

# **APhA/NASPA**

## **NATIONAL STATE-BASED PHARMACY WORKPLACE SURVEY**

### **Report of Initial Findings December 2021**

#### *Analysis Prepared for APhA/NASPA By:*

Jon C. Schommer, PhD  
University of Minnesota

Caroline A. Gaither, PhD  
University of Minnesota

SuHak Lee, PharmD  
University of Minnesota

Nancy A. Alvarez, PharmD  
University of Arizona

April M. Shaughnessy, BSPHarm  
American Pharmacists Association

**Acknowledgements:** The *Preliminary Report* authors gratefully acknowledge funding from the American Pharmacists Association (APhA), in-kind support from the National Alliance of State Pharmacy Associations (NASPA), and intellectual contributions made by the APhA/NASPA Pharmacy Work Group.

We also thank the APhA/NASAP project oversight team for their direction and support: April Shaughnessy (APhA), Mitchel C. Rothholz (APhA), and Joni Cover (NASPA) and Rebecca Snead (NASPA).

Preliminary Findings inquiries: Jon C. Schommer at [schom010@umn.edu](mailto:schom010@umn.edu)

Press inquiries: Mitchel C. Rothholz at [mrothholz@aphanet.org](mailto:mrothholz@aphanet.org)

Copyright APhA December 2021. Contact April Shaughnessy at [ashaughnessy@aphanet.org](mailto:ashaughnessy@aphanet.org) for permission to use tables in publications or for classroom purposes.

## I. EXECUTIVE SUMMARY

### *Introduction*

Pharmacists and pharmacy personnel's workplace issues and their relationship to personal well-being continue to be a critical, complex issue across all practice settings, and have been further exacerbated under the COVID-19 pandemic. What is needed now is a critical examination of workplace factors to determine how they affect pharmacy personnel well-being and patient safety. The American Pharmacists Association (APhA) and the National Alliance of State Pharmacy Associations (NASPA) developed a national survey to address this critical need.

### *Background*

The work environment for pharmacists and pharmacy personnel has been studied for many years with both job satisfaction and job stress being high. In recent years, stress has reached an all-time high especially for those working in community and hospital practice settings. The 2019 National Pharmacist Workforce Survey found that overall, 71% of pharmacists rated their workload as high or extremely high and job satisfaction was at the lowest point in 20 years.

Beginning in 2019, several initiatives were launched to address these issues: The [\*2019 Enhancing Well-being and Resilience Among the Pharmacist Workforce: National Consensus Conference\*](#) was convened. APhA launched the [\*Well-being Index for Pharmacy Personnel\*](#) and APhA/NASPA developed the [\*Pharmacist's Fundamental Responsibilities and Rights\*](#).

While pharmacists answered the call from providing access to medications throughout even the most daunting of the Pandemic surges to providing COVID testing and vaccination, workplace issues remain and increased. Pharmacists' and pharmacy personnel workload has been linked to patient safety concerns regarding medication errors. Therefore, the goal of the APhA/NASPA National Pharmacy Workplace Survey was to identify state-specific workplace conditions and sustained stress experienced by pharmacy personnel that may lead to medication errors.

### *Methods*

A survey divided in seven sections was developed by the APhA/NASPA Workgroup. The exact wording for questions along with the response categories are found in in Addendums A through G. The distribution of the survey was administered on-line, using the *Internet-Based Qualtrics<sup>SM</sup> Survey* platform through links provided and promoted by state pharmacy associations and nationally by APhA. The survey was launched in April 2021. Responses were held in a data repository at the University of Minnesota, College of Pharmacy.

A preliminary analysis of the data represents the timeframe between April and November 2021. Descriptive statistics (frequency counts) were computed using IBM SPSS Version 27.

### *Limitations*

The results did not use a random sample of individuals and the total number of individuals contacted is unknown therefore a response rate cannot be calculated. The findings should be used for gaining insight and not be used for making estimates for or to generalize to the entire population of pharmacists and personnel.

### *Findings*

This preliminary report represents responses from 4,482 pharmacy personnel.

Section One: Respondents were placed in the National Association of Boards of Pharmacy (NABP) Districts to represent their geographic distribution since the threshold of 100 respondents per state was not met. Most respondents were from the eastern part of the United States, followed by the Midwest and the West. They are represented by 17 different practice settings including chain (46%), supermarket (13%), and independent and hospital pharmacy (10%). Most respondents were either staff/clinical pharmacists (50%), management/supervisor (30%), technicians/clerks (8%), owners or interns/students (4%), female (69%) or white (74%).

Section Two: Approximately, 75% responded in the negative to questions regarding enough time and personnel to safely perform or meet duties. Over 60% indicated that workflow, payment for pharmacy services and employee policies that allow pharmacy personnel to perform clinical and non-clinical duties safely were also responded to in the negative.

Section Three: Over 60% indicated that their employer does not actively seek their opinion or respects or values their input. In addition, 52% did not feel there were open channels of communication to discuss issues related to patient care and to provide suggestions for improvement.

Section Four: Of the 71% who indicated their practice site utilizes a continuous quality improvement (CQI) program to identify and prevent errors, 79% of employees are encouraged to report errors and near misses but only 43% agreed that my employer shares aggregate data with me so that I can improve practices.

Section Five: While 53% do not have the ability to make adjustments to team training, roles and responsibilities, most respondents indicated that team members are sufficiently educated, fully engaged, clearly understand their roles and responsibilities, and work together as a team.

Section Six: Telephone Interruptions (90%), inadequate staff (88%), patient demands/expectations (80%), inadequately trained staff (75%), the inability to practice in a patient-focused manner (76%) and harassment and bullying from customers/patients (69%) are stressors that contribute the most to medication errors and near misses.

Section Seven: Respondents provided many responses to five open ended questions that addressed factors that positively impacted their ability to ensure patient safety and confirmed our findings found in previous sections. Using creativity, inserting redundancy into work systems, and using their own value system are ways in which pharmacy personnel positively ensure patients safety. Having control over policies and procedures, good working relationships with co-workers and management, support from employers by providing adequate staff and time to perform their jobs are also important. As found in previous sections, patient demands, negative/abusive relationships with employers, unrealistic workloads, and inadequate staffing are negative contributors to patient safety.

## ***Conclusions***

The anecdotal pharmacy workplace comments heard by state and national pharmacy associations or posted on social media are supported by the preliminary findings of this survey. Most of the factors of concern that were identified by this survey are systems based and changes are under the direct control of the employer/management. For the profession, the stress and workplace conditions explored in the survey findings are having a negative impact on the ability to recruit, train, and retain pharmacy personnel. There are opportunities to address issues in an expedient manner such as managers/directors can open communication channels with pharmacy personnel and revise policies to support pharmacists and pharmacy personnel when encountering patients/customers who are perceived to be threatening or harassing and when pharmacists utilize professional judgement in addressing clinical and workflow issues at hand. Support is needed, especially now as the pandemic continues, from employers, insurers, lawmakers, and the public to address patient safety issues, reduce stress and increase satisfaction of pharmacy personnel now and in the future.

## **II. INTRODUCTION, BACKGROUND, METHODS, and LIMITATIONS**

### ***Introduction***

Pharmacists and pharmacy personnel's workplace issues and their relationship to personal well-being continue to be a critical, complex issue across all practice settings, and have been further exacerbated under the COVID-19 pandemic. In recent decades, considerable work has been done to analyze medication errors, including near misses, and identify their root causes. What the research has lacked is a critical examination of workplace factors to determine how they affect pharmacy personnel well-being and patient safety.

