

# UConn

AN ONGOING CE PROGRAM  
of the University of Connecticut  
School of Pharmacy

## EDUCATIONAL OBJECTIVES

After completing the continuing education activity, pharmacists and pharmacy technicians will be able to

- Identify the occurrence of errors in the pharmacy
- Characterize the perception of the workplace by patients and pharmacists
- Describe actions taken by regulatory agencies to improve the pharmacy workplace
- Review the utilization of pharmacy personnel



The University of Connecticut School of Pharmacy is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

Pharmacists and pharmacy technicians are eligible to participate in this application-based activity and will receive up to 0.15 CEU (1.5 contact hours) for completing the activity, passing the post-test with a grade of 70% or better, and completing an online evaluation. Statements of credit are available via the CPE Monitor online system and your participation will be recorded with CPE Monitor within 72 hours of submission

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To obtain CPE credit, visit the UConn Online CE Center <https://pharmacyce.uconn.edu/login.php>.

Use your NABP E-profile ID and the session code **25YC10-FXE24 for pharmacists or 25YC10-EXF82 for pharmacy technicians**

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For questions concerning the online CPE activities, email [joanne.nault@uconn.edu](mailto:joanne.nault@uconn.edu).

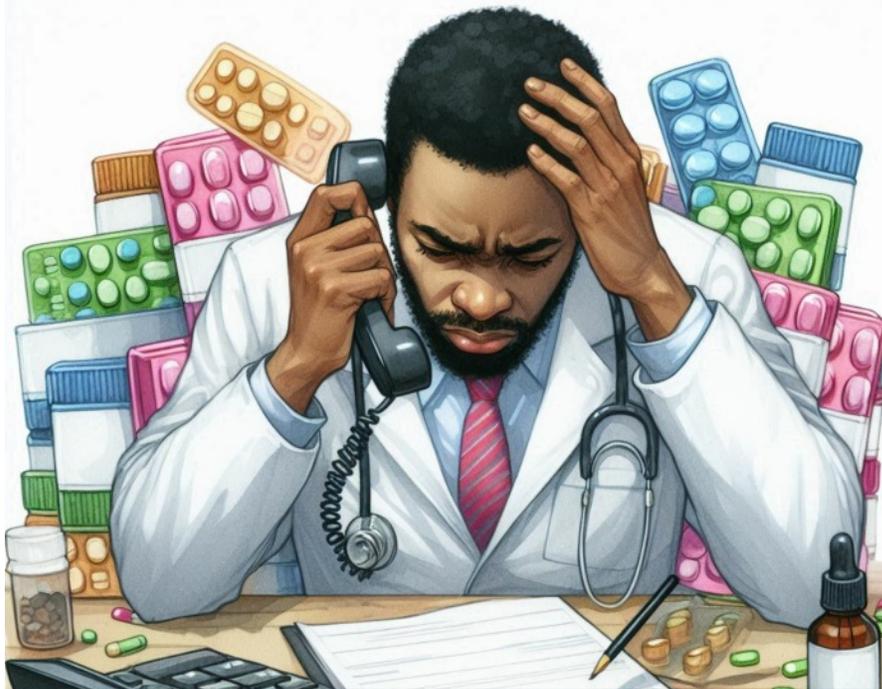
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## You Asked for It! CE



## Law: Danger Behind the Counter?

**TARGET AUDIENCE:** Pharmacists and pharmacy technicians interested in workload concerns in pharmacies and emerging laws.

**ABSTRACT:** Pharmacists filled 6.7 billion prescriptions in 2022 while also engaging in a growing number of other health-related services. These duties have created a challenging workplace that threatens public safety. Recent media reports have focused attention on the pharmacy workplace environment and the risk of errors. This continuing education activity will review the factors contributing to workplace stress and errors and the efforts by regulatory agencies and pharmacists to address this growing problem.

