An Incentive Program with Almost No Incentive: An Overlooked Benefit of Pay-For-Performance

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The idea of "pay for performance" (P4P) has been advocated and applied for more than two decades. The large literature has found mixed evidence, some researchers calling for increased financial incentives for the effectiveness of P4P programs. A problem in this literature is that although the idea of P4P is to reduce inefficient use of healthcare resources (typically overuse in traditional pay-for-volume), researchers have only studied its impact on limited narrowly-defined outcomes rather than the social efficiency gain from P4P. This paper offers a new view that P4P can improve efficiency in the allocation of healthcare resources, by studying a unique physician incentive program introduced in Australia in 2001 to promote effective management of chronic diseases, the diabetes Service Incentive Payment (SIP), which attracts an incentive of A\$40 per patient per year after completing a lengthy cycle of diabetes care - almost negligible for general practitioners (GPs). We evaluate the effect of the diabetes SIP on various healthcare utilisation and cost outcomes of diabetics, using a large survey linked to multiple years of detailed administrative medical records. More specifically, we identify the causal effect of the SIP availability by exploiting postcode-level variation in the penetration of SIP completion, based on the idea that SIP penetration measures the level of GPs' knowledge about and familiarity to the SIP in each area, which is presumably exogenous from each GP's point of view. To account for potential confounding differences across areas, we use pairs of diabetics and GPs who are ineligible for the SIP as a control group and employ a difference-in-differences framework.

The results show significant and heterogeneous effects of the SIP. People with diabetes aged 65 or above in high SIP-penetration areas tend to reduce their healthcare utilisation relative to those in low SIP-penetration areas, while people with diabetes aged 63 or below tend to increase their healthcare utilisation. We argue that the differential effect is due to patients' cost concerns: the SIP incentive corrects the over-use of health services by old diabetics as well as the under-use of services by young diabetics because most of the old diabetics in Australia face significantly lower marginal fees than their younger counterpart. At the same time, we do not find any negative effect on health outcomes. These results imply that notwithstanding the small reward, the guidelines set in the SIP have led to systematic diabetes management and reduce social inefficiency. A well designed P4P can increase social welfare by correcting inefficient allocation of resources due to idiosyncratic variations in treatment if not by improving health outcomes.