Introduction

ASHP conducted this survey to assess the impact of the current economy on pharmacy services in hospitals and health systems. Hospitals and health systems are not immune to the impact of the current economic conditions. A survey conducted by the American Hospital Association (AHA) shows dire trends in the payer mix, number of uninsured, bond ratings, and other financial indicators of our nation’s hospitals and health systems. These trends include difficulty in obtaining capital (making it challenging and expensive for hospitals to finance facility and technology needs), lower admissions and elective procedures, rising unemployment leading to increased uncompensated care, more physicians seeking financial support from hospitals, and stresses on state and federal budgets that could result in decreases in Medicaid and Medicare payments.

Key Findings

- Thirty-seven percent of respondents have had their staffing budgets reduced in the last six months.
- Ten percent of respondents have laid off personnel and 22% of respondents have frozen vacant positions.
- Sixty-six percent of respondents have been required to reduce their drug budgets.
- More than half of respondents are renegotiating leases, distributor agreements, or vendor agreements as a method to manage expenses.
- In the past six months, 29% of respondents reported their organizations have engaged a consultant to review aspects of the pharmacy.
- Sixty percent of respondents have been given oversight for organizational projects to identify and obtain cost reductions.
- Fifty-five percent of respondents are renegotiating leases, distributor agreements, or vendor agreements as a method to manage expenses.
- In the past six months, 29% of respondents reported their organizations have engaged a consultant to review aspects of the pharmacy.
- Among respondents that have student rotations, 16% reported that they will reduce the number of rotations.
- Among respondents that have PGY1 or PGY2 residencies, 7% and 4%, respectively, have had reductions or will have reductions in number of positions.
- Seventy percent of the respondents have had their travel and meeting registration budgets reduced.
The number of unemployed persons increased by 851,000 to 12.5 million in February 2009, and the unemployment rate rose to 8.1%. Over the past 12 months, the number of unemployed persons has increased by about 5 million, with the unemployment rate rising from 4.8% to 8.1%. The Kaiser Family Foundation estimates that for each percentage-point increase in unemployment, an additional 1.1 million people become uninsured, states have a decrease of 3-4% in revenues, and an additional 1 million persons become eligible for Medicaid and SCHIP programs.

By studying these trends in unemployment, ability to access capital, and the reports coming from AHA, ASHP through its Section of Pharmacy Practice Managers (SPPM) recognized the need to collect information on how the economy was affecting hospital and health-system pharmacy departments and the services they provide. A survey was designed to collect information on payroll and employment, cost and capital investment management, pharmacy services, and education and development. In addition, strategies that respondents have used to manage their pharmacy departments in these turbulent conditions were collected to share with ASHP members.

**Methods**

The survey was distributed via an email invitation, linking participants to an online survey instrument. It was sent to the 3,153 ASHP members identified as department directors and was launched March 10, 2009, and closed March 21, 2009 (two reminder emails were sent to nonresponders). There were 541 responses received yielding a response rate of 17% with a margin of error of + 4% at the 95% confidence level (the margin of error is higher when data are disaggregated).

In addition, the survey resulted in a good mix of respondents according to bed size and region of the United States. The percentages of hospitals by bed size are listed in Table 1.

**Impact on Pharmacist Roles and Staffing Levels**

The survey asked respondents a series of questions related to their staffing and payroll budgets, methods that were used to manage reductions in budgets, impact on how pharmacists were utilized, and any changes in pharmacy services. The impact on staffing and payroll budget was variable, with 56% reporting their budgets remained the same, 37% reporting their budgets decreased, and 8% reporting their budgets increased. Pharmacies in larger hospitals were more likely to be experiencing budget cuts in staffing and payroll than smaller hospitals. The percent reporting budget cuts ranged from 21% in hospitals with less than 100 beds to 47% in hospitals with more than 300 beds. There was no measurable difference by region of the country.

Respondents experiencing a decrease in their staffing and payroll budget reported a number of strategies in managing these decreases. The strategies are listed in Table 2.

![Table 1. Percentages of Respondents by Bed Size](image)

<table>
<thead>
<tr>
<th>Reported Bed Size</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>6%</td>
</tr>
<tr>
<td>Less than 100</td>
<td>19%</td>
</tr>
<tr>
<td>100 – 199 beds</td>
<td>15%</td>
</tr>
<tr>
<td>200 – 299 beds</td>
<td>19%</td>
</tr>
<tr>
<td>300 – 399 beds</td>
<td>12%</td>
</tr>
<tr>
<td>400 or more beds</td>
<td>29%</td>
</tr>
</tbody>
</table>

Of the two-thirds of respondents who indicated that they reduced budgeted FTE’s, 89% froze vacant positions and 40% had reductions in force. Nearly one-third (32%) implemented...
both. This translates to 10% of all respondents indicating they laid off pharmacy staff and 22% indicating they have frozen vacant positions.

