

2006 ASHP Pharmacy Staffing Survey Results

Objective

The annual ASHP Pharmacy Staffing Survey is conducted to gauge the supply of and demand for pharmacists and to measure perceptions about pharmacist workforce shortages. A core set of questions are asked each year to measure trends and additional questions are added each year to gather information on staffing-related issues. This year the additional questions focused on staffing practices that address the changing demographics of the pharmacy workplace.

Methodology

On August 7, 2006, e-mail invitations with a link to an on-line survey were sent to 2,774 ASHP members identified as pharmacy directors. Reminder e-mails were sent to non-responders on August 15, and the survey was closed on August 24. Of those directors invited to participate, a total of 597 questionnaires were completed, yielding a 23% response rate. In addition, 40 additional surveys were completed by directors not included in the initial survey distribution. Twenty federal surveys and one non-U.S. survey were excluded from the analysis, resulting in 616 questionnaires that were included.

Key Findings

- The pharmacist vacancy rate increased for the second year in a row, reaching 7.0%. This rate represents a statistically significant increase from the low of 5.0% reported in 2004. (Table 1)
- The average turnover rate in 2006 is 9.0% for pharmacists and 12.4% for technicians; neither rate has changed significantly since 2002. (Table 2)
- The percentage of respondents reporting a shortage of pharmacy managers increased for the second year in a row.
- The percentage reporting a shortage of experienced front-line pharmacists was up for 2006.
- Vacancy rates and turnover rates for pharmacists did not differ significantly between small, medium, and large hospital settings.
- The average length of time required to fill a vacant pharmacist position remains approximately 6 months, roughly the same as in 2002. (Table 5)
- Nearly half of hospitals reported an increase in the use of non-traditional staffing models for pharmacists, with a larger percentage being used in larger hospitals with more staff. (Table 6)
- The most commonly used non-traditional staffing models include compressed work week (e.g. four 10-hour shifts) (54%), team scheduling (48%), job sharing (45%), and career transition programs (41%). (Table 7)
- The least commonly used non-traditional staffing models included support for retirement age workers (18%), re-entry programs (13%), teleworking arrangements for non-pharmacists (10%), and teleworking arrangements for pharmacists (8%). Only a few hospitals have these models in place, and most are not currently planning to adopt them. (Table 7)
- No statistical relationship was found between overall pharmacist vacancy rates and the level of adoption of non-traditional staffing models.
- Larger hospitals are more likely to have non-traditional staffing models in place than are smaller hospitals.

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The maximum sampling error associated with this survey does not exceed $\pm 3.5\%$ at the 95% confidence level. However, sampling error may vary depending on the number of respondents and variability within each subgroup studied.

Detailed Results

Vacancy Rates

The average vacancy rate was calculated by dividing the mean number of positions vacant by the mean number of currently budgeted positions. The average vacancy rate for pharmacists responding to the 2006 survey is 7.0%. This is the second

year in a row that the vacancy rate for pharmacists has edged up, and is a statistically significant increase from the low of 5.0% reported in 2004.

The average vacancy rate for pharmacy technicians (4.2%) is similar to last year's level and has not changed significantly since 2002.

Turnover Rates

The average turnover rate was calculated by dividing the mean number of resignations by the mean number of currently budgeted positions. The average turnover rate in 2006 is 9.0% for pharmacists and 12.4% for

technicians; neither rate has changed significantly since 2002.

Pharmacy Shortage Perceptions

Pharmacy directors rated their perceptions about the availability of qualified staff for seven pharmacy positions. A five point scale was used where:

- 1 = Severe shortage
- 2 = Moderate shortage
- 3 = Balanced
- 4 = Moderate excess
- 5 = Severe excess

Table 3 displays the 2006 results with a moderate or severe shortage combined and labeled "shortage"

Table 1. Vacancy Rates

	2006	2005	2004	2003	2002	2000	1999
Pharmacists							
Positions budgeted (FTE)	13.4	14.2	14.9	13.4	13.6	16.7	14.2
Positions vacant (FTE)	0.94	0.88	0.75	0.74	0.94	1.5	1.1
Vacancy rate	7.0%	6.2%	5.0%	5.6%	6.9%	8.9%	7.7%
Pharmacy Technicians							
Positions budgeted (FTE)	13.6	13.5	14.9	12.6	13.8	NA	NA
Positions vacant (FTE)	0.57	0.53	0.56	0.54	0.64	NA	NA
Vacancy rate	4.2%	3.9%	3.7%	4.3%	4.6%	NA	NA

FTE = Full time equivalent.

