

To obtain a real-time status of pharmacy resources during the current COVID-19 pandemic, ASHP is surveying members of the Section of Pharmacy Practice Leaders on a biweekly basis. The surveys are designed to assess the status of pharmacy resources, including personal protective equipment (PPE) and critical drug supplies. The surveys are informal and nonscientific and are not designed for statistical analysis. Questions about other impacted pharmacy resources are added as trends develop.

The following includes results from the fourth biweekly survey (Round 4), which included 258 respondents and contained 14 questions that were fielded for three days. When applicable, the data are compared to the first biweekly survey (Round 1) which was deployed from March 9-15, 2020 and had 403 responses, the second biweekly survey (Round 2) which was deployed from March 23-26, 2020 and had 382 respondents, and the third biweekly survey (Round 3) which was deployed from April 6-9, 2020 and had 304 respondents.

KEY FINDINGS

- Availability of masks is slowly improving since the first biweekly survey (Round 1).
- The number of respondents reporting a surge in COVID-19 ICU patients (defined as an ICU census comprised of at least half COVID-19 patients) declined from Round 3 to Round 4.
 - 43% in Round 3
 - 40% in Round 4
- Inventories of critical care drugs have improved from Round 3 to Round 4.
 - Neuromuscular blockers (cisatracurium, atracurium, and vecuronium) were the most frequent drugs in short supply.
 - Fentanyl, dialysis replacement solutions, and midazolam were also in short supply.
- Two-thirds of respondents have reduced staffing during the pandemic.
 - The most common mechanisms of decreased staffing were reduced hours (79%), not backfilling vacant positions (49%), staff furloughs (31%), and temporary reductions in positions (31%).
- Eighty percent of respondents indicated an increase in utilization of remote and telehealth technology in response to the pandemic.
 - The most common increase in use of technology was in remote work for patient care activities (60%) and non-patient-care activities (62%), and in utilization of telehealth technologies for outpatient visits (48%) and inpatient visits (32%).

ROUND 4 PARTICIPANTS:

- There were 258 respondents representing hospitals of various sizes:
 - Small hospitals (< 200 beds): 22.1%
 - Medium hospitals (200-500 beds): 32.9%
 - Large hospitals (> 500 beds): 42.2%
 - Other (not a hospital setting): 2.7%
- The highest number of Round 4 respondents were from California (21), Ohio (20), and Texas (19).

ROUND 4 RESULTS:

Current availability of medical masks

Major disruption - often going without masks

- Surgical-type masks: 2%
- N-95 respirators: 9%

Moderate disruption - use of an alternative product or vendor with mixed or poor results

