Testimony for the Record
Submitted to the Delaware Senate
for Hearings on SB 176
June 18, 2018

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Impact of Opioid Drug Tax in Delaware

I am Dr. Jeromie Ballreich, and I am a faculty member and director of the Master's in health economics program at Johns Hopkins University. My research interests include economic evaluation, health policy with a focus on domestic pharmaceutical policy, and pharmaceutical market dynamics. I am pleased to testify today on Senate bill 176.

The bill sets a fee on the morphine milligram equivalent per prescription and uses the raised funds to address the opioid epidemic in Delaware. I have conducted empirical analysis of the proposed fee with consultation from other pharmaceutical policy experts at Johns Hopkins. The details of this analysis has been provided to the committee in a form of a memo. In my testimony today I will summarize my findings. Very simply, the fee will have only minor impact on the price and patients of opioids, because the companies will absorb most of the fee.

The proposed morphine milligram equivalent fee will impact 212 unique drugs in Delaware. The 212 unique drugs were identified by cross referencing a list of opioid drug products produced by researchers at Johns Hopkins with drugs that were actually dispensed in Delaware in 2017 by the Medicaid program. I then used the National Drug Codes (NDCs) to acquire prices for these drugs from a national price database maintained by the Centers for Medicare and Medicaid Services. This database also included some basic drug characteristics including whether a drug is a branded or generic.

Branded drugs have patent and market exclusivity protections which effectively limits competition and allows drug companies to charge substantially higher prices than what would be observed in a free competitive market. Generic drugs are available after the patent or market exclusivity period expires, and they are typically sold at much lower prices than branded drugs. The lack of patents or market exclusivities allow many generic companies to make and sell identical drugs, and the competition brings down the price.

My analysis has found 62 out of 212 unique opioid drugs sold in Delaware are branded drugs. The average price for these branded drug is $19.83 per pill. All these drugs, both branded and

generics, are small molecule drugs, and small molecule drugs are inexpensive to manufacture generally costing only pennies per pill to manufacture. Branded drugs are priced much above their manufacturing cost, largely due to patent or market exclusivity periods. Effectively the government gives them a monopoly to sell the drugs. The large difference between the price and general manufacturing cost suggest large profit margins to absorb a fee.

The other 150 opioids are either generic drugs or branded drugs with generic competitors. The average price for these drugs is $2.33 per pill with nearly half priced less than 50 cents per pill. Because generic drugs compete primarily on the basis of price, the more competitors in the market the lower the price. When there are many competitors the price can get very low and the fee could increase the price because the profit margins are very thin. In this case the fee should be lower in order to have a minimal impact on price.

Drug companies priced drugs at a national profit maximizing point. Adding a state fee does not appreciably change this profit maximizing point. Drug companies will not change their prices because of a sales fee in Delaware.

The next question is what level of fee to impose. The amount of morphine milligram equivalent varies for each drug. The proposed fee amount was compared to the price of a drug. Drugs with more morphine would pay a higher fee. Drugs with lower prices would feel the effect of the fee more acutely. I looked for the balance between assessing a fee on opioids and not materially affecting the price of the drug. In other words, finding the point where the drug manufacturer pays the cost for the fee without raising the price.

I examined the impact of the proposed fee and have the following suggestion. For drugs that cost more than $.15 per pill, the fee would be $.01 per MME. These are primarily branded drugs that can absorb the price increase without raising the price to the patient, especially since the average impact of the fee amounts to only 3.5% of total price. Branded medications have large price markups, and branded drug companies can absorb a 3.5% relative fee.

For drugs that cost less than $.15 per unit, I would impose a $.0025 per MME fee. These are primarily generics that could absorb a smaller fee increase without raising the price to the patients. For generic drugs, most patients pay a fixed copay with the insurer picking up the remainder of the cost. If the generic companies raise their prices, then the higher price would be borne by the insurer, who typically has negotiation power with the generic company.

Delaware is a small state. Opioid drugs are part of a national market meaning any price rise to compensate for the fee would be spread across all the states. Drug companies cannot raise prices in only one state. It is unlikely that a drug manufacturer would raise prices in all 50 states to respond to a fee charged in Delaware. If it increased the price, then it would lose revenue in other states.

In the event of a price rise, Delaware patients will feel little impact due to the following reasons. One, most drugs are generics, and patients face fixed co-pays. Two, for branded drugs, the fee is small relative to price at 3.5%, meaning at absolute most, patient coinsurance would increase 3.5%. In summary, it is my opinion that this fee would have little effect on patients.

Thank you.