

RESEARCH ARTICLES

The Capacity Ratio as a Measure of Solvency in Experiential Education

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Submitted May 24, 2011; accepted August 4, 2011; published December 15, 2011.

Objective. To determine the utility of the capacity ratio to measure and compare solvency in experiential education in 6 colleges and schools of pharmacy in the Northwestern United States.

Methods. The 6 colleges and schools of pharmacy combined data on student placements needed, site availability, and changes made to placements during the 2009-2010 and 2010-2011 academic years and calculated capacity ratios for the advanced and introductory experience programs in the region. Comparisons also were made to previously published capacity results to determine whether the capacity ratio was useful in identifying trends and guiding preceptor and site development.

Results. Capacity ratio calculations were successful in facilitating comparison of capacity within and across regions. Experiential education is solvent in the Northwest overall, but specific parts of experiential programs were found to have more capacity than others. Trends in the Northwest were consistent with capacity in other regions.

Conclusions. The capacity ratio can determine and facilitate comparison of solvency within and across colleges and schools of pharmacy and thereby inform decisions about resource management in experiential education.

Keywords: experiential education, capacity, advanced pharmacy practice experiences, introductory pharmacy practice experiences, availability, site recruitment, preceptor development

INTRODUCTION

As part of the accreditation process, colleges and schools of pharmacy report their capacity to meet needs for student placements in pharmacy practice experiences with available sites and preceptors.¹ Capacity in experiential education has been compared to solvency, a business measure of a company's ability to meet its liabilities with current assets.^{2,3} Pharmacy colleges and schools currently compile their own capacity data and independently create forecast charts.^{4,5} These charts, which are required by the Accreditation Council for Pharmacy Education (ACPE), seem to focus more on availability of full-time paid faculty members than on adjunct faculty members

who offer student experiences for little or no pay. They contain limited historical data and do not adequately define "capacity." Experiential directors often complete these charts with different parameters in mind, and the data generated do not reflect all of the work that goes into initial student placements and reassignments that occur during the year. Therefore, information in these charts is not necessarily comparable across pharmacy programs. At the same time, demand for additional capacity from newly opened colleges and schools of pharmacy, increased enrollments, and added requirements for introductory pharmacy practice experiences (IPPEs) has compressed excess capacity and threatened the solvency of experiential programs.

A measure of solvency that allows for benchmarking among colleges and schools and regions would be useful to faculty members and program administrators in estimating and forecasting capacity. This paper discusses how the capacity ratio can be used to compare solvency within and

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across colleges and schools and to inform decisions regarding support and development of outstanding experiential education programs. To illustrate use of the capacity ratio, 6 colleges and schools of pharmacy in the Northwest shared institutional data to benchmark solvency in experiential education.

In business analyses, the success of a company is measured by its solvency, efficiency, and profitability. These concepts can be adapted to use in an experiential education program much as they are in a business unit in a corporation. Just as in a business, administrators and faculty members in experiential education need to know the current status of their experiential program and where it is trending. Without benchmarks to measure against and tangible future goals for which to plan, faculty members and administrators do not have relevant data to justify changes or to assist in budgetary discussions. The recent economic downturn and resulting budget cuts demonstrate how important it is for experiential program directors to speak the language of their administration.

Capacity in experiential education measures the ability to meet placement needs for pharmacy practice experiences based on current and projected student enrollment. As currently calculated, capacity is derived from comparing the number and type of practice sites and preceptors available to precept students from a school or college with the type and number of experiences those students need to meet curriculum requirements. This simple calculation subtracts the total placement needs from total availability of sites for student placements to determine existing capacity. However, this calculation does not take into account reassignments that occur during an academic year related to preceptor-initiated changes (eg, job changes, maternity leave, reorganization at practice sites, and reduced funding for preceptors' time) and student-initiated changes (eg, personal or health issues, location preferences, and academic performance problems).⁶ A buffer is essential to account for these inevitable changes that cause significant extra administrative work for experiential program staff.