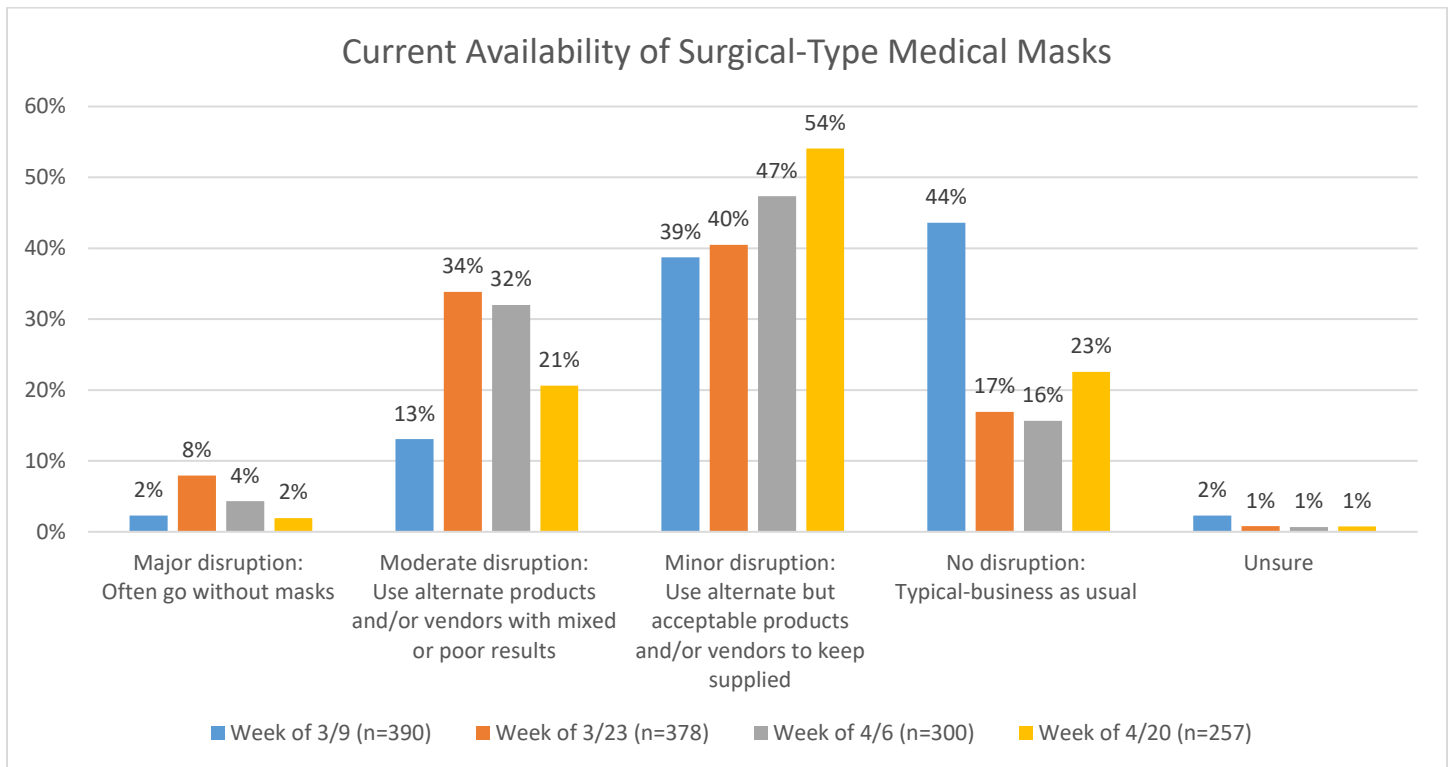
- Surgical-type masks: 21%
- N-95 respirators: 31%

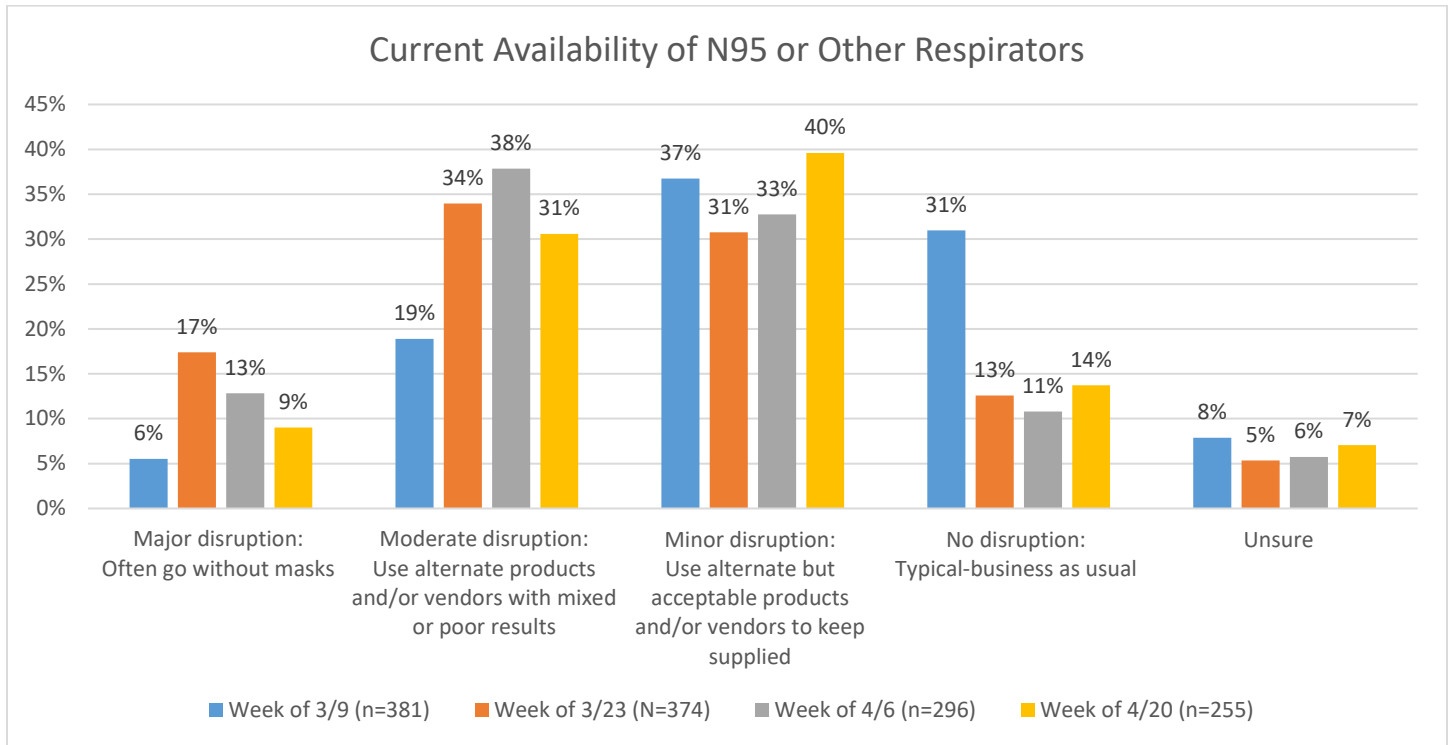
Minor disruption - use of an acceptable alternative product or vendor