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**FACULTY DISCLOSURE:** Dr. Gianutsos has no financial relationships with an ineligible company.

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“No one recognizes the level of stress they’re putting you under. You’re filling a prescription and the phone is ringing, saying, ‘One pharmacy call, two pharmacy calls, three pharmacy calls.’ I would stand there and feel the sweat come up the back of my neck.” - Pharmacist<sup>1</sup>

## INTRODUCTION

A recent survey found that more than half of United States (U.S.) consumers worry about potential problems with their prescriptions arising from inadequately staffed pharmacies.<sup>2</sup> Half of consumers worry about receiving the wrong drug,

the wrong dose, or the wrong instructions.<sup>2</sup> Similarly, a 2024 study by the American data analytics, software, and consumer intelligence company J.D. Power found that overall patient satisfaction with pharmacies has declined, especially among chains, with only mail-order pharmacies showing an improvement in patient satisfaction.<sup>3</sup> Only 51% of respondents said their pharmacist is trustworthy.<sup>3</sup> The most significant problem areas emerging from the study are long wait times, lower levels of customer trust in pharmacists, and difficulty in ordering prescriptions.<sup>3</sup> On a more positive note, 97% of American consumers agree that a pharmacist should have responsibility for informing them about the safety and/or effectiveness of their medications.<sup>2</sup>

It will probably come as no surprise to readers that pharmacists also report dissatisfaction with working conditions, particularly with issues of staffing, patient aggressiveness, and lack of meaningful communication between pharmacy personnel and management.<sup>4</sup> The most commonly reported root causes for the disgruntlement were inadequate staffing, the use of performance metrics, and workflow design/policies.

Media reports have described pharmacists at chain pharmacies across the U.S. expressing concern that increased demand for prescriptions, vaccines, and other services are occurring without sufficient staff to fulfill those activities, making it nearly impossible for pharmacy staff to do their jobs properly or safely.<sup>5</sup> A national survey released in 2022 showed that nearly 75% of pharmacist respondents felt they did not have enough time to safely perform clinical duties and patient care. Nearly two-thirds disagreed with the statement that “employer policies facilitate my ability to safely perform patient care/clinical duties.”<sup>6</sup> The report also found that three-quarters of pharmacists rated their workload as high or extremely high and that job satisfaction was at the lowest point in 20 years.<sup>6</sup>

Has the modern community pharmacy become a danger to the public? This continuing education activity will examine the current sentiment about the pharmacy workplace, and the perceived risk associated with the current working conditions. It will also review legal and policy changes enacted or contemplated by pharmacists, regulatory bodies, and patients to improve the environment.

## THE PHARMACY ENVIRONMENT

In 2022, 6.7 billion prescriptions were dispensed in the U.S., a more than 50% increase from the nearly 4 billion prescriptions dispensed in 2009.<sup>7</sup> Some pharmacists may feel that they filled that many by themselves.

Currently, almost 70% of people in the U.S. between 40 and 79 years old take at least one prescription drug; 20% take five or more.<sup>8</sup> In addition to prescriptions, between February 2020 and September 2022, pharmacy staffs administered more than 270 million vaccines, including more than half of all COVID-19 vac-



cines given in the U.S..<sup>9</sup> Community pharmacy teams alone accounted for approximately 45% of the total, including more than 8 million COVID-19 vaccines for long term care residents. Pharmacy staffs also provide more than 50 million influenza vaccines per year, supply in excess of 42 million COVID tests, and prescribe and dispense many antiviral medications.<sup>9</sup> Interventions by pharmacy staffs during this period is conservatively estimated to have averted more than 1 million deaths, 8 million hospitalizations, and saved \$450 billion in healthcare costs.<sup>9</sup>