To address this need, the American Pharmacists Association (APhA) and the National Alliance of State Pharmacy Associations (NASPA) joined forces to address pharmacy workplace conditions and pharmacy personnel well-being. The collaboration that began in late 2020 yielded three activities, this survey being one of the three, that were all launched in 2021.<sup>1</sup>

## **Background**

The work environment for pharmacists and pharmacy personnel has been studied for many years. Early studies examining job stress and satisfaction found that pharmacists tended to be moderately satisfied with their jobs, while simultaneously finding the work environment stressful. (Stewart & Purohit, 1980; Ciaccio, Jang, Caiola, 1982, et al.; Wolfgang, Kirk & Sheperd, 1985)<sup>2</sup> In recent years, stress has reached an all-time high especially for those working in community and hospital practice settings. In 2018, APhA sponsored a qualitative research study using open-ended questions to examine the personal and professional well-being of pharmacists and student pharmacists. (Schommer, Gaither, Goode, et al., 2020) While this project found that pharmacists' and students' basic human needs were being met, there were internal (fear of failure/pressure to succeed) and external (employer policies, low reimbursement rates, patient demands) factors negatively influencing their well-being. The 2019 National Pharmacist Workforce Survey found that overall, 71% of pharmacists rated their workload as high or extremely high and job satisfaction was at the lowest point in 20 years. (Doucette, Witry, Arya, et al., 2020)

Beginning in 2019, several initiatives were launched to address these issues. The [2019 Enhancing Well-being and Resilience Among the Pharmacist Workforce: National Consensus Conference](#) was convened and provided a set of 50 consensus recommendations for individual and system action. APhA launched the [Well-being Index for Pharmacy Personnel](#) which pharmacy personnel can use to assess their level of distress and track over time. It also provides resources for individuals to access that address contributing factors to negative well-being. Several state pharmacy associations and boards of pharmacy fielded workplace surveys to their stakeholders. APhA/NASPA developed the [Pharmacist's Fundamental Responsibilities and Rights](#) document which describes the core responsibilities to which pharmacists dedicate themselves as health care professionals and what is necessary (rights) for pharmacists to fulfill those responsibilities.

The onset of the COVID-19 global pandemic has stretched the health care workforce, including pharmacists, to the breaking point. (Terlap, 2021) While pharmacists answered the call from providing access to medications throughout even the most daunting of the Pandemic surges to providing COVID testing and vaccination, workplace issues remain and have intensified. (Bakken & Winn, 2021) Pharmacists' and pharmacy personnel workload has been linked to patient safety concerns regarding medication errors. (Haugtvedt, Lewis, Gaither, et al, 2021) In addition, student pharmacists' once positive views of the profession of pharmacy have declined in recent years. (Nau & Kier, 2021) These findings demand immediate action from varied pharmacy stakeholders.

The goal of the APhA/NASPA National Pharmacy Workplace Survey was to identify state-specific workplace conditions and sustained stress experienced by pharmacists that may lead to medication errors. The APhA/NASPA Work Group believed the most efficient way to reach pharmacy personnel across the country was to develop a national survey, held on a neutral platform<sup>3</sup>, that would be distributed through state pharmacy associations and nationally by APhA. Unfortunately, responses for most states were not large enough to provide state-level data. Instead, results will be presented and analyzed by region defined by using the established NABP Districts. (See Figure 1.1)

---

<sup>1</sup> To learn more about the other APhA/NASPA collaborative projects visit [Pharmacist's Fundamental Responsibilities and Rights](#) and [Pharmacy Workplace and Well-being Reporting \(PWWR\)](#).

<sup>2</sup> See Addendum H – References for all study citations listed in this report.

<sup>3</sup> Survey Data Repository - University of Minnesota, Jon Schommer (PI); IRB# 00012292

## Methods

With these issues in mind, the APhA/NASPA Work Group developed the survey questions based on learnings from the Well-being Index for Pharmacy Personnel, a state pharmacy association survey instrument<sup>4</sup>, and principles outlined in the [Pharmacist's Fundamental Responsibilities and Rights](#).

The survey was divided into seven sections:

1. Practice place, role, and setting/demographics
2. Work environment
3. Employee engagement and value
4. Culture of safety
5. Pharmacy personnel
6. Contributors to stress
7. Your Opinion

The exact wording for questions along with the response categories are found in in Addendums A through G.

APhA developed common promotional messaging templates that included the national survey URL and graphics that were used by state pharmacy associations and APhA. The survey was administered through the *Internet-Based Qualtrics<sup>SM</sup>* Survey platform for receiving de-identified data for analysis. To protect the responders' anonymity, all responses are held at the University of Minnesota, College of Pharmacy. Staff at APhA and NASPA were not provided access to individual responses and only received aggregate results data.

The survey was launched nationally in April 2021 by APhA. State pharmacy associations launched at different times during the spring and summer of 2021. Promotion of the survey to pharmacists, student pharmacists, and pharmacy technicians continued through the end of August 2021. Social media, email, and online periodicals were used to promote the survey. Due to the number of surveys that were started but not completed, a decision was made to keep the survey open for those individuals through November 2, 2021, when data for this preliminary report was extracted.

As of November 2, 2021, 4,486 surveys were completed with another 1,986 in progress. This preliminary report provides initial findings for the completed surveys through frequency counts computed using IBM SPSS Version 27 statistical software.

## Limitations

The survey was promoted via email, periodicals, and social media; therefore, a limitation of the results is that it did not use a random sample of individuals. The total number of individuals contacted is unknown so a response rate cannot be calculated. As such, the findings should be used for gaining insight and not be used for making estimates for or to generalize to pharmacists and pharmacy personnel overall.

## III. FINDINGS

*Note: Refer to Addendums A through G for preliminary results data. The each set of findings are explained in this Section.*

While only national level data is discussed in this Preliminary Report, the analysis of preliminary findings found that there were near across the board similarities in responses when comparing data at the district level. Validating anecdotal remarks in the profession, the respondents to this survey indicated that work environment factors contribute to pharmacy personnel being unable to perform their clinical and non-clinical duties effectively. There is also not an open mechanism for pharmacists and pharmacy personnel to discuss workplace issues with supervisors/management and if they try, the discussion is not welcomed or heard. The feelings of not being heard or valued are risk factors that can cause stress leading to occupational burnout. Another issue identified as a factor that could lead to medication errors or near misses was the increasing demands, harassment, and bullying by patients/consumers experienced by pharmacy staff. In addition, medication error worry due to insufficient and ill trained

---

<sup>4</sup> Questions for this survey were based on a portion of the Tennessee Pharmacists Association workplace survey fielded in the first half of 2020.

staff, the employer focus upon production results and adding more services with inadequate support for these services contributes to stress.

### ***Section One***

As shown in Figure 1.1, most respondents were from the eastern part of the United States, followed by the Midwest and the West. Figure 1.2 shows respondents represented 17 different practice sites with the most practicing in a community pharmacy setting. Figure 1.3 indicates that respondents represent a broad spectrum of pharmacy practice roles. Gender and race/ethnic identity are found in the remaining figures.

### ***Section Two***

Over three-fourths of the respondents to the work environment questions regarding enough time and personnel to safely perform or meet duties were answered in the negative (Table 2.1) Interestingly, over 60% of respondents indicated that workflow, payment for pharmacy services, and employee policies that allow pharmacy personnel to perform clinical and non-clinical duties safely were also responded to in the negative.

### ***Section Three***

As in the previous section, most pharmacy personnel did not feel like employers valued their input. (Table 3.1) They did not feel supported by management for professional development activities and did not feel there were open channels of communication to discuss issues related to patient care and to provide suggestions for improvement.

