

interaction with sex ( $p$  for interaction=0.420 and 0.236 respectively). Age-adjusted RR comparing the lowest versus highest level of household income was 1.30 [95%CI=1.21–1.39] and RR comparing the most versus least deprived quintile of residential areas was 1.26 [95%CI=1.22–1.31]. Adding all the three indicators in a full model resulted in a more pronounced attenuation of the income and FDep gradients compared to education, however all the associations remain significant in men and women.

**Discussion** In this sample, individual education displayed different patterns of association with hypertension across sexes, but not household income nor neighborhood deprivation. This result underlines that systematic stratification by sex may not be appropriate in all analyses focusing on hypertension as outcome of interest. Besides, these results suggest that education attainment has a greater impact on women in preventing hypertension and therefore prevention should start early. More work is needed to understand sex differences in the causal pathway linking SES and hypertension.

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#### HEALTHCARE SYSTEM PERFORMANCE IN CONTINUITY OF CARE FOR PATIENTS WITH SEVERE MENTAL ILLNESS: A COMPARISON OF FIVE EUROPEAN COUNTRIES

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**Background** Patients with severe mental illness (SMI) require continuity of care. Continuity of care refers to the uninterrupted contact of patients with the service delivery system, and includes three main dimensions: cross-sectional, longitudinal, and relational continuity. Cross-sectional care continuity refers to the provision of comprehensive care during a single episode, longitudinal continuity to the provision of care over time, and relational continuity to the quality of the patient-provider relationship. In Europe, healthcare systems have developed differently from two basic models: national health (NHS) and regulated-market systems (RMS). It is unclear which healthcare system model is more performant in the delivery of continuity of care. Therefore, we examined the care provision, regulation, and financing features in two NHS – England and Veneto (Italy) – and three RMS countries – Germany, Belgium, and Poland –, and assessed empirically the system's performance in cross-sectional, longitudinal, and relational care continuity.

**Methods** 6,418 SMI patients were recruited from psychiatric hospitals in the five countries and followed up one year after admission. Data were collected on their use of services and contact with care professionals. Care continuity was assessed using several indicators: the time gap between hospital discharge and outpatient care, access to services, number of contacts with psychiatrists and other care professions, satisfaction with care continuity, and helping alliance. Multivariate regressions were used to control for patients' characteristics and robust standard errors were computed to account for the clustering effect of the recruiting hospitals.

**Results** Important differences were found between healthcare systems. NHS countries, particularly Veneto, had more effective longitudinal and cross-sectional care continuity than RMS countries: patients had a longer gap between hospital discharge and outpatient care (RR=1.71,  $p<0.001$ ), had half the chance to access to supported living (OR=0.54,  $p<0.05$ ), and to access different professions (RR=0.76,  $p<0.01$ ). However, Germany had similar results to England, while Poland had lower performance measures, despite a mixed NHS and RMS model. Relational continuity had mixed results, patients being slightly less satisfied in RMS than in NHS countries (RR=0.90,  $p<0.01$ ) but having a higher helping alliance (RR=1.07,  $p<0.01$ ).

**Conclusion** Organisational features have an impact on cross-sectional and longitudinal continuing care delivery. Although the relationship between healthcare provision, regulation, and financing mechanisms, and care continuity is complex to disentangle, stronger regulation of care provision and financing at a local policy level should be considered for care continuity. Yet, relational care continuity seemed less affected by organisational mechanisms.

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#### TRENDS IN NATIONAL PHARMACEUTICAL EXPENDITURE ON DIABETES 2011–2015; THE RISING COST OF BLOOD GLUCOSE-LOWERING MEDICATIONS

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**Background** Medication costs are the primary driver of increasing medical expenditure on diabetes. We explore trends in pharmaceutical expenditure on diabetes between 2011 and 2015, examining the impact of newer blood glucose-lowering medications, and estimating the effect of cost-containment measures implemented during this time.

**Methods** Data from a national pharmacy claims database were analysed. Patients dispensed items used in the treatment or management of diabetes were identified. Total expenditure associated with diabetes was calculated by extracting data on all diabetes-related items dispensed to eligible patients. Costs were categorised into two groups; diabetes-specific items include items used directly in the treatment of diabetes and other items include all other condition-related. The impact of two specific cost-containment measures, co-payments and reference pricing, implemented over the study period were assessed using segmented linear regression analyses of interrupted time series.

**Results** Total expenditure varied over the study period, peaking at € 216,994,441 in 2012. Expenditure on diabetes-specific items increased steadily by 18% reaching € 153,621,477 in 2015, with blood glucose-lowering medications accounting for 73% of this increase. During the same period, expenditure on other items decreased by 32% to € 50,835,856. The introduction of reference pricing for atorvastatin in November 2013 resulted in immediate costs savings of € 2.4 million per yearly quarter (level change  $p<0.001$ ).

**Conclusion** The increasing costs of blood glucose-lowering medications overshadows the effect of cost-containment measures. Innovative policies are required to ensure high quality diabetes care can be provided at an equitable, affordable and sustainable rate.