Numerous survey tools have been used to measure capacity in experiential education.⁷⁻¹¹ In all of these analyses, various capacity results are reported, but the results are not necessarily comparable across colleges and schools. A method is needed that uses common parameters including an essential buffer capacity that allows colleges and schools to benchmark their capacity against regional and national norms. A simple and accessible tool that identifies trends and helps with planning but does not involve the expense and uncertain validity of survey tool results would be a valuable addition to the experiential program director's tool chest. Simply measuring capacity retrospectively with

previous years' data may not be enough, and for new colleges and schools of pharmacy without historical data for comparison, a method to set goals for future capacity is essential in accomplishing solvency.

The capacity ratio calculation in experiential education is based on the current ratio calculation, an index for solvency in a business. In the current ratio, total current assets are divided by total current liabilities.

$$\text{Current Ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}}$$

Current assets include cash on hand plus other assets that can or will be converted into cash within a year. Current liabilities include debts or expenses that must be met within the year. Examples of liabilities include monthly expenses, such as rent and utilities, as well as loan payments if the owner has received financing. If a business does not have enough current assets to meet its current liabilities, it is not considered solvent. The company may be overleveraged or undercapitalized and, thus, in danger of collapsing.

In an experiential program, the availability of sites and preceptors to teach students could be considered its current *assets*, whereas obligations it must meet each year to provide adequate placements required in the curriculum for all enrolled students could be considered its current *liabilities*. In experiential education, solvency can be thought of as capacity to provide students with the practice experiences they need to meet curriculum requirements and accreditation standards.

$$\begin{aligned} \text{Capacity Ratio} \\ = \frac{\text{Total availability of experiences}}{\text{Total placement needs} + \text{placement changes}} \end{aligned}$$

When calculating the capacity ratio, the denominator must account for changes that happen as a result of preceptor and student requests. These placement changes occur for various reasons and reassigning students requires a significant investment of time and effort from experiential program faculty and staff members. No measure of solvency would accurately represent the status of an experiential program without including placement changes.

When the capacity ratio is greater than 1, the program is considered solvent. A capacity ratio of less than 1 indicates that the experiential program needs more sites and availability to meet the curricular needs of its student enrollment. The capacity ratio is thus a measure of solvency in which availability for a particular academic year is divided by the placement needs for that same year. Inserting different numbers into each of these parameters facilitates

projections for future capacity. A tool such as the capacity ratio and the details it reveals about an experiential program are useful in projecting capacity and guiding site recruitment efforts, especially when increased enrollment is expected.

METHODS

To study the usefulness of the capacity ratio in comparing pharmacy programs across a region, 6 of the colleges and schools of pharmacy that are members of the Northwest Pharmacy Experiential Consortium (NWPEC) shared availability and placement data for their advanced pharmacy practice experience (APPE) and IPPE programs for academic years 2009-2010 and 2010-2011, respectively. Colleges and schools participating in this study included Oregon State University, Pacific University of Oregon, University of Montana, University of Washington, University of Wyoming, and Washington State University. This project was approved for exempt status by the Human Subjects Division at the University of Washington and the Institutional Review Board at Pacific University of Oregon.

Data collected from all schools to use in calculating capacity ratios included class size, total placements needed, initial site availability, and changes in APPE and IPPE programs that occurred during the study year. Reported changes were classified into those attributable to student requests, preceptor requests, problems with affiliation agreements, and an "other" category.

Not all colleges and schools in the region used the common 6-week practice experience calendar, so practice experience lengths were normalized to allow direct comparison. All 4- and 6-week practice experience lengths were normalized to 1 placement or available block each. Shared results for APPEs were then separated into the 4 core required experiences as outlined in ACPE Standards 2007 (ie, acute care/general medicine, ambulatory care, community pharmacy, and inpatient health-system) for the 2009-2010 academic year. For 2 schools, the acute care/general medicine APPE was 8 weeks long whereas other APPEs were 4 weeks in length. Because these 8-week blocks were treated as 1 placement (ie, students placed for one 8-week-long continuous experience that was not subdivided or changed part way through), each of these 8-week practice experiences also was normalized to 1 placement and 1 availability. Capacity ratios for individual schools and the regional mean were calculated from reported data for total APPEs (academic years 2009-2010 and 2010-2011), the 4 core required APPEs (academic year 2009-2010), and non-community APPEs (academic year 2010-2011).