Table 2. Turnover Rates

	2006	2005	2004	2003	2002
Pharmacists					
Positions Budgeted (FTE)	13.4	14.2	14.9	13.4	13.6
Resignations in last 12 months (FTE)	1.2	1.2	1.1	1.0	1.2
Turnover rate (% resigned)	9.0%	8.5%	7.5%	7.5%	8.5%
Pharmacy Technicians					
Positions budgeted (FTE)	13.6	13.5	14.9	12.6	13.8
Resignations in last 12 months (FTE)	1.7	1.7	1.8	1.7	1.7
Turnover rate (% resigned)	12.4%	12.9%	11.8%	13.3%	12.3%

Table 3. 2006 – Perceptions of Availability

Pharmacy Position	Shortage	Balanced	Excess
Manager (Director/Asst. Director)	87%	11%	2%
Clinical Coordinator	65%	29%	6%
Clinical Specialist	63%	28%	10%
Entry-level Frontline Pharmacist	71%	24%	6%
Experienced Frontline Pharmacist	93%	6%	1%
Entry-level Pharmacy Technician	17%	50%	33%
Experienced Pharmacy Technician	87%	11%	2%

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and a moderate or severe excess combined and labeled “excess.” With the exception of entry-level pharmacy technicians, all positions are perceived as being out of balance toward a shortage.

Hiring managers and experienced frontline pharmacists continues to be greatest challenge (Table 3). Perceptions of a shortage of managers appears to be trending upward while perceptions of a shortage of clinical specialists and entry-level frontline pharmacists have trended downward. Perception of a shortage of experienced frontline pharmacists is

especially notable since it continues to be the highest rated shortage of all position types (Table 4).

Length of Time to Recruit

On average, employers reported that it took 6.0 months to hire a pharmacist. The average length of time to hire a pharmacy technician is 1.8 months.

Use of Non-traditional Staffing Models

An objective of the survey was to examine whether hospitals are adopting non-traditional staffing models to meet the needs of chang-

ing workforce demographics (gender, generational, and ethnic changes).

Overall, nearly half of all respondents (48%) reported an increase in the use of non-traditional staffing models in the past two years. Just over half (51%) reported no change in the past two years and only 1% reported a decrease in the use of non-traditional models. An examination of the results by census size shows that the shift is significantly greater as hospital size increases, ranging from 41% in organizations with ‘less than 100 beds’ to 66% in organizations with ‘400 or more beds’ (Table 6).

Table 4. Perceptions of a Shortage^a

	2006	2005	2004	2003	2002
Manager (Director/Asst. Director)	87%	84%	74%	74%	74%
Clinical Coordinator ^b	65%	67%	na	na	na
Clinical Specialist	63%	64%	67%	71%	71%
Entry-level Frontline Pharmacist	71%	71%	75%	84%	84%
Experienced Frontline Pharmacist	93%	89%	90%	93%	93%
Entry-level Pharmacy Technician	17%	21%	22%	31%	31%
Experienced Pharmacy Technician	87%	69%	74%	77%	77%

^aRepresents those responses of “moderate” or “severe” shortage combined.

^bClinical Coordinator was added to the survey in 2005.

Table 5. Number of Months to Hire

	2006	2005	2004	2003	2002
Pharmacists	6.0	6.5	5.3	5.8	5.7
Pharmacy Technicians	1.8	1.8	1.8	1.9	1.8

Table 6. Change in Use of Non-traditional Staffing Models in Past Two Years

Status/Daily Census	Less than 100	100-199	200-299	300-399	400+	All
Decrease	1%	1%	0%	2%	4%	1%
No change	58%	52%	48%	46%	30%	51%
Increase	41%	47%	53%	52%	66%	48%
Total	100%	100%	100%	100%	100%	100%

*Question: In the past 2 years, how would you characterize the use of non-traditional staffing models at your organization (e.g., part-time opportunities, teleworking, job sharing, compressed work week, self scheduling, and career re-entry and/or transition programs)?

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Table 7 shows the incidence of eight specific non-traditional staffing models. Respondents were asked to indicate if their organization is using the model and if not, whether they are considering its adoption.

Four models were used most often: a compressed work week (such as four 10-hour shifts) (54%), team scheduling (48%), job sharing (45%), and structured career transition programs (41%).

The least commonly used non-traditional staffing models included support for retirement age workers, workforce re-entry programs (after several years away from work), teleworking arrangements for non-pharmacists, and teleworking arrange-

ments for pharmacists. Few hospitals have these models in place, and most are not currently planning to adopt them.

Table 8 displays the average number of non-traditional staffing models adopted by the responding organizations. The number adopted ranged from none to eight. The average number of non-traditional staffing models used is 2.3 (from the list of eight). Large hospitals (400+ beds) are using on average 3.4 of the models, which is significantly greater than the average of 2.0 models reported by directors in small hospitals (less than 100 beds).

Respondents also reported a number of non-traditional staffing models that were not included in the list

of eight in the survey. These creative models were designed to address staffing shortages, add scheduling flexibility, and attract and retain a diverse pharmacy workforce. Some other models that were reported by survey respondents included:

- Development of a “Mommy shift” with only mid-day hours (similar to models used for nurses in some hospitals) and creation of a “Weekend shift” where employees can obtain their hours working Friday through Sunday and still be considered full-time with benefits. Both models allowing flexibility to meet unique schedule needs at home.
- Adoption of a schedule where clinical staff, evening shift staff, and night