While these data, highlighting pharmacists' value, should engender a deserved sense of pride, as the opening quote illustrates, pharmacists are also feeling stress over their workload. Pharmacists interviewed by the *Chicago Tribune* and the *New York Times* reporting on pharmacy errors related that they felt flabbergasted by pressures at the workplace to work quickly and meet quotas.<sup>10,11</sup> As a result, a chief executive of a state pharmacy association noted that the number of complaints from members related to staffing cuts and worries about patient safety had become “overwhelming.”<sup>12</sup> Similarly, a survey conducted by the California State Board of Pharmacy found that 91% of chain pharmacists indicated that they lacked the staff needed to ensure adequate patient care.<sup>13</sup> The Kansas Board of Pharmacy found similar results with more than half of pharmacists polled responding that they didn't feel they could perform their jobs safely.<sup>13</sup> The biggest reasons cited were a lack of adequate staffing and employer-imposed metrics, such as filling a specific number of prescriptions a day or providing service to patients within a set time.<sup>13</sup>

These added pressures are consistent with a reduction in the number of pharmacies. Chain pharmacies in particular have been reducing staffing levels and closing pharmacies while simultaneously burdening workers with additional duties.<sup>13</sup> Staff who do not fill prescriptions or answer the phone fast enough or fail to solicit enough vaccinations reportedly may face discipline, reassignment, or termination.<sup>13</sup> A former pharmacy school Dean likened the current working environment to the equivalent of a fast-food operation where workers feel pressured to race through every order.<sup>13</sup>

**PAUSE AND PONDER:** How has your job stress changed in the last few years? Have you seen errors in the workplace?

Consumers are also noticing problems or at least expressing a lack of confidence in pharmacists' attention to detail and public safety. Their concerns are not unfounded. A recent systematic review of 62 studies reported a pooled prevalence of dispensing errors across community, hospital, and other pharmacy settings of 1.6%.<sup>14</sup> [It is difficult to accurately determine error rates due to differences in how studies are conducted, the definition of "error," and other factors. Consequently, error rates vary widely among different studies. However, a generally accepted reasonable estimate of dispensing errors is approximately 1% to 2%.<sup>15-17</sup> This would represent approximately 67 to 134 million errors each year at the current prescription volume!]

Many factors may contribute to the occurrence of medication errors. An error may occur at any stage of therapy, including prescribing, transcribing, identifying the product, counseling, use by the patient, or monitoring. Errors can occur across all practice settings.<sup>17</sup> Errors may result from an act of commission (e.g., dispensing the wrong drug or dose) or omission (e.g., failure to properly counsel a patient).<sup>18,19</sup> According to the Academy of Managed Care Pharmacy, the most common dispensing errors are dispensing an incorrect medication, dosage strength, or dosage form; miscalculating a dose; and failing to identify a drug interaction or contraindication.<sup>18</sup> Medication errors can cause a range of undesirable outcomes including adverse drug events (dangerous and unintended events), hospitalization, and even death.<sup>17</sup>

### What's Workload Got to Do with It?

A few lines of evidence suggest that errors may be associated with workload. Numerous studies have described a relationship between prescription volume and errors.<sup>20-22</sup> A survey of pharmacists in Texas in 2001 found that the estimated risk of errors was positively related to the number of prescription orders filled per hour.<sup>20</sup>



Other studies found that as prescription volume increased beyond 20 to 24 per hour, the number of errors increased significantly.<sup>20-22</sup> An earlier analysis by a prominent researcher also concluded that the rate of pharmacists' errors increases after they fill more than 24 prescriptions an hour.<sup>23</sup>

The potential for errors is no surprise to pharmacists.<sup>12</sup> One pharmacist reportedly wrote an anonymous letter to his State Board of Pharmacy saying, "I am a danger to the public working for (chain pharmacy)."<sup>12</sup>

