Informational Shocks and the Effects of Physician Detailing

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Abstract:

The effects of pharmaceutical firm advertising directly to physicians using sales reps, or detailing, has been a major area of interest for both regulators and firms. As firms spend vast amounts of money on detailing activities, understanding the response of such inputs is crucial to profit maximization. Regulators, on the other hand, worry that detailing might be illegally focused on off-label prescribing or may distort spending to more expensive, branded drugs. While there are many interested in learning the effects of detailing, finding exogenous variation to estimate effects is difficult, as sales reps determine their own details to maximize incentive-based bonuses which should be correlated with the underlying responsiveness of the physicians to detailing. Further, data limitations have previously kept the content of detailing and its effects as a black box. In this paper, I estimate the effect of detailing in the anti-psychotic category using two studies that disseminated new information that drastically changed the nature of competition, providing good news for two products— one generic (no advertising response) and one brand (large advertising response). These large information revelations led to large advertising responses of sales reps to physicians who had previously not been detailed before and left detailing to specialists and frequently visited physicians largely unchanged. I use this variation and physician level detailing data to estimate the causal effect of detailing and how that effect varies based on the content of the detail, which is observed in the data. I am able to identify the effects of detailing on primary care physicians who largely were not detailed before. Detailing effects are significant, though smaller than has been found in previous literature, with the average effect of a visit being to increase prescriptions by 0.06. While detailing raises both on-label and off-label prescriptions, I find evidence that it disproportionately raises on-label prescriptions. Further, those visits that included the
presentation of a clinical study were almost twice as effective than those that did not and visits that included a meal were no more effective than those visits that did not.