Because 2010-2011 was the first academic year that all 6 schools' IPPE programs were fully operating according

to current ACPE standards, capacity ratios for total IPPEs were calculated for that year only. Each NWPEC school had independent, unique, and innovative approaches in operating introductory practicums and placing students for IPPEs. For instance, 1 school placed students at a long-term care facility for 1 day per week over the first year, and another school placed students in ambulatory clinic settings in the third year. Consequently, most schools had at least 1 unique introductory experience for which comparisons with other schools were impossible. Adjustments to shared data were necessary, and common definitions for introductory experiences were developed to compare placements. For example, some schools placed IPPE students on 3- to 4-week defined blocks of time, whereas others placed students 1 day per week for an entire school year. In the end, reported data were normalized to 1 community and 1 institutional IPPE at each school. Capacity ratios for individual colleges and schools and the regional mean were calculated from reported data for community and institutional IPPEs for the academic year.

After calculating regional means for APPE and IPPE programs, NWPEC results were then compared to previously published analyses available in the literature. Results for capacity in APPE programs from the University of Illinois Chicago (UIC)⁶ and the Southeastern Pharmacy Experiential Education Consortium (SPEEC)¹⁰ were found to include comparable data to those generated for this analysis. These published data were used to calculate capacity ratios for the other schools and regions and were then compared to NWPEC regional means. NWPEC capacity data for academic year 2010-2011 were further divided into community pharmacy and non-community pharmacy APPEs for these comparisons.

Capacity ratios for non-community APPEs for NWPEC (calculated from 2010-2011 actual data) and for SPEEC (calculated from 2010-2011 projected data) were then compared with capacity ratios calculated from projections for 2012 about capacity for experiences in the health-system setting nationwide.¹¹ As reported jointly by American Society of Health-System Pharmacists (ASHP) and AACP, these capacity projections included experiences in acute and ambulatory clinic settings as well as other elective experiences because all of these experiences could conceivably be offered by health systems.¹¹ In effect, community sites were removed from both APPE capacity projections either by design or through purposeful exclusion after data collection.^{10,11}

When forecasting capacity, an essential buffer of 15% excess capacity has been suggested to accommodate changes that occur during the year.⁶ Projections made by SPEEC used this 15% excess capacity. To remain consistent with previous publications, capacity ratio results calculated in

this analysis included an estimated essential buffer capacity of 15%.

In a search of the published literature, little was found on IPPE capacity that could be compared with our results. An attempt was made to compare NWPEC institutional IPPE results to estimations of actual hospital placements for 2007,¹¹ but these previously published results lacked the detailed data necessary to calculate capacity ratios for IPPEs only. Consequently, comparison of capacity in IPPE programs outside of the Northwest was not possible.

RESULTS

As defined by the capacity ratio, all colleges and schools in the Northwest appeared to have solvent APPE and IPPE programs. All capacity ratios for individual schools were greater than 1, with the exception of 1 school that could not quantify and report changes that occurred during the year observed, prohibiting calculation of the capacity ratio for that school. However, that school reported excess availability beyond its basic needs for placements, indicating that the capacity ratio was likely greater than 1. Capacity ratio calculation was possible and facilitated comparisons between the schools in this region.

Capacity in APPE Programs

As seen in Table 1, the regional mean capacity ratio for all schools reporting data was 1.85 (range 1.5 to 2.4). On average, 6% of APPE placements region-wide had to be changed during the academic year measured. One school experienced a higher-than-average number of changes (15%) but remained solvent with a capacity ratio of 1.8, which is near the regional mean. In the Northwest overall, excess capacity for APPEs did not seem to correlate by state or class size. However, schools in the largest metropolitan cities had the lowest calculated capacity ratios for APPEs.

Capacity in IPPE Programs

As with APPE programs, calculated capacity ratios for both community and institutional IPPE programs indicated solvency for all schools (Table 2). Capacity ratios

for institutional IPPEs were lower (mean 1.1, range 1.0 to 1.6) than those for community IPPEs (mean 1.8, range 1.4 to 2.6) for all schools. The 2 schools closest in proximity that shared some sites had an institutional capacity of 1.0. Fewer changes in placements occurred during the year for institutional IPPEs (mean 3%, range 0% to 6%) than for community IPPEs (mean 9%, range 3% to 16%), indicating that, even though there was less capacity in the institutional setting, placements made in that setting were more stable.