Table 7. Use of Non-traditional Staffing Model Practices

Practice	Yes, in place	No, but considering	No, with no plans
Provide options for working longer shifts in order to work fewer days per week (i.e., compressed work week, such as four 10-hour days or three 12-hour days).	54%	20%	27%
Provide employees the option of collaborating on creating their own work schedules that meet both individual and organizational needs (i.e., group/team scheduling).	48%	25%	28%
Provide opportunities for two part-time employees to divide the hours and responsibilities of a full-time position (i.e. job sharing).	45%	25%	30%
Offer programs that support pharmacists who are looking to transition from a community pharmacy to a health system position (career transition programs).	41%	21%	38%
Provide support or incentives for retirement-age workers to remain in the workforce longer.	18%	19%	63%
Offer programs that support pharmacists who are attempting to re-enter the workforce after an extended absence (5 years or more) from the profession.	13%	18%	68%
Have other employees (i.e., pharmacy technicians or others) who perform their job responsibilities from home (e.g., billing, special projects, etc).	10%	6%	84%
Have pharmacist(s) who process patient care orders from home (i.e., through a teleworking-type arrangement)	8%	29%	63%

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shift staff work seven days on and have seven days off (total of 70 hours per 2 week pay period). This schedule was designed to provide extended hours for shift overlap during critical times, and a better shift exchange of information. In addition, it ensures that highly trained people are present on the weekend.

- Creation of a “Weekend option” where staff work 12-hour shifts every Saturday and Sunday and receive pay for 36 hours and full-time benefits. Staff have no weekday commitment.
- Development of an extremely flexible schedule and shift designation, using a combination of 10-hour shifts for those with long commutes, 6-hour shifts for students and technicians, allowing 72-hour pay periods with full-time benefits, etc.

Directors also reported on the percentage of the shifts in their pharmacy department covered by part-time staff. As displayed in Table 9, more than half of the organizations (53%) are covering 20% or less of their shifts with part-time staff. This would suggest that the use of less than full-time staff is still not a major component of the day-to-day work schedule.

Pharmacy directors were asked to rate their level of agreement with six statements regarding their perceptions of emerging demographic trends within pharmacy. Table 10 shows that the majority of directors were in agreement about the importance of demographic changes and the need for preparation within the profession as a whole. Four out of five directors agreed (rating either a 4 or 5 on a five-point scale) and 43%

rating “strongly agreed” with the statement suggesting that the pharmacy profession as a whole should plan for demographic changes.

The survey results show far less agreement with the statements that probed at how well they thought *their* organization was actually preparing for emerging demographic trends. Only a quarter of all directors agreed that their organization

Table 8. Number of Non-traditional Staffing Model Practices

Number in place	% of organizations
None	15%
One	20%
Two	22%
Three	19%
Four	12%
Five	8%
Six or more	4%

Table 9. Percentage of Shifts Covered by Part-time Staff

% Part-time	% of organizations
20% or less	53%
21-40%	31%
41-60%	11%
61-80%	4%
81-100%	1%
Total	100%

Table 10. Importance of Adopting New Staffing Models

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The pharmacy profession should prepare for and examine various staffing approaches to plan for demographic changes.	2%	2%	14%	38%	43%
Demographic trends will have a significant impact on my department in the future.	2%	6%	19%	39%	34%
Creating a staffing model designed to engage the realities of changing patient and workforce demographics would be helpful to my department.	3%	8%	19%	43%	28%
My department should create a staffing model to accommodate for demographic trends.	2%	8%	28%	38%	23%
The human resources and health-systems administrators at my organization are aware and responsive to the implications of changing demographic trends.	10%	28%	30%	25%	8%
OVERALL, I feel that my organization is adequately preparing for the changing demographic trends in the pharmacy workforce.	13%	30%	32%	20%	5%

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was adequately preparing for changing demographic trends; only 5% strongly agreed.

The statements with the greatest level of agreement were similar for both large and small hospitals. However, larger organizations were significantly more likely to indicate that non-traditional staffing models

would be helpful and should be created for their department. While 80% of directors at hospitals of 400 or more beds agreed that it was important for their department to create staffing models to accommodate these trends, only 48% of directors at hospitals with less than 100 beds agreed. And while 83% of directors at hospitals of 400 or more beds

agreed that creating a new staffing model would be helpful, only 60% of directors at hospitals of less than 100 beds agreed.

Demographics

The demographic profiles of the respondents in the 2006 and 2005 studies are comparable, as shown in Table 11.

Table 11. Demographics

	2006	2005	2004	2003
Region				
Northeast	16%	16%	17%	16%
South	38%	35%	36%	37%
Midwest	27%	33%	30%	30%
West	19%	17%	17%	17%
Practice Setting				
Hospital/Health-system	88%	87%	85%	85%
Other	12%	13%	15%	15%
Average Daily Census*				
1-99 beds	41%	35%	36%	39%
100-199 beds	26%	31%	25%	25%
200-299 beds	14%	12%	14%	14%
300-399 beds	8%	8%	10%	9%
400 or more beds	12%	13%	16%	12%
Facility Type				
Academic Medical Center	11%	9%	13%	NA
Community Hospital	73%	75%	69%	NA
Other	16%	16%	18%	NA
Facility Location				
Rural	36%	37%	32%	NA
Suburban	34%	32%	31%	NA
Urban	30%	31%	38%	NA

*4% of 2005 said not applicable