Not only is the volume of prescriptions filled by a typical pharmacist a concern for its impact on the risk of errors, but the danger is aggravated by some pharmacy chains' implementation of time guarantees, promising patients that prescriptions will be filled quickly.<sup>1,12</sup> While the guarantee should provide a benefit to the busy consumer, it is also a safety concern, since the haste to fulfill the guarantee may make it more likely that a medication error may occur. As one pharmacist interviewed by the *New York Times* wrote, "Metrics put unnecessary pressure on pharmacy staff to fill prescriptions as fast as possible, resulting in errors."<sup>12</sup> One study of 49 community pharmacists that had a robust response rate of 90.9% found that the second most frequent source of error was "patient in a hurry."<sup>24</sup>

The former Dean quoted above also believes that "at ... the huge pharmacies, errors are a cost of doing business."<sup>13</sup> One chain store pharmacist told a reporter that she was reprimanded for taking too long to verify prescriptions, even though her extra diligence had caught several serious mistakes.<sup>13</sup>

The major chains have made changes to address the pressures on pharmacists and promote a "better work-life balance" according to one chain spokesperson.<sup>13</sup> Most now provide half-hour lunch breaks for staff and some have reduced pharmacy hours.<sup>13</sup> However, pharmacists report that their workloads remain the same and that they are pressured to work through lunch or stay late to finish their tasks.<sup>13</sup> Moreover, pharmacists report that when their hours were cut, they saw a corresponding decrease in their salary.<sup>13</sup>

**PAUSE AND PONDER:** What could be done to reduce workplace stress at your pharmacy?

### PHARMACY DESERTS

Pharmacists are not the only ones strained when pharmacies close; it also increases the burden on patients who are left without easy access to pharmacies and their medications. This phenomenon, referred to as "pharmacy deserts," creates disproportionate consequences for certain communities, notably in areas of patients with high levels of social vulnerability.<sup>25</sup> Poor access to pharmacies is often associated with lower medication adherence.<sup>25</sup>

A pharmacy desert may be defined as a low-income urban area with no pharmacy within a mile radius for those with adequate vehicle access or half a mile for those with limited vehicle access. In rural areas, it refers to areas without an available pharmacy within a 10-mile radius for those with access to transportation.<sup>26</sup>

The number of retail pharmacies in the U.S. declined by almost 4% (from 63,218 to 60,755) between 2018 and 2023.<sup>27</sup> The decrease was larger (5.9%) in rural communities. During the five-year period, 184 rural communities lost all of their retail pharmacies (although 195 rural communities gained retail pharmacies). The majority of the pharmacy losses in rural communities were among independent pharmacies.<sup>27</sup> Pharmacy closures were also more common in Black and Hispanic/Latino neighborhoods putting a further strain on health care accessibility in these communities.<sup>25</sup>

## EFFORTS TO CHANGE THE WORKPLACE

Recognition that the pharmacy workplace can contribute to staff burnout and risks to the public is growing. This has resulted in different types of reactions among various groups with the goal of improving the work environment.

### Action By Pharmacists

Some pharmacists who have been adversely affected by the current working environment have responded. One action that pharmacists have taken is work stoppage with dozens and, at least in one case, hundreds of pharmacy personnel in chain stores calling out of work to protest working conditions.<sup>5</sup> The pharmacists maintained that the increased focus on vaccinations added to their workload and made it more difficult for them to carry out their other duties and created a potentially unsafe condition. One pharmacist claimed that the chain has “turned into a vaccination clinic first and a pharmacy second” and added that “because immunizations are so profitable, filling prescriptions is almost an afterthought.”<sup>5</sup> In at least one instance, pharmacist organizers planned to stage a multi-day nationwide walkout, termed “Pharmageddon,” to protest unsafe working conditions.<sup>28</sup>

**PAUSE AND PONDER:** Under what conditions would you be supportive of pharmacists striking for better working conditions?

### Action By Regulatory Agencies

Governmental and professional organizations that oversee the pharmacy profession have also become concerned with potentially unsafe conditions existing in the nation’s drugstores and have taken steps to change the workplace environment.