### ***Section Four***

The response pattern for this section is interesting in that almost one-third of respondents indicated "no" or "did not know" if their employer had a continuous quality improvement (CQI) program. While 79% of those who indicated that they have CQI programs indicated that they are encouraged to report errors and near misses, only 43% agreed that their employer shared aggregate data with them so that they can improve practices. It is unclear if they report without fear of retaliation or understand that CQI programs under recognized Patient Safety Organizations are confidential and protected.

### ***Section Five***

The results for this section are a bit more encouraging. While greater than 50% do not have the ability to adjust staffing/hours based on the needs of the pharmacy, most respondents indicated that team members are sufficiently educated, fully engaged, clearly understand their roles and responsibilities, and work together as a team.

### ***Section Six***

The findings in this section are particularly concerning. Telephone interruptions, inadequate staff, and patient demands were identified as contributing stressors that could lead to medication errors and near misses. Inadequately trained staff and personnel who are unable to practice in a patient-focused manner were also noted as stressors that could lead to errors or near misses. Harassment and bullying from customers/patients are big stressors, while harassment from co-workers is not as great. Other issues include non-pharmacy managers not understanding pharmacy practice regulations, insurance issues and inconsistent enforcement of workplace policies. More than 50% of respondents indicated that lack of workplace safety and constructive feedback were not as problematic stressors.

### ***Section Seven***

Many of the responses to the closed-ended questions are confirmed and expanded upon by the open-ended questions. For example, by developing creative and innovative solutions, removing non-clinical work from the workflow, getting to know patients extremely well, adding redundancy to the system and having quality employees positively impact respondents' ability to ensure patient safety. Having control over policies and procedures, good working relationships with staff, management, and physicians and respondents' desire to do what is right also positively impact patient safety.

Employer actions that positively impact respondents' ability to perform the tasks necessary for optimal care for patients include having enough time to focus on the task at hand until completed, providing a dedicated person to immunize, compensating for all hours worked, scheduling vaccines by appointment, overlapping staff, and distributing work across different teams. Listening to employee feedback, not enforcing quotas, the desire to retain current staff and pay raises are important as well.

As found in previous sections, patient and customer demands, performance policies, insurance/payment, cumbersome CQI policies, negative or abusive employee/management relationships, and lack of care for employees' mental health negatively impacts pharmacy personnel's ability to ensure patient safety and provide optimal patient care. Respondents also mentioned unrealistic workloads without adequate support, the exclusive focus on the bottom line that leads to inadequate staffing, unrelenting quotas and metrics used to evaluate performance, and relying on pharmacy personnel to complete tasks that should be done at a corporate level are other negative contributors. Additional comments included a culture of not caring if staff are retained by management, paying certified pharmacy technicians just above minimum wage, and inadequate drug product reimbursement from insurance providers are additional issues.

A sample of responses (provided verbatim) for each of the five open-ended questions is provided under Addendum G.

#### **IV. CONCLUSION**

The anecdotal pharmacy workplace comments heard by state and national pharmacy associations or posted on social media are supported by the preliminary findings of this survey. Most of the factors of concern that were identified by this survey are systems based and changes are under the direct control of the employer/management. Employers/Management need to open lines of communication with their pharmacy staff to learn and understand the factors affecting the pharmacy workplace. In addition, seeking the input of pharmacy staff on changes to procedures, policies, and pharmacy design adds to the sense that pharmacy staff is valued. The feeling of not being valued, heard, or supported is a risk factor leading to occupational burnout. Coupled with fear of retaliation for attempting to identify issues and possible solutions also add to the increased risk of occupational burnout. Responders were concerned with how stress of pharmacy personnel can affect patient safety.

For the profession, the stress and workplace conditions explored in the preliminary findings are having a negative impact on the ability to recruit, train, and retain pharmacy personnel. Looking at the positive the preliminary findings offer opportunities to address some of the issues in an expedient manner such as managers/directors opening real communication channels with pharmacists and pharmacy personnel and revising policies to support pharmacists and pharmacy personnel when encountering patients/customers who are perceived to be threatening or harassing and when pharmacists use their professional judgement in addressing clinical and workflow issues at hand. Support is needed, especially now as the pandemic continues, from employers, insurers, lawmakers, and the public to address patient safety issues, reduce stress and increase satisfaction of pharmacy personnel now and in the future.

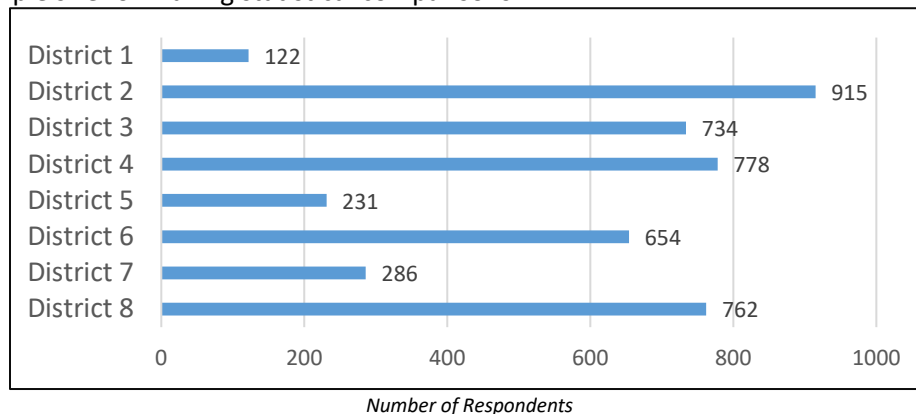


## ADDENDUM A

### Section One: Demographic Descriptions for Survey Participants

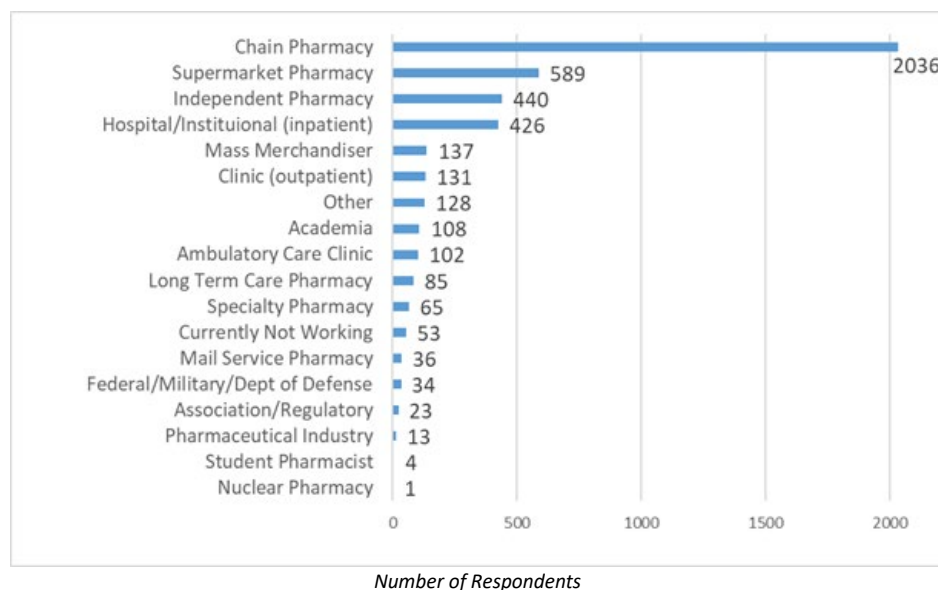
**Figure 1.1 - Geographic Distribution of Survey Respondents (n = 4,482)**

Shows the number of respondents from each of the eight NABP Districts<sup>5</sup> in the United States and Puerto Rico. It is noteworthy that the distribution of respondents does not match the geographic distribution of U.S. pharmacists overall. However, each District had at least 100 respondents, which is a sufficient sample size for making statistical comparisons.