- Surgical-type masks: 54%
- N-95 respirators: 40%

No disruption

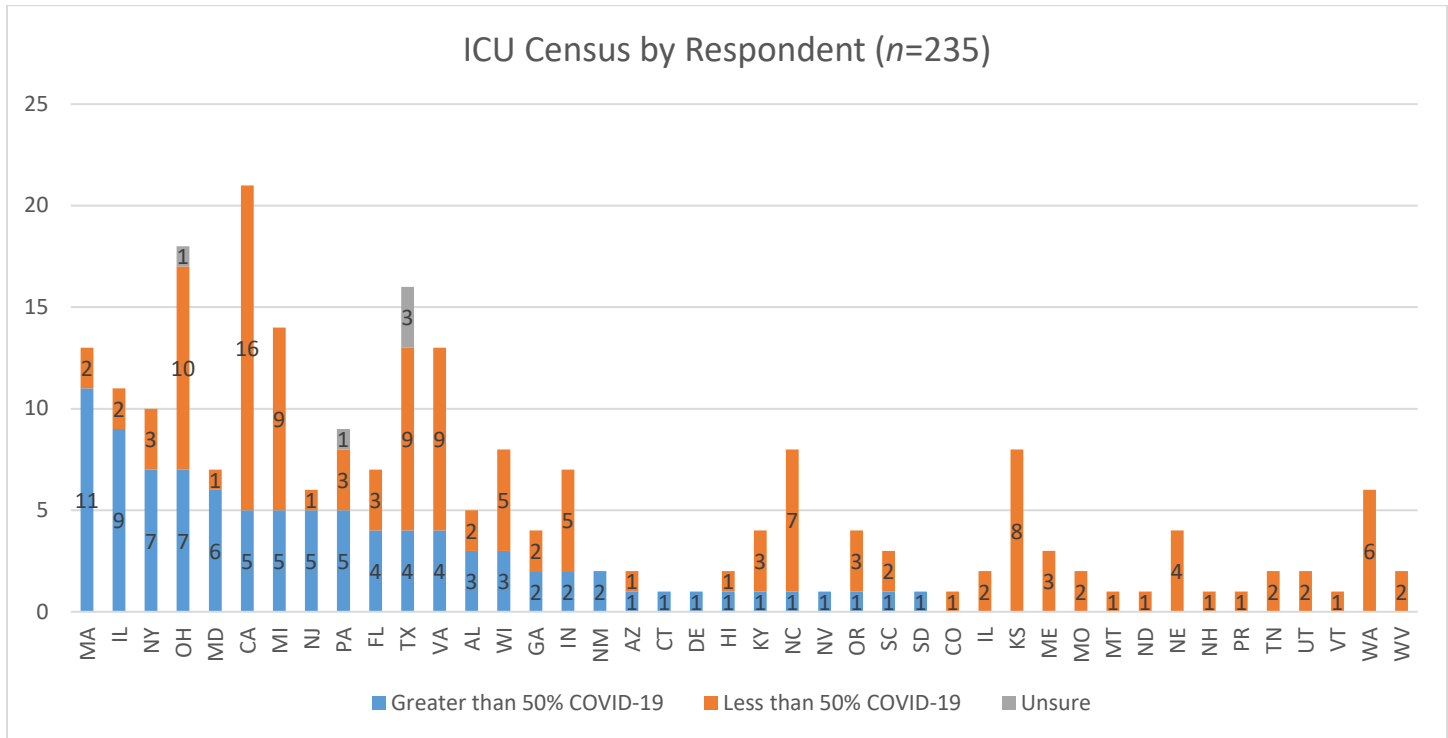
- Surgical-type masks: 23%
- N-95 respirators: 14%