If a pharmacy staff member commits an error, a State Board of Pharmacy may take disciplinary action, but the application of the action differs among the states.<sup>29</sup> In the typical situation, the Board will learn of the incident when a patient or caregiver files a

complaint, which the Board is obligated to investigate.<sup>29,30</sup> Most states do not have specific rules or regulations that specify that errors are actual regulatory violations, and most determinations are made on a case-by-case basis.<sup>30</sup>

The most common types of punitive action include license suspension, probation, or revocation and fines.<sup>30</sup> In a few states, incarceration is also a possible punitive action.<sup>30</sup> The most common bases for dispensing punitive action were to address public safety/health concerns and public complaints. At least two states (Maryland and Massachusetts) appear to take a nonpunitive approach, with a focus on system wide improvements rather than individual responsibility, and with punitive action reserved for pharmacists deemed incompetent.<sup>30</sup>

A majority of state boards do not require pharmacies to report errors, and most investigations focus on pharmacists, not the conditions in their workplaces.<sup>12</sup> Some boards have instructed pharmacists in public meetings to quit or speak up if they believe conditions are unsafe. However, many pharmacists fear retaliation, knowing they could easily be replaced for doing so.<sup>12</sup>

Pharmacists have also reported that errors are not consistently disclosed, even internally.<sup>13</sup> These pharmacists claim that small mistakes and those discovered early are routinely hidden or remain unreported especially by pharmacists who have previously made an error.<sup>13</sup> One California chain pharmacist believes that “for every error that gets found out, there will be an error that never gets caught.”<sup>13</sup> Pharmacists also say that even when they do report potentially fatal errors, no one from their companies investigates how they occurred or makes changes to prevent them from repeating.<sup>13</sup> Obviously these actions put the public at risk.

**PAUSE AND PONDER:** Should the reporting of pharmacy errors to a regulatory body be mandated?





Many pharmacy organizations have advocated for workplace changes to reduce the number of errors, including the elimination of prescription time guarantees.<sup>16</sup> The American Pharmacists Association approved a resolution in 2018 which “encourages the adoption of patient-centered quality and performance measures that align with safe delivery of patient care services, and opposes the setting and use of operational quotas or time-oriented metrics that negatively impact patient care and safety.”<sup>4</sup>

Similarly, the trade group The National Pharmacists Association, advocated for pharmacist dispensing limits more than 30 years ago as a means to promote safety. They recommended that a pharmacist fill no more than 15 prescriptions an hour.<sup>23</sup>

The former Dean says, “I don’t think the boards of pharmacy or the colleges of pharmacy or the professional associations are doing enough to address the issues.”<sup>13</sup> However, in one recent event, the Nevada Board of Pharmacy fined and suspended the licenses of two pharmacists who mistakenly provided a pregnant woman with misoprostol instead of the fertility treatment she was prescribed.<sup>13</sup> The Board also fined their chain pharmacy employer \$10,000. However, the pharmacy’s lawyer objected to the fine saying they did nothing wrong, saying that “the only allegation” against the employer “is that they had these pharmacists.”<sup>13</sup>

### Trends in State Intervention

Traditionally, state pharmacy boards and other regulatory bodies have considered sanctions after errors have occurred but have generally refused to intervene over workload complaints.<sup>13</sup> They have seen their role as protecting consumer safety, not to intrude on what has been regarded as business decisions such as staffing metrics and workload.<sup>13</sup> However, this stance has been changing.