**Figure 1.2 – Practice Setting Type for Survey Respondent**

Shows the number of respondents by practice setting type. Respondents working in chain pharmacies accounted for 2,036 (46%) of the respondents who reported their practice type (n = 4,411). Supermarket pharmacy was the next most common practice type (n = 589; 13% of total), followed by independent pharmacy (n = 440; 10% of total), and Hospital/Institutional pharmacy (n = 426; 10% of total).



<sup>5</sup>NABP Districts - <https://nabp.pharmacy/about/districts/>

Only States, DC, and PR are included in this list. Note: actual NABP Districts include Canadian provinces.

District 1 Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

District 2 Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

District 3 Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee

District 4 Illinois, Indiana, Michigan, Ohio, Wisconsin

District 5 Iowa, Minnesota, Nebraska, North Dakota, South Dakota

District 6 Arkansas, Kansas, Louisiana, Missouri, Oklahoma, Texas

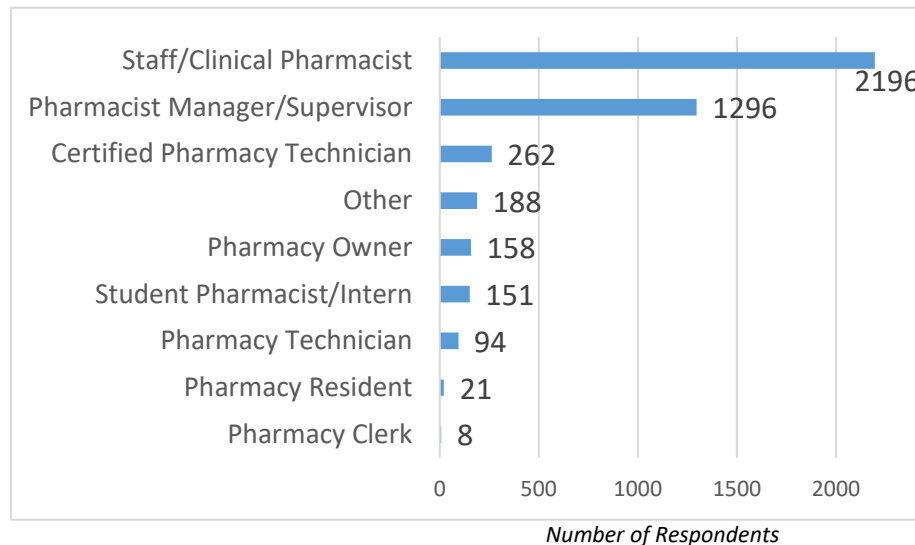
District 7 Alaska, Idaho, Montana, Oregon, Washington, Wyoming

District 8 Arizona, California, Colorado, Hawaii, Nevada, New Mexico, Utah



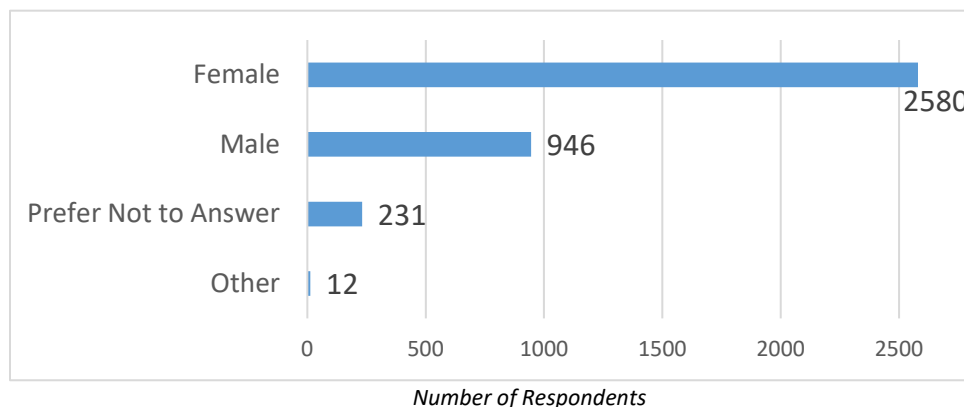
**Figure 1.3: Primary Role for Survey Respondents (n = 4,374)**

Shows the number of respondents by their primary role. The most common type of role was Staff/Clinical Pharmacist (n = 2,196; 50% of total), followed by Pharmacist Manager/Supervisor (1,296/30%). Pharmacy Owner was reported by 158 (4%) of the respondents who answered this question. Certified Pharmacy Technician was reported by 262 (5.9%). Combining Pharmacy Technician and Pharmacy Clerk yields 102 (2.3%) respondents. Student Pharmacists/Interns were selected by 151 (3.5%).



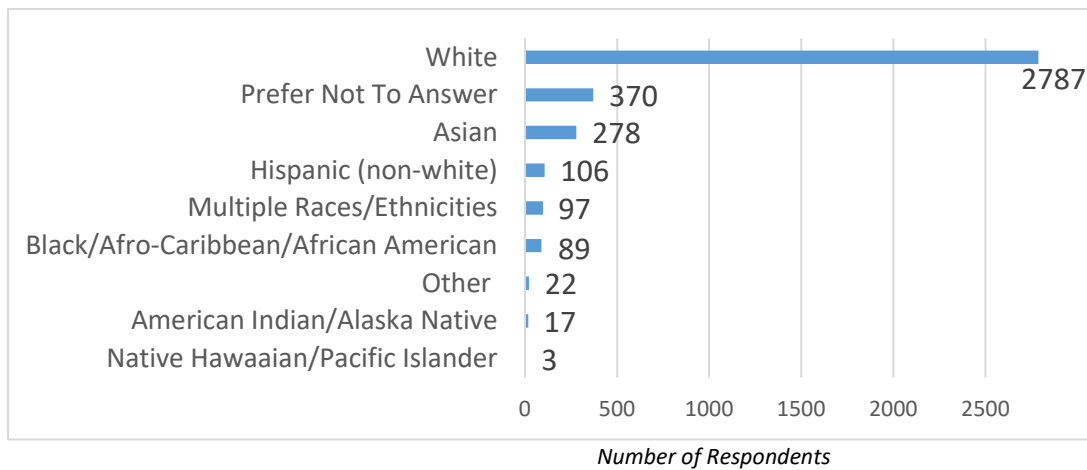
**Figure 1.4: Gender Identification for Survey Respondents (n = 3,769)**

shows the number of respondents by gender identification. Only 3,769 respondents provided an answer to this question (717 skipped this question). Of those who answered, 2,580 (69%) identified as female, 946 (25%) identified as male, 12 (0.3%) identified as other, and 231 (6%) preferred not to answer the question.



**Figure 1.5: Race/Ethnicity Identification for Survey Respondents (n = 3,769)**

shows the number of respondents by race/ethnicity. Only 3,769 respondents provided an answer to this question (717 skipped this question). Of those who answered, 2,787 (74%) identified as White, 370 (10%) preferred not to answer the question, 278 (7%) identified as Asian, and 106 (2%) as Hispanic (non-white). Fewer than 100 respondents identified as any of the other categories.



