

# **Which payment-scheme better support the use of personalized medicine? Learnings from the “dictation game”**

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## **Abstract**

In this article, we study physicians’ incentives to use personalized medicine technics. By means of a dual-agent game, we aimed at replicating the fundamental trade-offs made by a physician when personalized medicine information is costly. We ran a laboratory experiment using 6 successive dictation games among 95 medical students. In a within-subject design, we vary both the information structure (free-access versus costly-access to personalized medicine information) and the payment system (we focus on incentives in pay-for-performance (P4P), capitation (CAP) and fee-for-service (FFS)). Our results indicate that pay-for-performance (P4P) reduces the number of treated patients and is associated with better quality outcomes. On the contrary, fee-for-service (FFS) is associated with a higher number of services and leads to poorer health outcomes. Capitation (CAP) and P4P have similar incentives regarding quality. However, for more severe patients, P4P yields better outcomes. Finally, P4P is an important driver in the decision to buy personalized medicine compared to FFS and CAP. The free provision of personalized medicine information leads to a decrease in the number of treated patients, as well as the number of services, but it is not associated with quality improvements. However, when personalized medicine is costly and chosen voluntarily by physicians, the information seems to be associated with better health outcomes.