ICU Census and Inventory of Critical Medications

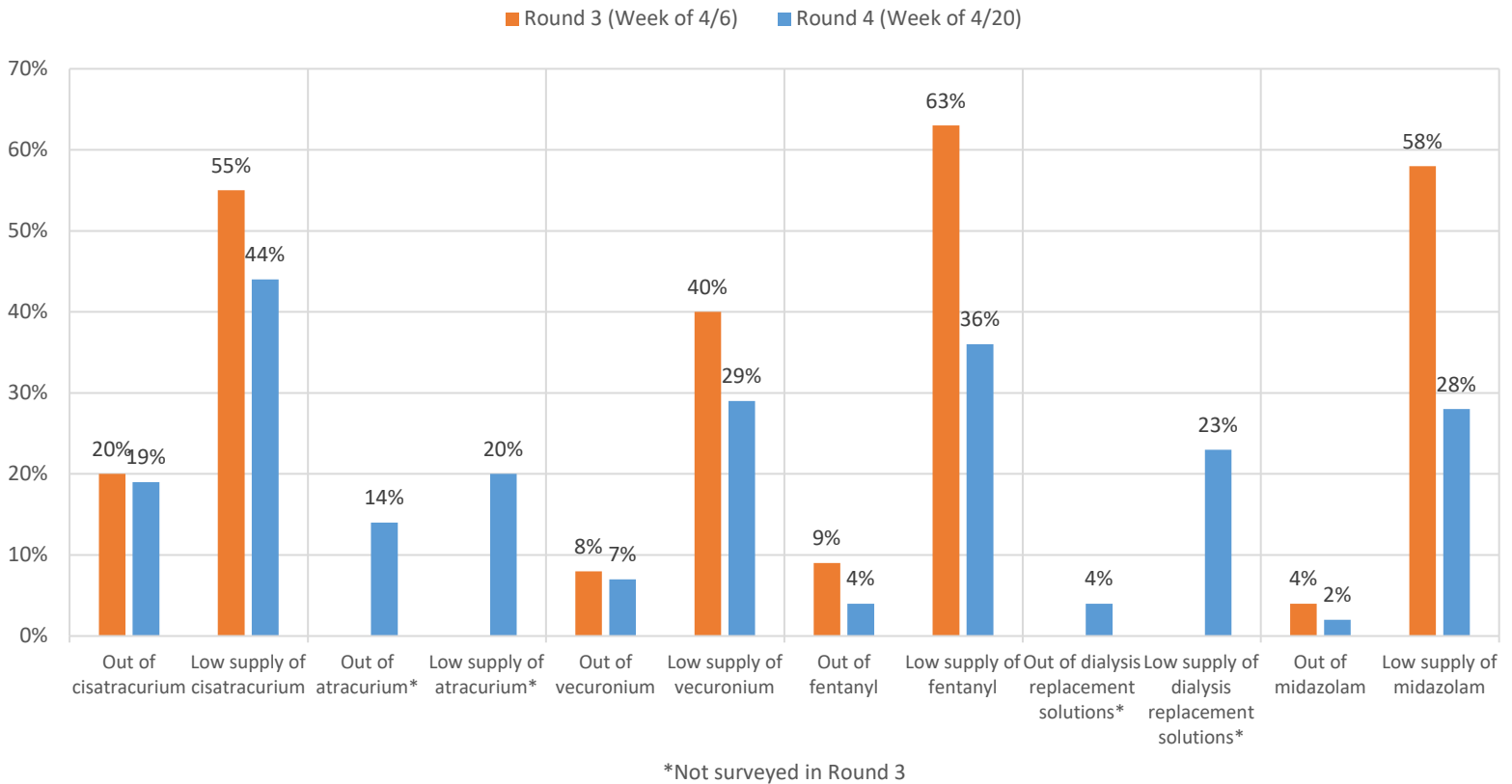
- Of the 235 respondents with an ICU, 40% indicated greater than half of their ICU census consisted of COVID-19 patients (down from 43% in Round 3), 58% indicated less than half of their ICU had COVID-19 patients (up from 55% in Round 3), and 2% were unsure (no change from Round 3).



