The Productivity of Professions Evidence from the Emergency Department

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Professions play a key role in determining the division of labor and the returns to skilled work. This paper studies the productivity difference between physicians and nurse practitioners (NPs), two health care professions performing overlapping tasks but with stark differences in background, training, and pay. Using data from the Veterans Health Administration and quasi-experimental variation in the patient probability of being treated by physicians versus NPs in the emergency department, we find that, compared to physicians, NPs significantly increase resource utilization but achieve worse patient outcomes. We find evidence suggesting mechanisms relating to lower human capital among NPs relative to physicians and worker-task assignment responding to the lower skill of NPs. Counterfactual analysis suggests a net increase in medical costs with NPs, even when accounting for NPs’ wages that are half as much as physicians’. Despite large productivity differences between professions, we find even larger productivity differences within professions and substantial productivity overlap between professions. Yet there is little overlap in wages between NPs and physicians and, within professions, no significant correlation between productivity and wages.

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