Reform Workplace Practices of Chain Pharmacies to Reduce Medication Errors

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Executive Summary: Pharmacists employed by chain pharmacies have raised concerns over corporate-mandated practices that compromise patient safety. Harsh working conditions and the pressure to meet mandated quality metrics have increased the likelihood of medication errors. Complications associated with medication errors exceed \$40 billion and cause adverse health effects for hundreds of thousands of Americans annually. Despite their ubiquity, chain pharmacies face varying regulations as state pharmacy boards dictate individual statewide policies. There is minimal data collection on pharmacy practices and state pharmacy boards do not require pharmacies to report errors. We recommend Congress pass a bill mirroring the Illinois Pharmacy Practice Act to improve pharmacists' working conditions and mandate data collection on medication errors nationwide.

I. Statement of issue

7,000 to 9,000 Americans die annually as a result of a medication error (ME) (Tarig 2020), which is defined as "any preventable event that may cause or lead to inappropriate medication use or patient harm" (WHO 2016). Hundreds of thousands of additional patients experience ME-associated complications. The cost of treating ME-related health effects exceeds \$40 billion each year (Tarig 2020). Dispensing errors, in which pharmacies dispense the incorrect medication or dosage, comprise 11% of MEs (Leope et al. 1995, 38). Pharmacy employees attribute errors to hectic working conditions, increased distractions, and fatigue (Evanoff 2005, 53). Additionally, data on error-associated fatalities and complications are likely an underestimate as both patients and healthcare workers often fail to report errors (Sarvadikar 2010, 844). By not requiring pharmacies to report MEs, state pharmacy boards contribute to

i. Medication errors increase healthcare costs

ii. Unsafe working conditions of chain pharmacies Pharmacists are required to counsel patients about their medications and to review patients' drug profiles before filling prescriptions under the Omnibus Budget Reconciliation Act of 1990 (Van Dusen 2006). High workload demands prevent pharmacists from properly performing these patient safety measures. 67% of chain pharmacists found meeting mandated quotas and insufficient technician staffing as highly stressful factors of their jobs (AACP 2015). 68% of these pharmacists indicated their workload negatively affected time spent with patients (AACP 2015). While chain pharmacies allow pharmacists to voice workplace concerns, many pharmacists forgo doing so for fear of retaliation (Gabler 2020).

II. Policy landscape

i. Regulation of chain pharmacies

While the Food and Drug Administration regulates commercial pharmaceutical manufacturing, individual states are the primary regulators of their

this underestimation.

chain pharmacies. However, Congress has acted in the past to set federal mandates superseding state control to prevent unsafe pharmaceuticals from being sold nationwide (Wax 1995, 458-459).

Pharmacy regulation is often the responsibility of state pharmacy boards, which set training standards for pharmacists, investigate safety violations, accredit pharmacies/pharmacists, and inspect pharmacies for compliance. In most states, board members are appointed by governors, while in some states, relevant professional societies also nominate members. Boards typically include pharmacists, consumer protection professionals, public members, and chain representatives (McCoy 2008), with each state setting their own criteria.

Chain pharmacies like CVS, Walgreens, Rite-Aid, and Walmart are responsible for dispensing 70% of prescription drugs nationwide (Gabler 2020). These chain pharmacies and their policies aimed at dispensing the maximum amount of prescriptions at minimal cost have profound effects on Americans and their healthcare costs. In response to recent criticism, chain pharmacies have expressed that their own internal regulations are sufficient in addressing complaints about working conditions (CVS Health 2020).

ii. The Illinois Pharmacy Practice Act

In an attempt to decrease MEs and regulate working conditions, the state of Illinois passed the Pharmacy Practice Act (IL 225 ILCS 85/). The Act mandates that the workday not exceed 12 hours, allows for breaks, and increases pharmacy technician support. The Act limits the number of prescriptions a pharmacist can fill to 10 prescriptions per hour. Protection is provided under this Act to pharmacists and pharmacy technicians who report employer violations of worker policies. The Act mandates collecting data on break periods of pharmacy staff as well as retaining records of any errors in the receiving, filling, or dispensing of prescriptions. Other state pharmacy boards have attempted to enhance working conditions with minimal success. South Carolina discourages quotas and encourages patient safety; California has tried to prevent pharmacists from working alone, yet these measures are widely ignored (Gabler 2020). The Illinois Pharmacy Practice Act specifically addresses a wider array of major concerns while providing a framework for data collection for further improvements to be made.

III. Policy options

i. Option 1: Adoption of a national pharmacy practice act

Adopting a national pharmacy practice act akin to the Illinois Pharmacy Practice Act would standardize pharmacy practices that ensure patient safety. Harsh working conditions at chain pharmacies fail to prioritize patient safety. Increased workload and insufficient staffing contribute to MEs and hinder pharmacists from properly abiding by federal provisions that mandate certain patient safety measures.

Advantages

- Nationwide adoption of legislation like the Illinois Pharmacy Practice Act would standardize workplace conditions across ubiquitous chain pharmacies.
- Pharmacists would spend more time counseling patients on medication use and possible side effects or drug interactions.
- Implementing recordkeeping of MEs and breaks taken by pharmacists across all states would help pinpoint where additional improvements can be targeted.
- Considering 11% of MEs occur in the dispensing process, a national pharmacy practice act has the potential to save \$4.4 billion each year of the \$40 billion costs associated with MEs.

Disadvantages

- States would need to ensure pharmacies are compliant with the provisions in a national pharmacy practice act.
- State pharmacy boards would need to build infrastructure for data collection and storage.

ii. Option 2: Data collection on statewide pharmacy practices and medication errors

Congress should direct the Department of Health and Human Services to collect data on pharmacy working conditions and prescription error rates. Data collection is necessary to craft evidence-based policy. Currently, there is no central database of pharmacy practices relating to working conditions and MEs. Moreover, this data should be disaggregated by state and pharmacy chain in order to better understand how state and pharmacy policies affect health outcomes and costs in each state.

Advantages

- Congress and health agencies can determine the specific causes of pharmacy errors and create legislation to effectively target these issues.
- States can decide what policies are most appropriate to implement in their state.

Disadvantages

- While collecting data on pharmacy practices and MEs is a promising step, it does not immediately address the current health crisis caused by MEs.
- Data collection processes at the national level would require increased data infrastructure and maintenance while also introducing privacy concerns.

iii. Option 3: Inaction

No new policies are introduced requiring regulation or data collection among chain pharmacies.

Advantages

 States maintain autonomy over whether to regulate the practices and data collection on chain pharmacies and how they relate to healthcare costs in the state.

Disadvantages

- The practices of chain pharmacies remain in place, continuing to lead to MEs, unsafe working conditions, and their respective burdens on society and costs to taxpayers.
- Considering the monopoly held by a handful of chain pharmacies, these problems could worsen if chain pharmacies merge and subsequently force independent pharmacies to close.

IV. Policy recommendations

We recommend that Congress approve Option 1—the national adoption of a pharmacy practice bill similar to the Illinois Pharmacy Practice Act. The change immediately improves the protection of all Americans from adverse health effects resulting from pharmacy-related medication errors. Enhancing workplace conditions across all pharmacies creates a patient-centric environment and has the potential to save thousands of lives each year. Additionally, equipping state pharmacy boards with data from individual pharmacies would allow them to identify best practices and target interventions to error-prone pharmacies.

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