Health Inequality: Role of Insurance and Technological Progress

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Abstract

The paper investigates the role of insurance and technological progress on the rising health inequality across income groups. We develop a life-cycle model of an economy where individuals decide consumption-savings, whether to take up health insurance, when to visit a doctor and how much to invest in their health capital. Our estimates show that the timing of the health investments explain a substantial part of health inequality across wealth/ income groups. We find that while rich and poor have comparable health investments, there are substantial differences in the timing of the investments. The estimated model is able to explain about 65% of the gap in life-expectancy across income groups observed in data. We show that different types of technological innovation interacts with the timing of the investment and has a first order effect on disparities. On one hand, a non-uniform increase in the productivity of the medical sector – one where there are improvements in treating early stages of cancer for example, but none for stage 4 – can lead to increase in inequality in Life-expectancy. On contrast, a uniform increase in the productivity of the healthcare sector, leads to a reduction in disparities.

Keywords: Health Inequality, Technological Progress, Health Insurance

JEL Classification: I12, I13, I14, O11

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