Dynamic Monitoring Design

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This paper studies a dynamic moral hazard model in which a principal designs both monitoring protocol and contingent contract with no transfer for an agent. For example, the medical board incentivizes a physician to provide quality health care. The optimal monitoring follows a Poisson process and the optimal contract features coarse history and decreasing turnover. When shirking is not allowed, the principal hires the agent and incentivizes effort by monitoring with Poisson bad news that leads to termination. Conditional on no news, the non-stationary Poisson monitoring becomes more informative and less frequent. When shirking is allowed, the principal monitors in the trial period with Poisson bad news that leads to termination. After the trial period, the principal switches to a stationary two-sided Poisson monitoring. Bad news leads to termination and good news leads to termine.

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