Capacity in Core Required APPEs

While APPE programs in aggregate were considered solvent with excess capacity (capacity ratio 1.85), deficiencies in specific types of APPEs were apparent when the programs were examined individually (Table 3). NWPEC schools had the lowest mean capacity ratio for APPEs in acute care/general medicine (mean 1.2) followed by health system (mean 1.8), ambulatory care (mean 2.2), and community pharmacy (mean 3.9), respectively. These ratios indicate that it is difficult to secure availability for APPEs in the inpatient setting. Capacity in the community pharmacy setting was so much greater than in other settings that total APPE capacity ratios were inflated when community availability was included. The abundance of community pharmacy availability contributed to overestimation of solvency in APPE programs as a whole.

Comparing Capacity Across the Nation

Limited published data for availability at the University of Illinois Chicago prevented direct comparison of capacity ratios with NWPEC schools (Table 4).⁶ However, adequate data were published to calculate capacity ratios for SPEEC member schools and to compare capacity across regions (Table 4).¹⁰ Schools in the Northwest appeared to have higher capacity ratios (1.9 mean) than did comparator schools belonging to SPEEC (mean 1.6) for the years measured. When comparing capacity ratios calculated from SPEEC projections in 2010-2011 (mean 1.34) to actual results for NWPEC in the same year (mean 1.6), the gap in regional means remained constant.

Table 1. Actual Capacity for APPEs in the Northwest in Academic Year 2009-2010

	University						NWPEC Mean
	Oregon State	Pacific	Montana	Washington	Wyoming	Washington State	
Class size	96	86	66	86	46	92	79
Placement needs	602	595	589	783	368	637	596
Total availability	1254	1372	802	1164	878	1552	1166
Changes, no. (%)	91 (15)	53 (9)	NA	39 (5)	22 (6)	15 (2)	33 (6)
Total placements	693	648	NA	822	390	652	756
Capacity ratio	1.8	2.1	NA	1.5	2.3	2.4	1.9

Abbreviations: NWPEC = Northwest Pharmacy Experiential Consortium; NA = not available (data not reported).

Table 2. Actual Capacity for Community and Institutional Introductory Pharmacy Practice Experiences in the Northwest in Academic Year 2010-2011, Community/Institutional^a

	University						NWPEC Mean
	Oregon State	Pacific	Montana	Washington	Wyoming	Washington State	
Class size	92	86	66	81	44	91	77
Placement needs	92/92	95/95	68/65	80/82	44/44	100/81	80/77
Total availability	149/92	190/99	184/101	124/106	112/59	184/85	157/90
Changes, no. (%)	11(12)/0	15(16)/4(4)	2(3)/0	4(5)/5(6)	2(5)/3 (6)	10(10)/0	7(9)/2(3)
Total placements	103/92	110/99	70/65	84/87	46/47	110/81	87/79
Capacity ratio	1.4/1.0	1.7/1.0	2.6/1.6	1.5/1.2	2.4/1.3	1.7/1.0	1.8/1.1

Abbreviations: IPPEs = introductory pharmacy practice experiences; NWPEC = Northwest Pharmacy Experiential Consortium; NA = data not available/not reported.

^a Data show the mean number of community IPPEs and mean number of institutional IPPEs (community/institutional).

When results from the Northwest were divided into community (required and non-required experiences) and non-community (required and non-required experiences) APPEs for the academic year 2010-2011, the regional capacity ratio for non-community placements (mean 1.4) declined from total APPE capacity the year before (mean 1.9). Consistent with previously published results,¹⁰ this categorization confirms that capacity ratios declined when community site availability and placements were removed from consideration.

Categorizing APPEs into community and non-community experiences also allowed for comparison to other previously published capacity projections (Table 5).^{10,11} Actual capacity ratios for NWPEC exceeded projected capacity ratios for SPEEC member institutions and national projections published jointly by ASHP and AACP. The lower end of the range in projected capacity ratios representing the health-system setting even included estimates of potential insolvency (Table 5). These comparisons indicated potential insolvency from deficient capacity in acute care and health-system APPEs—a similar trend across all comparators.