As early as 2017, the Chicago City Council approved legislation that would limit pharmacists to filling a maximum of 10 prescriptions per hour and also required a 30-minute meal and two 15-

minute bathroom breaks for pharmacists working at least a 7-hour shift.<sup>31</sup> A pharmacy also would need to schedule at least 10 pharmacy technician hours per 100 prescriptions filled. The proposal came in response to an investigation by the *Chicago Tribune* which found that 52% of local pharmacies tested failed to warn a member of the investigative team of potentially serious or fatal drug interactions when presented with a pair of prescriptions.<sup>31</sup>

A few years later the state of Illinois went further, passing notable changes to their Pharmacy Practice Act in 2020 after the *Tribune’s* undercover investigation.<sup>31</sup> The Act prohibits a pharmacy from requiring staff to work more than 12 continuous hours, including breaks, per day. This applies to pharmacists, pharmacy technicians, and student pharmacists. It also requires at least one uninterrupted 30-minute meal break and another 15-minute break for a pharmacist working six or more continuous hours per day.<sup>32</sup> The pharmacist may not work more than five continuous hours before being given the opportunity for a meal break and must be given access to a private break room if one is available.<sup>32</sup>

The regulation permits the pharmacy to close during the break period but does not require closure. The pharmacist must be available for emergencies if the pharmacy remains open. Technicians and other authorized support staff may continue to perform normal duties while the pharmacist is on break, except for duties that require a pharmacist’s professional judgment. Prescriptions that have received final verification by a pharmacist and do not require counseling may be dispensed during the break period.<sup>32</sup> If a mandated break period is not provided, the pharmacy must pay the pharmacist three times the pharmacist’s regular hourly rate of pay for each workday with no break.

The *Tribune’s* investigation also prompted Illinois Senator Richard Durbin to call for nationwide policies to protect consumers, including asking the Centers for Disease Control and Prevention (CDC) to determine the prevalence of the problem and to provide guidance to pharmacy boards. He also asked the CDC to examine how workload, company performance metrics that track prescriptions, and the length of time consumers wait for prescriptions may impact patient safety and pharmacist errors.<sup>33</sup>

Many years earlier (2007), North Carolina had passed a law restricting a pharmacist’s workday to no more than 12 continuous hours and required breaks for a shift of six hours or more.<sup>31</sup>

Other states have also considered regulations to reduce pharmacy stress, although many face opposition from employers. Minnesota is also considering a bill to require bathroom and meal breaks after pharmacists complained that they were afraid to drink liquids during a shift because they might not be able to get to the bathroom.<sup>31</sup> New Hampshire also has enacted a rule permitting a 30-minute break for pharmacists who work more than

eight hours. The new rule took more than four years to be implemented due to opposition from the pharmacy industry.<sup>31</sup>

The South Carolina board has discussed how to investigate conditions more thoroughly after a mistake. It also published a statement discouraging quotas and encouraging “employers to value patient safety over operational efficiency and financial targets.”<sup>31</sup>

**PAUSE AND PONDER:** Do you think that mandated breaks are beneficial in increasing safety in the pharmacy?

California recently instituted workplace regulations that go even further. The “Stop Dangerous Pharmacies Act” enacted in 2024 allows the pharmacist in charge (PIC) to make staffing decisions “to ensure sufficient personnel are present in the pharmacy to prevent fatigue, distraction, or other conditions that may interfere with a pharmacist’s ability to practice competently and safely.”<sup>35</sup> The California Board of Pharmacy estimates that pharmacists make 5 million errors in the state per year, prompting the need for workplace changes.<sup>36</sup> If the PIC is not available, a pharmacist on duty may adjust staffing according to workload if needed.<sup>35</sup> The pharmacist on duty may also close the pharmacy if, in their opinion, staffing at the pharmacy is inadequate to provide patient care in a safe manner.<sup>37</sup>

In addition, a chain community pharmacy is required to be staffed at all times during normal business hours (defined as 8:00 am to 7:00 pm) with at least one clerk or pharmacy technician fully dedicated to performing pharmacy-related services.<sup>35</sup> This requirement is waived if the pharmacy’s average daily prescription volume is less than 75 prescriptions per day. However, the exemption does not apply if the pharmacist is also expected to provide additional pharmacy services such as immunizations or tests.<sup>35</sup> The new regulations also expanded duties that can be performed by a technician including accepting prescription transfers and clarifications of prescriptions.<sup>35</sup>

