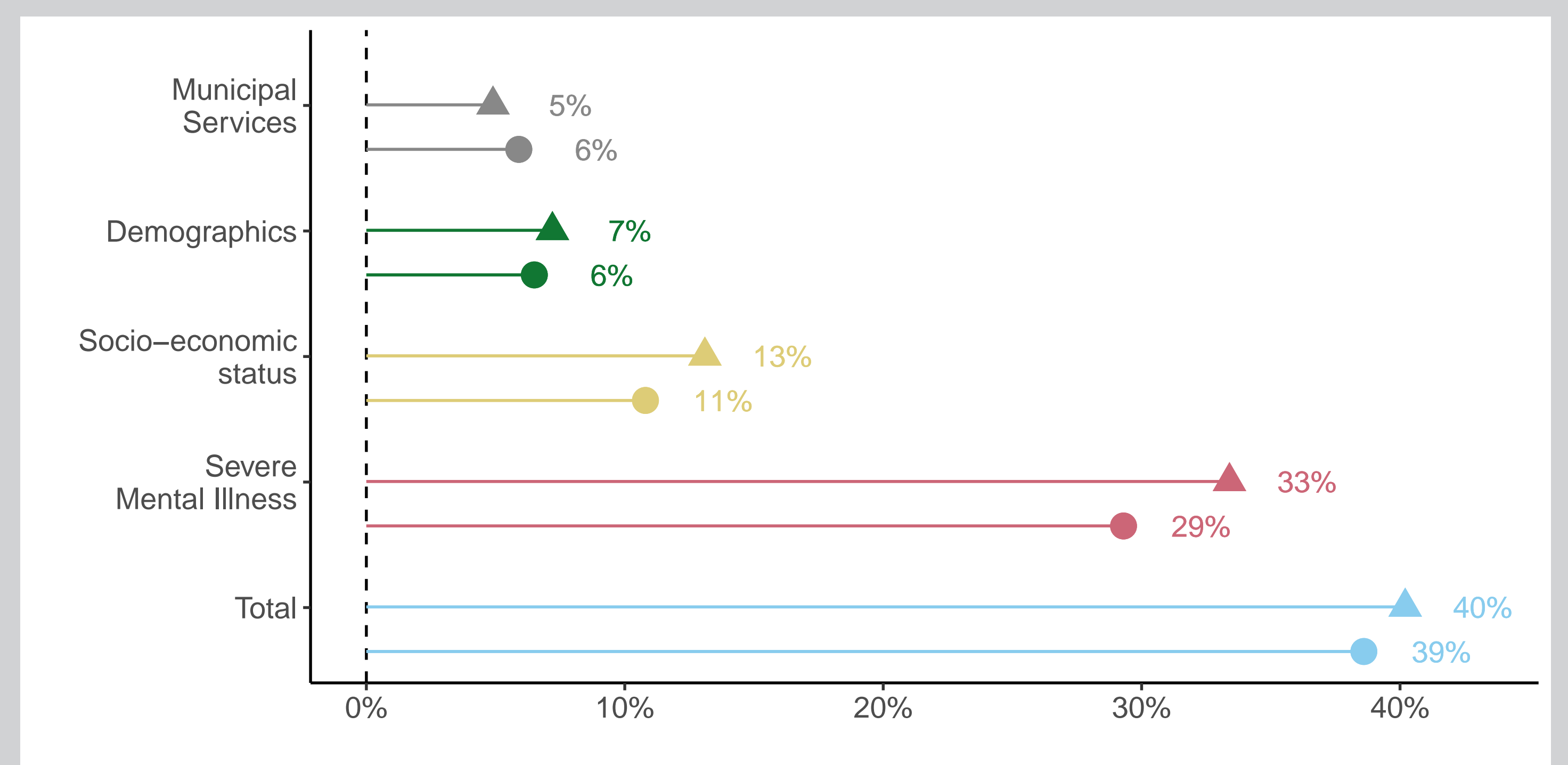


Figure 2: Amount of total variance explained by groups of explanatory variables. ▲ = Patients ● = Hospitalisations

Conclusion

- Strengthening primary mental health care by increasing the number of general practitioners and mental health workers can reduce the use of compulsory hospitalisation and improve the quality of health services.
- Further research is required to explain the remaining variation in compulsory hospitalisation.

References

1 Hofstad, T., Rugkåsa, J., Ose, S. O., Nytingnes, O., & Husum, T. L. (2021). Measuring the level of compulsory hospitalisation in mental health care: The performance of different measures across areas and over time. *International Journal of Methods in Psychiatric Research*.