Little to no data about capacity in IPPE programs were found in the published literature, making comparisons beyond the Northwest impossible. Although ASHP estimated actual placements for IPPEs in the hospital

setting in 2007 to be 14,126 experiences nationally, no availability data were collected.¹¹ Consequently, non-NWPEC capacity ratios could not be calculated and compared with ratios in the Northwest region.

DISCUSSION

The fact that experiential education programs in the Northwest are solvent is not surprising. These colleges and schools would not be graduating new pharmacists if they were unable to meet their experiential education obligations. However, examining experiential education solvency using the capacity ratio provides colleges and schools with a common language with which to assess strengths and weaknesses within their programs. The capacity ratio also allows benchmarking between peer institutions and across regions—a process that faculty members and school administrators can use to make strategic decisions about resource management. As shown in this analysis, data used to calculate the capacity ratio can reveal opportunities for site recruitment and preceptor development. This analysis, for instance, suggests that experiential program directors in the Northwest and across the country should consider focusing their preceptor development efforts on acute care/general medicine APPEs and institutional IPPEs.

One limitation of this analysis is that the data collected and used to calculate capacity ratios were self-reported.

Table 3. Mean Capacity for Advanced Pharmacy Practice Experiences by Type in the Northwest Region^a in Academic Year 2009-2010

	AcuteCare/ General Medicine	Ambulatory Care	Community	Health System
Placement needs	407	407	407	407
Available experiences	549	931	1617	744
Changes, no. (%)	38 (9)	19 (5)	7 (2)	18 (4)
Total placement needs	466	527	500	544
Capacity ratio	1.2	2.2	3.9	1.8

Abbreviations: APPE = advanced pharmacy practice experience.

^a One school removed because of inability to measure/report changes.

Table 4. Comparison of Total APPE Capacity Between Regions Over Time

	UIC 1997-98, Actual	SPEEC 2006-07, Actual (mean)	NWPEC^a 2009-10, Actual (mean)	SPEEC 2010-11, Projected (mean)	NWPEC 2010-11, Actual (mean)
Placement needs	1276	3594 (899)	3574 (596)	4310 (1077)	3576 (596)
Available experiences	NA	6662 (1666)	7201 (1200)	6662 (1666)	6003 (1001)
Changes	29 student (2%) 119 preceptor (9%) 7 affiliation agreement (2%) 34 other (2%) 189 total (15%)	15% buffer assumed	89 (18) student (2%) 89 (18) preceptor (2%) 33 (7) affiliation agreement (1%) 211 (44) total (6%)	15% buffer assumed	50 (8) student (1%) 84 (14) preceptor (2%) 157 (26) total (4%)
Total placements	1465	4133 (1033)	3243 (821)	4957 (1239)	3299 (550)
Capacity ratio	NA	1.6	1.90	1.34	1.6

Abbreviations: APPE=Advanced Pharmacy Practice Experience; UIC=University of Illinois Chicago; SPEEC=Southeastern Pharmacy Experiential Education Consortium; NWPEC=Northwest Pharmacy Experiential Consortium; NA=data not available/not reported.

^a One school removed due to inability to measure/report changes.

While common definitions for placements and availability were determined, and the collaborative nature of faculty members in the NWPEC consortium lends credibility to and confidence in the integrity of these results, self-reported data always are prone to human error and misinterpretation.

Another limitation of this analysis is that it was conducted in a region with a relatively low density of pharmacy colleges and schools. Other regions with multiple colleges and schools per state, especially those with newly opened institutions, may have vastly different capacities. In areas where multiple schools are competing for a set number of sites, capacity may be stretched thin. While only 1 new pharmacy school has opened in the Northwest region, several new colleges and schools have opened within or in close proximity to the southeast region represented by SPEEC. This added competition may be one reason for the difference in the regional capacity ratio between NWPEC and SPEEC. And, other regions have yet higher density of schools than either of these. Further analysis in other regions and comparisons across colleges and schools in close proximity to each other are necessary to validate usefulness of the capacity ratio in high-density regions.

Perhaps a density factor should be included in the calculation to account for added pressures of competition for sites.