## ADDENDUM B

### Section 2: Work Environment

**Table 2.1 Proportion of Respondents who Disagree with Survey Items about their Work Environment (n = 4,027)** summarizes the findings for survey questions that related to a respondent's work environment. These questions (as ordered in the survey) were:

1. Sufficient number of pharmacists are available during shifts to meet administrative/non-clinical duties.
2. Sufficient non-pharmacist staff personnel are available during shifts to meet administrative/non-clinical duties.
3. Sufficient pharmacists are available during shifts to meet patient care/clinical duties.
4. Non-pharmacist staff personnel are available for shifts sufficiently to meet clinical duties.
5. Sufficient pharmacists overlap and procedures exist to ensure transfer of information and status.
6. Sufficient time is allocated for me to safely perform administrative/non-clinical duties.
7. Sufficient time is allocated for me to safely perform patient care/clinical duties.
8. Employer policies facilitate my ability to safely perform administrative/non-clinical duties.
9. Employer policies facilitate my ability to safely perform patient care/clinical duties.
10. Payment for pharmacy services supports our ability to meet clinical and non-clinical duties.
11. Workflow design facilitates my ability to meet clinical duties.
12. Workflow design facilitates my ability to meet non-clinical duties.

Each item was rated on a five-point scale: 1 - Strongly agree; 2 - Somewhat agree; 3 - Neither agree nor disagree; 4 - Somewhat disagree; 5 - Strongly disagree.

The findings in **Table 2.1** are reported as the proportion who answered **Somewhat or Strongly Disagree (% Disagree)** ranked from highest disagreement to lowest. It shows that more than 60% of respondents who answered these questions, disagreed with each statement. It is noteworthy that almost three out of four respondents (74%) disagreed with the statement: *Sufficient time is allocated for me to safely perform patient care/clinical duties.*

Survey Item	% Disagree
Sufficient time is allocated for me to safely perform administrative/non-clinical duties.	76%
Non-pharmacist staff personnel are available for shifts sufficiently to meet clinical duties.	75%
Sufficient time is allocated for me to safely perform patient care/clinical duties.	74%
Sufficient non-pharmacist staff personnel are available during shifts to meet administrative/ non-clinical duties.	74%
Employer policies facilitate my ability to safely perform administrative/non-clinical duties.	73%
Sufficient pharmacists are available during shifts to meet patient care/clinical duties.	70%
Sufficient number of pharmacists are available during shifts to meet administrative/non-clinical duties.	67%
Sufficient pharmacists overlap and procedures exist to ensure transfer of information and status.	66%
Payment for pharmacy services supports our ability to meet clinical and non-clinical duties.	65%
Employer policies facilitate my ability to safely perform patient care/clinical duties.	64%
Workflow design facilitates my ability to meet clinical duties.	62%
Workflow design facilitates my ability to meet non-clinical duties.	61%

## ADDENDUM C

### Section 3: Employee Engagement and Value

**Table 3.1 Proportion of Respondents who Disagree with Survey Items about Employee Engagement and Value (n = 4,008)** summarizes the findings for survey questions that related to a respondent's "employee engagement and value" which are items associated with the potential for employee burnout.

These questions (as ordered in the survey) were:

1. Communication channel(s) exist to enable me to voice ideas and suggestions for process improvement.
2. My employer actively seeks my opinion.
3. My employer respects and values my input.
4. Management is available for and open to discussing issues impacting patient care.
5. My employer supports (financially or with time off) my professional engagement and education.

Each item was rated on a five-point scale: 1 - Strongly agree; 2 - Somewhat agree; 3 - Neither agree nor disagree; 4 - Somewhat disagree; 5 - Strongly disagree. The findings in **Table 3.1** are reported as the proportion who answered **Somewhat or Strongly Disagree (% Disagree)** ranked from highest disagreement to lowest.

**Table 3.1** shows that more than 50% of respondents who answered these questions, disagreed with each statement. It is noteworthy that 63% disagreed with the statement "My employer actively seeks my opinion."

Survey Item	% Disagree
My employer actively seeks my opinion.	63%
My employer respects and values my input.	61%
My employer supports (financially or with time off) my professional engagement and education.	58%
Management is available for and open to discussing issues impacting patient care.	55%
Communication channel(s) exist to enable me to voice ideas and suggestions for process improvement.	52%

## ADDENDUM D

### Part 4: Culture of Safety

For this section of the survey, respondents were asked to respond to the following question:

*My practice site utilizes a continuous quality improvement (CQI) program to identify and prevent errors or near misses from occurring.*

1= Yes

2 = No *[if no, survey should skip the next three questions]*

3 = Unsure *[if unsure, survey should skip the next three questions]*

Out of 4,047 responders to this question, 71% (2,852) replied “Yes”, 15% (631) were “Unsure” and 14% (564) replied “No.”

For the 2,852 individuals who replied “Yes,” three additional questions were asked:

1. *Pharmacy personnel are encouraged to voluntarily report errors or near misses without adverse, internal, or administrative action.*

2. *Voluntary reporting of errors or near misses results in improvements in structure and/or processes in my practice.*

3. *My employer shares aggregate report data with me so that we can improve our practices.*

Each item was rated on a five-point scale: 1 - Strongly agree; 2 - Somewhat agree; 3 - Neither agree nor disagree; 4 - Somewhat disagree; 5 - Strongly disagree. The findings in **Table 4.1** are reported as the proportion who answered **Somewhat or Strongly Agree (% Agree)** ranked from highest disagreement to lowest.

**Table 4.1 Proportion of Respondents who selected YES to having a CQI program in place (n = 2,808)** shows that of those who indicated that they had a CQI program in place, the majority of respondents indicated that these reporting resulted in improvements. However, only 43% reported that their employer shared aggregate reports with them in order to improve their practices.

Survey Item	% Agree
Pharmacy personnel are encouraged to voluntarily report errors or near misses without adverse, internal, or administrative action.	79%
Voluntary reporting of errors or near misses results in improvements in structure and/or processes in my practice.	61%
My employer shares aggregate report data with me so that we can improve our practices.	43%

## ADDENDUM E

### Part 5: Pharmacy Personnel

For this section of the survey, respondents were asked to respond to the following questions:

1. All members of the team clearly understand their roles and responsibilities.
2. All members of the team work together to accomplish tasks.
3. All members of the team are sufficiently educated and/or trained to perform the tasks required of them.
4. All members of the team are engaged fully to the extent permitted by their scope.
5. I have the ability to make adjustments to personnel training, roles, and responsibilities based on the needs of my pharmacy.

Each item was rated on a five-point scale: 1 - Strongly agree; 2 - Somewhat agree; 3 - Neither agree nor disagree; 4 - Somewhat disagree; 5 - Strongly disagree. The findings in **Table 5.1** are reported as the proportion who answered **Somewhat or Strongly Disagree (% Disagree)** ranked from highest disagreement to lowest.

**Table 5.1 Proportion of Respondents who Disagree with Survey Items about Pharmacy Personnel (n = 3,965)** summarizes the findings and shows that more than 50% of respondents who answered these questions, disagreed with the statement “I have the ability to make adjustments to personnel training, roles, and responsibilities based on the needs of my pharmacy.” In addition, 41% disagreed with the statement “All members of the team are sufficiently educated and/or trained to perform the tasks required of them.”

Survey Item	% Disagree
I have the ability to make adjustments to personnel training, roles, and responsibilities based on the needs of my pharmacy.	53%
All members of the team are sufficiently educated and/or trained to perform the tasks required of them.	41%
All members of the team are engaged fully to the extent permitted by their scope.	39%
All members of the team clearly understand their roles and responsibilities.	27%
All members of the team work together to accomplish tasks.	20%

## ADDENDUM F

### Part 6: Contributors to Stress

For this section of the survey, respondents were asked to respond to the following based on their primary practice site (work environment): How likely is each of the following situations listed below to contribute to medication errors or near misses:

1. Interruptions from telephone calls.
2. Inadequate staffing.
3. Inadequately trained pharmacy personnel.
4. Completion of paperwork or reports.
5. Inability to practice pharmacy in a patient-focused manner.
6. Lack of constructive performance feedback.
7. Inconsistent enforcement of workplace policies.
8. Insurance issues.
9. Patient expectations or demands.
10. Non-pharmacy managers lack of understanding/knowledge of pharmacy practice regulations.
11. Harassment/bullying from manager or co-workers.
12. Harassment/bullying from patients/customers.
13. Lack of workplace safety.