California also prohibits chain pharmacies from establishing a quota related to the duties for which a pharmacist or pharmacy technician license is required.<sup>38</sup> (A quota is defined as “a fixed number or formula related to the duties for which a pharmacist or pharmacy technician license is required, against which the chain community pharmacy or its agent measures or evaluates the number of times either an individual pharmacist or pharmacy technician performs tasks or provides services while on duty” and includes prescriptions filled and “services rendered” to patients.<sup>38</sup>)

However, California and other states have found that enforcing these rules is challenging.<sup>13</sup> The California State Board of Pharmacy, for example, is coping with routine violations by retail pharmacies that then fail to provide records to inspectors seeking to verify complaints.<sup>13</sup>



Oklahoma also recently established rules to ensure adequate staffing levels.<sup>39</sup> Pharmacists are expected to complete a form whenever they are concerned about inadequate staffing due to inadequate number of support personnel or excessive workload. Each pharmacy must review completed staffing reports and address any issues listed and document any corrective action taken or justification for inaction. The reports must be made available to the Board during inspections. There is also a prohibition against disciplinary action or retaliation against the pharmacist filing the report.<sup>39</sup>

Virginia also passed temporary emergency regulations banning production quotas and increasing staffing in late 2024.<sup>13</sup> Other states, including West Virginia, New York, and Illinois have attempted to pass legislation similar to California’s prohibition of the use of quotas for duties performed by pharmacists or technicians, but the legislation failed to pass.<sup>36</sup>

The Ohio Board of Pharmacy also took steps to address the pharmacy staffing shortage with new rules in 2024.<sup>40</sup> One new rule requires pharmacies to “ensure sufficient personnel are scheduled to work at all times in order to minimize fatigue, distraction, or other conditions which interfere with a pharmacist’s ability to practice with reasonable competence and safety.” It also calls for staffing levels to be based on “other requirements” related to the practice of pharmacy and not solely based on prescription volume and also bans the use of “quotas” for “ancillary services.” (Quotas are defined as “a fixed number or formula related to the duties of pharmacy personnel, against which the pharmacy or its agent measures or evaluates the number of times either an individual performs tasks or provides services while on duty.”<sup>40</sup>)

To alleviate burnout that can lead to mistakes filling prescriptions, Ohio’s new rules will require that all pharmacies give all employees working six hours or more an uninterrupted 30-minute break.<sup>40</sup> The pharmacy does not need to close during the break if the pharmacist remains on the premises and prescriptions may still be sold but the recipient must be provided with an offer to counsel. A person who wishes to speak with a pharmacist must be told that the pharmacist is on break and that they



may wait to speak with the pharmacist or provide a telephone number for contact after the break.

Significantly, the new rules require pharmacies to develop a formal system so pharmacists can request additional staff. They also require pharmacy owners to act promptly on those requests and prohibit owners from retaliating against pharmacists who request extra help. A written response to the request must occur within 14 business days and a copy of the response must be maintained in the pharmacy for three years for inspection by the Board.<sup>40</sup>

Ohio's Board also reacted to patients reporting delays in receiving their medication.<sup>41</sup> The new rules require new prescriptions to be filled within three business days and those subject to auto refill to be done within five.<sup>40</sup> (The rule has exemptions for shortages, delays in insurance coverage, and where the prescription requires clarification or raises suspicion about its safety or validity.<sup>40</sup>)

Pharmacy chains opposed the new rules.<sup>13</sup> One chain wrote that the "Board should stay focused on the regulation of the practice of pharmacy rather than the business of pharmacy."<sup>13</sup> Chain representatives acknowledged the challenges their pharmacists have faced but denied allegations of unsafe working conditions. They claimed that metrics based on measurable objectives such as quick prescription turnarounds, short telephone hold times, and vaccination volumes are standard within the industry and meant to assess quality rather than penalize staff.<sup>13</sup>

