Physicians under pressure: Evidence from antibiotics prescribing in England

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Abstract: Many physicians work close to their maximum capacity of care provision, while experiencing increasing demands from both their patients and society. We predict that increasing pressure may make physicians disregard societal welfare when treating patients. We test this prediction on general practitioners’ antibiotic prescriptions. As prescription of broad-spectrum antibiotics does not require microbiological testing it can be more quickly prescribed than narrow-spectrum antibiotics, and is therefore often preferred by the patient. In contrast, from a societal perspective inappropriate prescribing of broad-spectrum antibiotics should be minimised as it may contribute to antimicrobial resistance in the general population. We combine longitudinal survey data and administrative data from 2010 to 2017 to create a balanced panel of up to 1,072 English general practitioners. Using a series of linear models with GP fixed effects, we estimate the importance of different sources of pressure for general practitioners’ prescribing. We find that as pressure on general practitioners’ increases, the share of broad-spectrum antibiotics prescribed increases. This result holds for both demand- and supply-side pressures. Our findings thus suggest that there may be societal costs of physicians working under pressure.