Each item was rated on a five-point scale: 1 – Very Likely; 2 - Likely; 3 - Neutral; 4 - Unlikely; 5 – Very Unlikely. The findings in **Table 6.1** are reported as the proportion who answered **Somewhat or Very Likely (% Likely)** ranked from highest to lowest.

**Table 6.1 Proportion of Respondents who reported that each of the following situations listed below was “Likely” to contribute to medication errors or near misses (n = 3,849)** showed that 90% of respondents reported that it is likely that “interruptions from telephone calls” contributes to medication errors or near misses. Also, 88% reported that it is likely that “inadequate staffing” contributes to medication errors or near misses. It is noteworthy that “patient expectations or demands” and “harassment/bullying from patients/customers” reportedly are likely to contribute to medication errors or near misses (reported by 80% and 69%, respectively).

Survey Item	% Likely
Interruptions from telephone calls.	90%
Inadequate staffing.	88%
Patient expectations or demands.	80%
Inability to practice pharmacy in a patient-focused manner.	76%
Inadequately trained pharmacy personnel.	75%
Harassment/bullying from patients/customers.	69%
Insurance issues	65%
Non-pharmacy managers lack of understanding/knowledge of pharmacy practice regulations.	64%
Completion of paperwork or reports.	58%
Inconsistent enforcement of workplace policies.	50%
Lack of workplace safety.	45%
Lack of constructive performance feedback.	44%
Harassment/bullying from manager or co-workers.	36%



## ADDENDUM G

### Part 7: Written Responses to Open Ended Questions

Respondents were asked five open-ended questions:

1. In addition to factors listed in Section Five (Pharmacy Personnel), what other factors have positively impacted your ability to ensure patient safety?
2. In what ways has your employer positively impacted your ability to perform the tasks necessary for optimal care for your patients?
3. What other factors have negatively impacted your ability to ensure patient safety?
4. In what ways has your employer negatively impacted your ability to perform the tasks necessary for optimal care for your patients?
5. Any additional comments?

The following are examples of *verbatim* responses for each question.

*Note: A qualitative analysis for the text generated from the written responses will be included in the Final Report.*

#### ***1. In addition to factors listed in Section Five (Pharmacy Personnel), what other factors have positively impacted your ability to ensure patient safety?***

##### ***a. Workflow and Staffing***

- I have the authority to control workflow, training, and scheduling. But I don't have the budget. This forces me to move work from pharmacists to techs and maximize the ratio even when I think more oversight is ideal. We believe in cross-training, but payroll constraints mean that order entry is also customer service, and that pharmacists are continually moving across areas, which increases the risk for errors. Managers put patients first, which means stepping into workflow and handling management tasks on our own, uncompensated time. 50-60 hours/week was my norm all of 2020.
- The ability to innovate creative solutions to problems that have resulted in errors
- Removal of non-clinical work in queues to be completed by pharmacists.
- Pharmacists are only to focus on checking prescriptions, do not answer phones or do data entry, billing, etc.
- I have been in the store location where I am for over five years. During that time, I have been able to get to know my patients very well. Knowing them and their medical needs means that I am able to take better care of them and keep them safe and healthy.
- Double-checks and redundancies built into current processes
- Employing a system of checks where NOTHING leaves the pharmacy without review by 2-3 different people. Maximizing technician responsibility to anything they can legally do, while minimizing
- Provided sufficient pharmacist overlap and supportive personnel.
- Having checkpoints and good computer programs have helped decrease errors
- Constant short staffing has led to some positive, creative changes in our workflow. Not perfect but are good improvements despite staffing issues.
- Daily safety huddle
- Seeing the patients smile when you give them extra time to answer all the questions they have .
- I am fortunate to work in a place that values patient safety and care. We have quality employees and adequate staff for our workload.

##### ***b. Autonomy of Pharmacy Personnel***

- Having control over policies and able to make decisions quickly and implement them.
- Non punitive actions when make mistakes. Just fix them and figure out root analysis so don't repeat
- Having adequate time to get to know my patients

*c. Coworkers Relationships; Employee/Employer Relationship; Relationship with other HC practitioners*

- Pharmacy teamwork and communication is excellent at my workplace.
- Buy-in from physicians as to pharmacy's role in the hospital. They value our input.
- Good working relationship with store director and district leader
- Openness about defects and patient safety.
- My pharmacy support staff often goes above and beyond to reinforce the importance of requesting clarification to ensure patient safety. Knowing that they will have my back when customers are angry or frustrated that their prescriptions aren't ready now helps.
- My pharmacist in charge, pharmacy manager. Without her dedication and efforts, we would be so far behind. Her staying late and working back-to-back open to close shifts.
- The professionalism of colleagues (pharmacists and technicians) who work together daily to provide patients with the best care.

*d. Personal Values*

- My own desire to do the right and safe processes
- My own personal dedication
- My refusal to cut corners
- My efforts to educate myself as much as possible off the clock. My empathy and devotion for patient care and a type A personality.
- I am involved in my local, state, and national pharmacy associations, complete many hours of CE per year and try to keep up on all the emails coming out which I feel makes me a better pharmacist because I am current in my knowledge to prevent harm to patients.
- My experience in personal life and length of service have allowed me the mindset that overall I am responsible to make the judgement call on how much pressure to allow a patient to put on me to rush. Although communicating with patient's and haste is still significantly important but the rush and high "fast food" pharmacy that so many expect no longer drives me into mistakes. Taking that overreaching pressure off has significantly improved patient safety.

*e. Educational/Professional Development Opportunities*

- Excellent training and availability of resources and continuing education material.
- My work pays for CEs, Conferences, classes so we can be the best we can be designing our own workflow and streamlining tasks.
- Employer encourages pharmacists to always seek further education, and pays to have a good, educated team.

**2. In what ways has your employer positively impacted your ability to perform the tasks necessary for optimal care for your patients?**

*a. Time and Staffing*

- Adequate funding to be staffed, create patient care programs, and advocating for donations to our 340B FQHC.
- Each individual has time to focus on task at hand, each person is able to perform at one workflow area until task is completed.
- We have a central fill facility that helps fill scripts
- Dedicated immunizer for some shifts
- Not being forced by management to work faster
- Allowed unlimited tech and clerk hours
- One time when they cut vaccine and testing from a store to allow it to catch up.
- They have shut off the phones for 1 hour after opening for vaccines.
- Permission was given to limit vaccinations without an appointment (this was very delayed, but much needed and appreciated)
- Creation of a good online immunization scheduler, though it is vastly underutilized by elderly patients.

- My store manager has compensated me for the hours I work instead of the hours I am scheduled. I am salaried, but because of this, I get paid hourly. This has incentivized me to work later to clean things up daily.
- Allowed 2 hr. overlap every other week, helps the 3 pharmacists have time to communicate but need more time like this.
- My direct boss is very supportive of changes I make to my unit
- Created more mid-shift RPh's.
- They give me the staffing that I need, my team needs. They are always available to help with any questions. They have also fostered a true team environment to the point that I truly consider my teammates to be my friends. We rely on each other and, most importantly, we trust each other.
- Constant encouragement and realizing who is stressed so they can help out or have someone take over if needed
- New roles take busy-work off of the pharmacist allowing us to be more patient focused.
- By allowing us to close the pharmacy at 7pm versus 9pm during 2020. It allowed more staff overlap to concentrate on prescriptions, drug orders, and pharmacy maintenance. This may seem odd but having more employees there at the same time instead of spread thin made a world of difference. We were more efficient and moral was better.
- My employer has split the care/customer focused team from the fulfillment team. The customer team can focus on service and contacting doctors, insurance, etc. while the fulfillment team can focus on filling, verifying, and packing prescriptions without interruption.
- We have 2-3 pharmacists on staff at all times. Workload is heavier on days we have more pharmacists. When we needed another technician to handle the work, we hired one. My employer will not sacrifice safety for any reason. If we feel overwhelmed we make a plan to get everything done. We have daily huddles to ensure good communication and we have tasks assigned to specific people to ensure that work gets done.