- Among respondents with an ICU at least half full of COVID-19 patients, the ICU drugs with the most critical current inventory status were:
 - Cisatracurium (19% with < 1 day supply, 44% with < 7 day supply)
 - Atracurium (14% with < 1 day supply, 20% with < 7 day supply)
 - Vecuronium (7% with < 1 day supply, 29% with < 7 day supply)
 - Fentanyl (4% with < 1 day supply, 36% with < 7 day supply)
 - Dialysis replacement solutions (4% with < 1 day supply, 23% with < 7 day supply)
 - Midazolam (2% with < 1 day supply, 28% with < 7 day supply)
- Inventory supplies improved from Round 3 to Round 4 for all drugs that were included in both surveys



Inventory Status of select ICU Drugs in Hospitals with ICU census > 50% COVID-19

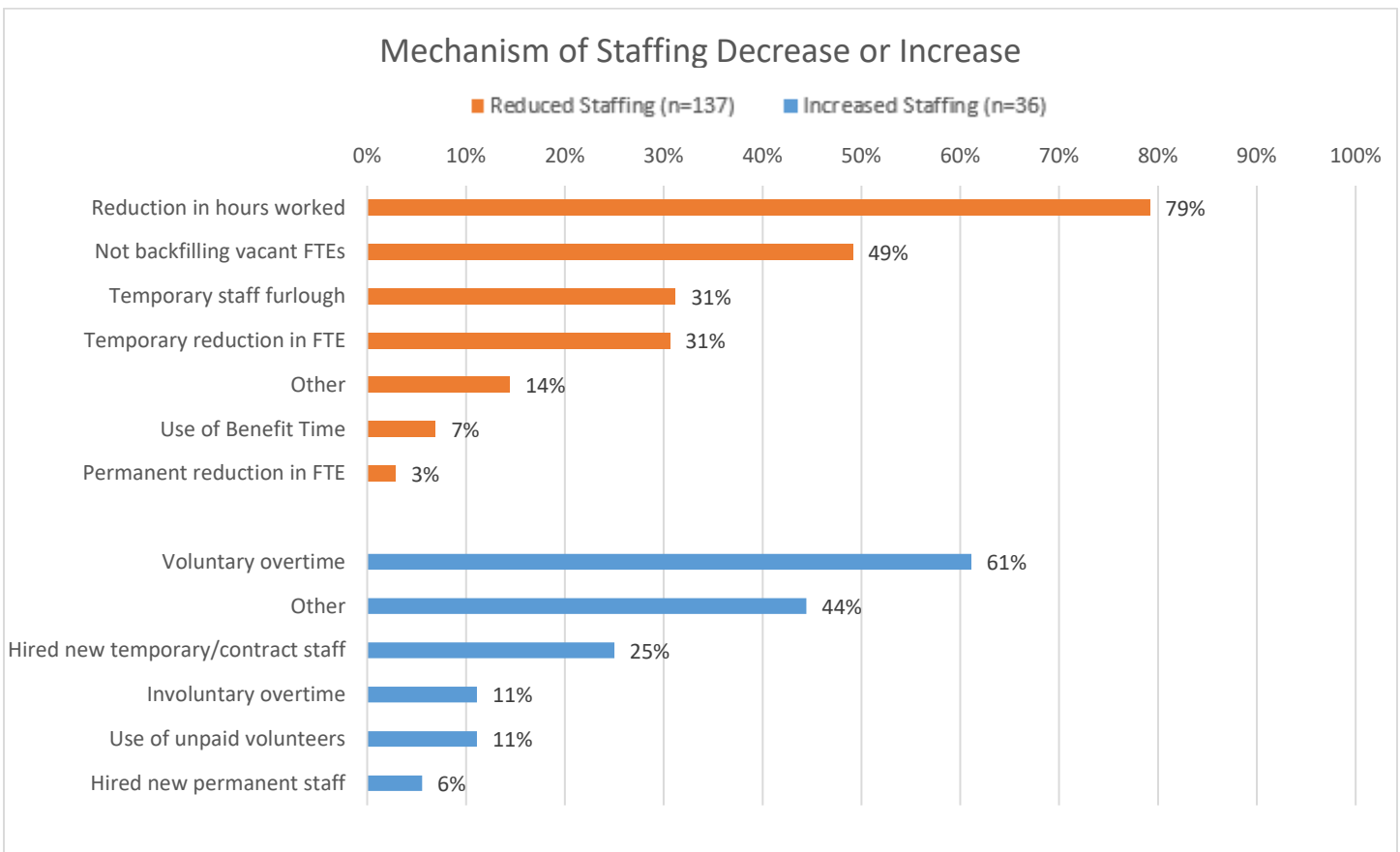
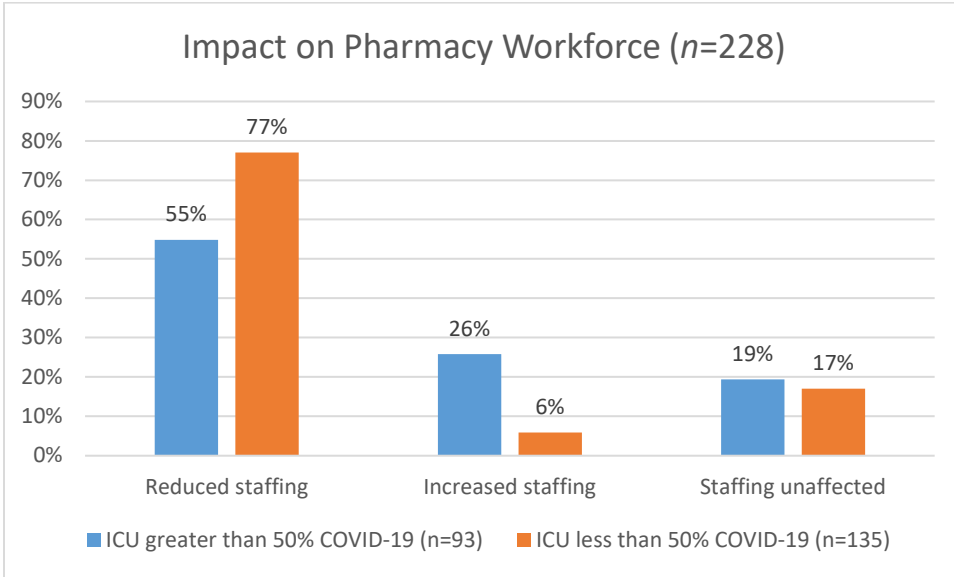