Another effort to reduce errors being considered by some states is mandatory error reporting.<sup>37</sup> Pennsylvania requires healthcare facilities to report all incidents of harm and may be the only state currently doing so.<sup>37</sup> In Canada, Nova Scotia became the first jurisdiction to implement a requirement for community pharmacies to anonymously report medication incidents to a national repository in 2010 and several other Canadian provinces have followed.<sup>42</sup> The stated purpose of the repository is to improve medication safety in the community through evidence-informed recommendations for reducing preventable harm related to medications.<sup>42</sup>

Another approach to reduce errors in the pharmacy is to free up the pharmacist from certain traditional tasks by placing greater reliance on technicians. A formalized program is termed tech-check-tech (TCT) and enables a trained pharmacy technician to perform the final verification on a prescription for which the pharmacist has previously performed the prospective drug utilization review.<sup>43</sup> The TCT concept dates back to at least 1978 and has been well validated in institutional pharmacy settings.<sup>44</sup> Studies have found that technicians perform at least as well as pharmacists in final verification activities in institutional settings and have demonstrated that utilization of technicians in this way allows pharmacists to devote one to five more hours per day to direct patient services.<sup>43,44</sup> While this expanded role for technicians is becoming common in institutional settings, few states have adopted it for use in the community pharmacy.<sup>43</sup>

**PAUSE AND PONDER:** In your workplace, what additional tasks could certified technicians perform?

## SUMMARY

To err is human, and pharmacy staff will make errors despite their best efforts. Errors can occur at any step during prescription processing. The error rate is not well validated due to many methodological variables, and estimates vary widely although 1% to 2% is a commonly accepted value. However, even at these low rates, the number of patients affected is large and the consequences, although usually minor, can be catastrophic. Pharmacy staffs, of course, do not want to commit errors and removing the triggers for errors is a worthy goal. Evidence supports the concept that workplace pressures and insufficient staffing, high prescription volume, and interruptions and distractions exacerbate the risk of errors. The trend towards reducing the number of pharmacies while expanding pharmacy services has added additional strains to the health care system. Patients have become more aware of the risks associated with the pharmacy environment and burnout. This has also lessened the public's perception of pharmacists.

Concerns over errors have spurred a growing number of states to revise their Pharmacy Practice Acts to relieve some of the workload pressure on pharmacists. Typical changes include limits on the length of the workday, mandated breaks, limits on the number of prescriptions a pharmacist can dispense over time, and reconsideration of tracking metrics. However, these changes have encountered resistance by employers and implementation and enforcement are spotty. Other changes include expanding the use of technicians and allowing more time for pharmacists to provide services related to patient care. It remains to be seen whether more regulatory oversight of the workplace will impact the number of errors committed. In the meantime, pharmacists and technicians should be extra vigilant to avoid being the object of the next media investigation that casts the profession in a bad light and hope they do not become "a danger to the public."

**Figure 1. Safety and Counseling When Workload is a Problem**

**Best**

- ① **Be COMMUNITY CHAMPIONS** and whenever possible, attend community events and state hearings about pharmacy workload concerns (and follow them in the news)
- ② **Manage patient expectations** about workload issues and waiting times; discuss the barriers you encounter
- ③ **Look for things that seem to trigger error**, and do your best to mitigate those circumstances

**Better**

- ① **Track data (errors and other indicators of increased patient risk)** if you feel management is unresponsive
- ② **Report adverse events** through the United States Food and Drug Administration Adverse Event Reporting System (FAERS)
- ③ **Report medication errors—all of them—in accordance with your state law**

**Good**

- ① **Be familiar with federal and state laws** concerning workload management
- ② **Track data (errors and other indicators of increased patient risk)** if you feel management is unresponsive
- ③ **Always put patient safety first**

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