*b. Autonomy/Communication*

- Freedom to make my own decisions
- My pharmacy manager is kind enough to explain and work through problems instead of yelling and blaming.
- Listens to constructive feedback
- Certain members of management are willing to listen and advocate for us.
- My employer is always open to my feedback and has the luxury of making quick changes in the independently owned community setting.
- There is a strong foundation in organizational leadership strategy. We are focused on building a culture that is conducive to positive patient outcomes and I am very lucky to work where I do.
- My company does NOT enforce performance quotas to be met

*c. Training and Development*

- My employer has FINALLY provided training to technicians to assist with immunizations. Given the volume of COVID vaccines that pass through the pharmacy each day, having trained individuals who can carry the load is a blessing. When more folks are practicing at the top of their license, we can better care for patients.
- Lots of resources company wide to perform tasks and prepare for NAPLEX and MPJE, Desire to keep current staff onboard and engaged, Recent pay raise for techs and interns as well as pay restructure for pharmacists.
- My facility has a great deal of policies and clinical resources available to all pharmacy staff and providers. These resources are updated by clinical pharmacy staff.
- Provides an education stipend to spend on ce or certifications

### **3. What other factors have negatively impacted your ability to ensure patient safety?**

#### **a. Patient/Customer Demands**

- The demand for instant gratification from patients and pharmacy staff alike are a burden. Multiple requests from multiple people at the same time makes it difficult to focus on critical tasks.
- Rude and lacking empathy patients yelling and honking and huffing constantly not seeing that we fill up close to 700 prescriptions a day with Covid vaccines and Covid testing with a small staff because we can't keep hires because the stress in the beginning shifts ruins it for them

#### **b. Metrics and Performance Policies**

- The constant need to complete patient outreach calls to further improve metrics that increase scripts to budget, constantly understaffed and phone interruptions.
- There is a HUGE focus on pharmacy metrics (orders) that they are using to benchmark our productivity and it is preventing us from being able to hire pharmacists and implement new quality and safety services
- Unreasonable corporate metrics; punishment for doing the right thing, even when the patient isn't happy; rewarding those patients who bully us the most; thinking that patients and customers are the same thing; refusal to disallow weapons on premises.
- Having to rush through clinical decisions in order to meet metrics of having prescriptions verified on time.
- Increasing tasks and duties while on-boarding process of new staff delayed

#### **c. Time and Staffing**

- Inability to get quality tech staffing. RN and MF expectations regarding last minute med changes. Poor transition of care.
- I work in a chain pharmacy with 1 pharmacist and 1 tech with minimal tech overlap. We fill anywhere from 250 to 300+ prescriptions on a given weekday. The pharmacists can't take breaks or leave the pharmacy or more than 5 minutes, we don't have much help when we have customers are steadily dropping off new scripts, e-scripts are being sent, phones ringing off the hook, and lines in drive thru and in store. We can't go over hours, but we aren't adequately staffed to complete normal clinical/filling duties, and we're expected to administer vaccines and COVID antibody tests.
- Not enough time or overlap for pharmacist to safely do tasks
- Lack of sleep, breaks, and the ability to sit. We're constantly running around, working long and late hours just to turn around and repeat. It's very exhausting.
- COVID. It put us in a position where the entire pharmacy had to quarantine. Also down staff for multiple weeks in a row. Now we are expected to work the vaccines into our regular workflow with no additional help. I'm a tech supposed to give shots draw up the shots and hunt people down to fill appointment slots so we don't waste vaccine, I still have to type scripts, count scripts, answer the phone, and be the cashier. No extra help given to do this. My pharmacist is still running around trying to do the DUR checks, counsel, product verify, check my typing, give the other shots, answer all the otc questions, talk on the phone to clarify scripts, do the transfers, and give the other shots, 2 people CANNOT do all of this, but one day a week we have just 2. Other days a week only 3, that's not much better. Can't get 250-300 scripts filled, they just keep compiling

#### **d. Insurance/Payment**

- Only reimbursement for diabetes education is very limited do to being a pharmacist. I may have to discontinue this service. Hard to work and serve for no pay. Low reimbursements prevent my pharmacy from having extra moneys to pay for these few services, that insurance should pay for.
- Insurance denials and poor reimbursement; Increased demand of desktop audits and paperwork with less reimbursement

#### *e. Impacting Patient Safety*

- A cumbersome patient safety reporting tool that is only accessible to pharmacists, so technicians/assistants either have to fill out a manual form to give to us or (more likely) not report the error.
- Criminal understaffing and lack of support from Board of Pharmacy to effectively regulate the practice of pharmacy to ensure safe staffing for our patients.
- There has been a lack of care for employees mental health which in turn trickles down and affects patient care. I used to love my job but now I find myself counting down the days til my next day off. This change did not happen overnight. We cannot blame this on COVID. This is 10 years in the making. We have to get back to a point where we are putting safety first. Where we are acting and thinking like clinicians. I think I speak for all pharmacists, we need help. Things have gotten really bad. I'm hopeful that something good will come of this survey. I still love the practice of pharmacy and I love helping people, that is why I'm still hopeful that things can change

#### *f. Employee/Management Relationships*

- Negative, abusive, and uncaring pharmacy supervisors
- Between COVID tests, COVID vaccines, managerial tasks and 500+ scripts per day with zero pharmacist overlap and short on technician help, the culture of our company right now has become to just "push through it", "it's almost over"

### **4. In what ways has your employer negatively impacted your ability to perform the tasks necessary for optimal care for your patients?**

#### *a. Workload and Staffing*

- Imposing unrealistic workload by increasing Covid vaccines while we try to maintain good and safe service to our customers.
- Employers are solely focused on the bottom line. Eliminating technician hours and pushing salaried pharmacists to work 60-80 hours weekly without paying overtime. The money is not what matters, but the detriment to patient care and wellbeing of the pharmacist is evident for every pharmacy you walk into. Putting more of the compliance and regulatory risk on the employer rather than the individual pharmacist in order to change the system.
- Cutting support staff hours well below the minimum necessary to properly/safely staff the pharmacy
- Pharmacist often working alone with no technician leading to higher risk of errors with no one double checking their work/no second set of eyes on the prescriptions
- Adding additional tasks that need to be completed without adding additional labor hours.
- Adding more technicians than we have terminals. There is a limit to how much I can focus on and still think. Adding more techs and clerks is NOT the answer. We have to listen and watch everything they do and say.
- Understaffing, workplace retaliation, and metrics that do not have any reflection on work actually benefiting patient care.
- Always referring to metrics for everything and just not providing tangible help to all of us in the pharmacy workplace. Even my coworkers up in the front of the store are understaffed. Typically, on the weekend it is only 1 staff on register and 1 manager on the floor. When we call for help in the pharmacy they cannot help because they are short on people also. This is a safety hazard that promotes theft and lowers quality of patient's care and experience.
- NOT ENOUGH TECH SUPPORT HOURS. It is absurd that we are forced to run drive -thrus, etc. without adequate tech support.

