Assessing the Role of Technology in Explaining US Physician Labor Force Trends

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Abstract The US physician workforce has undergone a significant transformation during the last 30 years. The proportion of specialists has increased dramatically as has the growth in relative pay between specialists and general practitioners. Competitive market explanations, including differences in length of training, hours worked, and compensating differentials, fail to fully account for these trends in wages. In a residual sense, technology is often identified as a culprit. However, a mechanism has not been established that illuminates this claim and identifies the incentives driving change. Using a simple growth model, this paper explores the role of technology in explaining trends in the composition and remuneration of the US physician workforce.

Keywords: Health care; Skill-biased technological change; Returns to human capital; Labor supply.

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