The survey also asked respondents about the changes in the roles of the pharmacist and the services that their pharmacies provided. It was reported that 23% of the respondents have experienced expanded leadership opportunities resulting from leadership voids in other departments and 19% have pharmacy staff that have assumed additional roles to support vacancies in other departments. In addition, 60% of respondents have been given oversight for organizational projects to identify and obtain cost reductions, and 40% have been given approval to implement cost reduction strategies not approved in the past.

The responses to the survey indicate that there has been shifting roles of pharmacists. It was reported that 19% of clinical pharmacy staff and 33% of management positions have been shifted to assume more hours in regular staffing roles or more distributive roles.

About one third (33%) of respondents noted that they have or will be reassessing staff ratios of pharmacists to non-pharmacists.

As an indicator of what might be occurring with employment trends, the survey asked the respondents about their vacancy rates and the number of applications they have been receiving over the last six months. The results of these questions are in Table 3.

### Table 3. Vacancy and Pharmacist Applicant Rates

<table>
<thead>
<tr>
<th>Question</th>
<th>Decreased</th>
<th>Remained about the Same</th>
<th>Increased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant positions for which you are recruiting</td>
<td>37%</td>
<td>54%</td>
<td>9%</td>
</tr>
<tr>
<td>Applications from pharmacists seeking employment</td>
<td>8%</td>
<td>58%</td>
<td>34%</td>
</tr>
</tbody>
</table>

**Impact on Drug Expenditures and Capital Investments**

In the current economic environment, hospitals and health-systems (1) have lower ability to access capital, (2) are performing fewer elective procedures, and (3) are experiencing changes in payer mix that reduce operating margin. More than half of U.S. hospitals are reconsidering or postponing investment in facilities or equipment. With increases in variable debt interest payments, hospitals are working harder to ensure adequate cash reserves to fund operations. These factors have caused many pharmacy departments to reduce drug expenditures, reassess contracts, and rethink capital investments. Sixty-six percent of this survey’s respondents have been asked to reduce their drug expenditures as a result of their hospital’s financial position over the past six months. The ranges of the reported decreases varied, and the survey did not ask about contributing factors such as change in average daily census or elective procedures (Table 4).

### Table 4. Drug Budget Reductions

<table>
<thead>
<tr>
<th>Amount of Drug Budget Reduction</th>
<th>% of Respondents that Had to Reduce Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2%</td>
<td>11%</td>
</tr>
<tr>
<td>2% - 5%</td>
<td>56%</td>
</tr>
<tr>
<td>6% - 10%</td>
<td>25%</td>
</tr>
<tr>
<td>More than 10%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Strategies to reduce drug expenditures included the traditional focus on formulary restrictions (80%), intravenous-to-oral conversions (79%), therapeutic substitutions (78%), and consideration of 340B participation (66%). Respondents also submitted free-text comments with additional strategies that included:

- Revenue cycle management for pharmacy to ensure accuracy,
- Tighter prior-authorization processes,
- Antibiotic stewardship programs,
- Increased inventory turns,
- Analyzing outpatient services such as oncology infusion centers for ROI,
- Evaluation of 340B options and expansion,
- Thorough review of all contracts and consider re-negotiations, and
- DRG-based drug utilization analysis.

Among respondents, 69% are re-evaluating vendor terms/agreements, 54% are renegotiating distributor terms/agree-
ments, and 52% are re-evaluating lease terms/agreements as a method to reduce costs or manage expenses.

The economy is affecting capital and technology investments and installations that typically involve pharmacy departments. Respondents were asked whether the current economic situation has negatively affected any of the following capital improvements or expenditures and whether they were postponed, eliminated, or reduced in scope (Table 5). In reviewing the verbatim comments by respondents it appears that hospitals that indicated “no impact” include those that already have committed capital, have already completed listed item(s), or have not initiated a project that would be affected.