#### *b. Metrics*

- Increased metrics forcing speed over quality/safety
- Placing more emphasis on numbers, quotas, busy work that does NOT affect patient care takes away from our primary goal, which should be to optimally BE THERE FOR OUR PATIENTS!

- Quotas always increase. This year our region's flu shot goal is 500% larger than last year's numbers. It's ridiculous.

#### *c. Employer Policies/Employee Well-being*

- Supervisors or District Managers who are NOT pharmacists placed in charge of evaluating our performance strictly based on numbers and quotas rather than seeing what we actually do and how we take care of and genuinely care for our patients.
- Not caring that employees are at their breaking points mentally and emotionally while still asking for us to do more.
- Conflicting messaging -- go as slow as you need to to avoid errors/get the prescriptions done and out faster, you slow down the discharge process
- Insufficient training of new staff, selective enforcement of rules, bad communication
- Not addressing poor performing pharmacists and transferring their workload to other pharmacists who are capable. That leads to very poor workplace morale and lousy culture.
- Incomplete or erroneous task expectations not being corrected at corporate level but instead expected to be fixed by employees, thereby increasing workload yet again; “forced” to take lunch break, but in reality, unable to leave the pharmacy for said lunch break because no RPh overlap and the scheduling of covid vaccines 2 every 10 minutes with no break
- Turning a deaf ear to what the pharmacist regards as safe and adequate staffing. The DOP is totally unaware that periodic visits to the facilities is both a responsibility and possibly may result in having a better understanding of the unsafe staffing issue. Haven't seen my DOP in two years. She delegates staff concerns to the assistant DOP.
- Cynicism in program implementation such that anyone can technically be fired.

### **5. Any additional comments?**

#### *a. Value of Pharmacy Personnel*

- Our industry now has a “if you don't like it, you know where the door is” culture and providing excellent patient care is no longer the measure of a valued pharmacist.
- Management expects an assembly line and you aren't given time to hardly call a doctor or insurance because you're told to wait for the right time when it's not as busy, even if the patient is waiting. That's not right! It's also not right to be expected to stay late after your shifts without pay because you feel obligated to make the next day not as difficult because there's no one to help support you. We need to hire at a higher pay rate because it's a joke what we start new hires out at and then wonder why we don't get recruits.
- Pharmacist have turned from a patient centered profession to running a deli counter with a ticket machine...NEXT IN LINE!
- The profession is dying because we've been turned into a commodity...
- If something doesn't change pharmacy errors will probably go up 100%
- My employer does not have patient safety in mind. Any and all complaints I've ever made to my employer or the BOP have fallen on deaf ears.
- It's all about the dollars and patient care is not a concern to corporate unless they write a negative review online.
- Certified pharmacy techs are paid as cashier's but are expected to prevent errors, assist in MTM, prepare meds, troubleshoot, call Drs offices...all for just above minimum wage. It is a nightmare job.
- Community pharmacists are the public face of pharmacy with ordinary people. We need to give them the support of our profession. Most of us are front-facing on-demand public practitioners. We aren't supported by our employers because they aren't paid enough for us to do our job.
- The current model in retail pharmacy is unsustainable. Young pharmacists are burning out and older pharmacists are retiring early. It is most definitely a public safety issue.

*b. Public Perception*

- Lack of understanding of the patient population on what a pharmacy does, how insurance works, and expecting us to operate like a fast-food restaurant also contributes to even more stress. Possibly adding insurance/medical training to high school classes might help!
- Pharmacy has become equivalent to fast food service to many people. We do so much and yet get no recognition. We are expected to do so much with so little. I hope it changes soon. Please!

*c. Payment Issues*

- There must be accountability for insurance companies! Then there should be swift resolve and financial ramifications if the situation is not resolved. They are negatively impacting patient safety, their health, and their lives. The tables should turn and the government should force the situation. The pharmacy should always be reimbursed what they paid for medications based on that transaction not based off national averages. I have no idea where our state funded welfare programs get their pricing, but it typically is way below our actual cost! We shouldn't have to make money on only some of the prescriptions we fill each day nor should we have to painstakingly "shop around" the country to try to find the cheapest meds. This takes away from patient safety. Pharmacies should make money on each prescription they fill PERIOD. The cost of printer ink, PBM charges, Insurance company take backs, etc. No wonder so many privately owned pharmacies have gone out of business.
- The insurance companies are ruining healthcare in America! They dictate what will happen and how much they will pay for, fighting by repeatedly rejected claims until you give up and write off the costs
- There are many insurance issues and reimbursement issues within the pharmacy world, many directly caused by things like low or negative reimbursements from third parties. It's making it more difficult for independents to keep up and stay in business. We have adequate staffing for now, but that may change with how our reimbursements are going.

*c. Survey Results*

- I am grateful for this survey and the work of the board. I hope this small action of completing this can help shed light on the work conditions we face daily and ultimately result in change. We really need change. Thank you
- The results of this survey need to be highly visible to the public and law makers.
- I have been in pharmacy for almost 20 years, I do love patient care. I am so sad to see how poorly our profession has been reduced to. Here's to hoping surveys like these make a difference!
- Is this really going to help things change? Most surveys get looked at and then nothing really happens.



## ADDENDUM H

### References

*Note: Listed in order of appearance in report.*

Stewart JE, Purohit AA. Intrinsic and extrinsic job satisfaction characteristics in pharmacy. *Contemporary Pharm Prac.* 1980;3: 258-263.

Ciaccio EA, Jang R, Caiola SM. et al. Well-being: A North Carolina study. *American Pharmacy.* 1982; NS22:244-246.

Wolfgang AP, Kirk KW, Sheperd MD. Job stress in pharmacy practice: Implications for managers. *American Pharmacy* NS25: 46-49.

Schommer JC, Gaither CA, Goode JVK, Owen JA, Scime G, Skelton JB, Cernasev A, Hillman L. Pharmacist and student pharmacist views of professional and personal wellbeing and resilience. *Journal of the American Pharmacists Association.* 2020;60:47-56.

Doucette WR, Witry WJ, Arya V, Bakken BK, Gaither CA, Kreling DH, Mott DA, Schommer JC. Final report of the 2019 national pharmacist workforce survey. [https://www.aacp.org/sites/default/files/2020-03/2019\\_NPWS\\_Final\\_Report.pdf](https://www.aacp.org/sites/default/files/2020-03/2019_NPWS_Final_Report.pdf). January 15, 2020.

Terlap S. Omicron Surge Is Just Starting and America's Pharmacists Are Already Burned Out. *Wall Street Journal.* December 20, 2021. [https://www.wsj.com/articles/omicron-surge-is-just-starting-and-americas-pharmacists-are-already-burned-out-11640008870?mod=Searchresults\\_pos...](https://www.wsj.com/articles/omicron-surge-is-just-starting-and-americas-pharmacists-are-already-burned-out-11640008870?mod=Searchresults_pos...)

Bakken BK, Winn AN. Clinician burnout during the COVID-19 pandemic before vaccine administration. *J Am Pharm Assoc.* 2021; 61: e71-e77.

Haugtvedt C, Lewis NJW, Gaither CA, Hussar DA, Kostrzewa A, Marwitz KK, Ranelli P, Selkow L, Sinha S, Weis L, Wright R. Final report of the pharmacy section task force on system-mediated medication safety issues. *American Public Health Association*, October 2021.

Nau DP, Kier, KL The decline in graduating student pharmacist positivity for the profession of pharmacy. *J Am Pharm Assoc.* in press, available on-line October 2021. <https://www.sciencedirect.com/science/article/pii/S1544319121004325?via%3Dihub>.