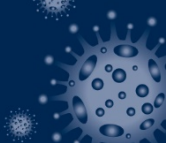
Impact on Pharmacy Workforce

Overall department staffing in response to the COVID-19 pandemic (*n* = 260)

- Reduced staffing: 173 (66.5%)
- Increased staffing: 36 (13.8%)
- Staffing unaffected: 51 (19.6%)

Department staffing in response to the COVID-19 pandemic stratified by COVID-19 surge (defined as COVID-19 patients representing greater than 50% of ICU census) (*n* = 228)





Department Utilization of Remote Staffing and Telehealth Technologies (n=205)	
Increased remote work for non-patient-care activities (e.g., administrators or purchasing staff working from home)	62%
Increased remote work for patient-care activities (e.g., order verification, medication assistance programs)	60%
Increased use of telehealth visits for outpatients (e.g., follow-up visits)	48%
Increased use of telehealth visits for inpatients (e.g., medication histories, discharge counseling)	32%
Increased access to specialist pharmacists (e.g., critical care) through remote consult visits	21%
No change in utilization of telehealth or remote staffing technologies	20%
Increased remote supervision or verification of technician activities (e.g., checking sterile compounding accuracy)	6%

ABOUT ASHP

ASHP represents pharmacists who serve as patient care providers in acute and ambulatory settings. The organization’s nearly 55,000 members include pharmacists, student pharmacists, and pharmacy technicians. For more than 75 years, ASHP has been at the forefront of efforts to improve medication use and enhance patient safety. Visit ASHP's [COVID-19 Resource Center](#) for helpful information about COVID-19.

For more information about the survey findings, please contact ASHP’s Center for Medication Safety and Quality at quality@ashp.org.