Table 5. Impact of Economy on Capital Investment

<table>
<thead>
<tr>
<th>Question</th>
<th>Postponed</th>
<th>Eliminated</th>
<th>Reduced in scope</th>
<th>No Impact</th>
<th>Not applicable/not underway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automated dispensing cabinets</td>
<td>14%</td>
<td>2%</td>
<td>9%</td>
<td>63%</td>
<td>11%</td>
</tr>
<tr>
<td>Bar Code Medication Administration</td>
<td>21%</td>
<td>2%</td>
<td>3%</td>
<td>53%</td>
<td>21%</td>
</tr>
<tr>
<td>Electronic Medication Administration Record</td>
<td>13%</td>
<td>1%</td>
<td>2%</td>
<td>67%</td>
<td>17%</td>
</tr>
<tr>
<td>General facility improvements/renovations</td>
<td>32%</td>
<td>5%</td>
<td>30%</td>
<td>27%</td>
<td>7%</td>
</tr>
<tr>
<td>Pharmacy information system upgrades</td>
<td>15%</td>
<td>1%</td>
<td>11%</td>
<td>59%</td>
<td>14%</td>
</tr>
<tr>
<td>Computerized Physician Order Entry</td>
<td>19%</td>
<td>1%</td>
<td>4%</td>
<td>54%</td>
<td>22%</td>
</tr>
<tr>
<td>USP 797 facility improvements</td>
<td>19%</td>
<td>2%</td>
<td>8%</td>
<td>57%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Pharmacy leaders will need to communicate with the leadership of their hospitals and health systems while managing these multiple challenges. Fifty-five percent of the respondents reported they have been in discussions with their organization’s finance or administration leadership to project the impact of the current economic situation on the pharmacy department. Twenty-nine percent of respondents’ organizations have engaged the services of consultants to review aspects of pharmacy operations in the last six months.

Impact on Professional Development

Hospital and health-system pharmacy departments are not only devoted to service but also to teaching pharmacist students, residents, interns, and other staff. Continuing professional development (CPD) is crucial for all health care providers to stay current with the ever-changing landscape of information affecting health care and the medicines and technologies available for patient care. With concern for the increasing demand on hospitals and health systems to provide experiential learning sites for students and the successful growth of residency programs and internships, the survey asked respondents about the impact of the economy on these programs. In addition, the impact on travel budgets to support CPD was surveyed.

Fourteen percent of respondents stated that they would be reducing the number of students as a result of the economy, 76% stated no impact, and 10% reported that they do not routinely take students. Of those that reported the number of students accepted for rotations would be affected, the largest impact was with hospitals with bed sizes between 200 and 299 beds (21%). The smallest was hospitals with less than 100 beds (7%). In addition, the range of decrease for the respondents that reported a decrease in the number of students was between 10% and 100% (Table 6).

Table 6. Decrease in Number of Pharmacy Students Accepted for Experiential Education

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased number of students by 10%</td>
<td>39%</td>
</tr>
<tr>
<td>Decreased number of students by 20%</td>
<td>9%</td>
</tr>
<tr>
<td>Decreased number of students by 50%</td>
<td>34%</td>
</tr>
<tr>
<td>Will not take students in 2009</td>
<td>18%</td>
</tr>
</tbody>
</table>
The impact on residency programs and internships was also notable in the survey results. Forty-three percent of respondents had PGY1 residency programs, 26% had PGY2 residency programs, and 62% had internship positions. Of the respondents that had PGY1 residency programs, 7% have or will have reductions in the number of positions. Of those that reported having PGY2 residency programs, 4% have reduced or will reduce their number of positions. Of those with internship positions, 18% have reduced or will reduce the number of positions available.

Verbatim comments on these three areas noted that residents and interns are crucial to recruitment and staff development, that positions were decreased to avoid affecting regular employees, and that there is a need to reassess the model for managing Introductory Pharmacy Practice Experience and Advanced Pharmacy Practice Experience student rotations.

Respondents were also asked about their travel budgets and ability to support meeting registrations for themselves or their staff. Seventy percent of respondents reported that their budgets had been reduced, 29% remained the same, and 2% increased.

**Conclusion**

In general, 69% of pharmacy leaders that responded to this survey felt that the pharmacy was affected at a similar level as the rest of their organization, 26% felt they were less affected, and 5% felt they were affected more. Pharmacy leaders are utilizing numerous strategies to ensure they are meeting the demands of providing safe and effective patient care in an environment of decreasing revenues, increasing expenses, and worsening payer mixes. It will become increasingly important for hospital and health-system pharmacy practice leaders to network with peers to share best practices in this economic environment.

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References


5. Region breakout for survey results: West (AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY)/ Midwest (IA, IL, IN, KS, MI, MO, MN, ND, NE, OH, SD, WI)/ North (CT, MA, ME, NH, NJ, NY, PA, RI, VT)/ South (AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV)