The Diffusion of Antipsychotic Medication: Does the Close-Knittedness of Physician Networks Matter?

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Abstract: Differences in the use of new technologies in medicine across geographic regions and subpopulations are well-noted in the literature and the reasons for these differences are varied and complex. Here we examine differences in the diffusion curves for new classes of psychotropic medications across physician networks. The diffusion of psychotropic medications is important to study since it represents the rate at which new, potentially quality-improving and costly technologies are used in the population and how this use changes over time. Psychotropic medication use is examined in the Florida Medicaid population from 1994-2005. The degree of prescribing similarity for antidepressant products is used as an indicator of close-knittedness of physician networks. We find that close-knottedness is positively associated with the diffusion of brand new antipsychotics (on the market for less than 2 years) and newer antipsychotics (on the market for less than 6 years). We also find small differences in the path of diffusion by different levels of closeknittedness.