Payment of preceptor stipends is another factor that impacts capacity for placements. Schools that pay preceptors for student placements may have higher capacity than those that do not pay. Payment of preceptor stipends was not taken into account in this analysis, because colleges and schools represented by NWPEC did not pay preceptor stipends for a vast majority of practice experiences at that time. Consequently, the results presented herein may not necessarily apply to colleges and schools or regions where preceptor stipends are commonly offered. According to AACP institutional research reports that summarize financial information for colleges and schools of pharmacy, privately funded institutions pay significantly more in preceptor stipends than do publicly-funded institutions. Considering that only 1 school in this analysis is privately funded and does not pay preceptor stipends, the results may not generalize to other privately funded schools. Further analysis with colleges and schools that pay preceptor stipends is needed.

The trend toward lower capacity ratios for urban schools as compared to rural schools was counterintuitive

Table 5. Comparison of Noncommunity APPE Capacity Nationally in Academic Year 2010-2011

	NWPEC Non-community Actual 2010-11	SPEEC Non-community Projected 2010-11	ASHP HealthSystem Projected 2012
Placement needs	2787	3,590	42,620-59,160
Available experiences	4050	4,427	64,900
Changes	109 (4%)	15% assumed	15% assumed
Total placements	3016	4309	49,013-68,034
Capacity ratio	1.4	1.03	0.95-1.3

Abbreviations: APPE=Advanced Pharmacy Practice Experience; NWPEC=Northwest Pharmacy Experiential Consortium; SPEEC=Southeastern Pharmacy Experiential Education Consortium; ASHP=American Society of Health-System Pharmacy.

in that one would expect schools in rural or less populated areas to find fewer APPE opportunities for their students. While these results suggest that the opposite may be true, further evaluation is needed to determine accurate reasons for these capacity differences across geographic areas. Despite these limitations, this analysis of capacity in the Northwest and subsequent comparisons to other regions and national projections demonstrate that the capacity ratio provides a common platform for assessment that can identify trends on a larger scale. The comparisons made herein, which include institutions of various sizes, show how the capacity ratio facilitates benchmarking without regard to class size.

Changes to APPE placements in the current analysis also were surprisingly low compared with other analyses. Experiential directors at individual colleges and schools often feel that much time is spent throughout the year in reassigning students for which changes are necessary. However, changes reported during the observed year for the Northwest were less than the previously observed 15% change rate suggested in 1998.⁶ Differences in the number of placement changes may be attributable to differences in the way changes were measured and reported. Also, differences in pharmacy practice and the way that healthcare organizations operate in different geographic and economic climates may contribute to variable volatility in APPE placements. Practice sites now have greater experience with first-professional degree doctor of pharmacy education nationally, which may have led to stronger comfort level with precepting APPEs and greater placement stability. This particular analysis does not support that a blanket 15% excess capacity is always necessary or that it should be an objective for all experiential programs in order to achieve solvency in APPEs at this time.

While changes to placements in IPPEs in the Northwest also failed to reach this 15% threshold, volatility in placements for community IPPEs was greater than for institutional IPPEs. Placements in the inpatient setting were more stable and reliable than those in the community setting. Possible reasons for this difference could be that pharmacy colleges and schools may have a closer working relationship with hospital sites because there are fewer of them. Also, job turnover among preceptors in the community pharmacy setting seems to be higher than in hospitals.

Still, capacity for IPPEs and APPEs was significantly greater in the community setting compared with that in the hospital setting. For instance, the capacity ratio for community pharmacy APPEs was more than 3 times that of acute care/general medicine APPEs, confirming a trend observed by others.¹⁰ These results support conclusions put forth by ASHP that experiential education capacity in the inpatient setting may be shrinking.¹¹ Excess capacity

in community pharmacy overshadows other practice settings and inflates the perception of capacity in APPE programs as a whole. Capacity ratios should be calculated separately for each required APPE. Capacity in the inpatient setting will be a rate-limiting step to increasing enrollment or opening new schools. To improve capacity in the inpatient setting, faculty members in experiential education should explore practice models and preceptor development programs that help the limited number of hospitals precept more than 1 student at a time. Efficiencies of scale should be developed to help preceptors in this setting preserve productivity while still providing instruction to students.

Availability of acute care/general medicine APPEs also may be low because this experience is narrowly defined. Variability exists in what colleges and schools consider to be an acute care/general medicine or inpatient/health-system pharmacy APPE.¹² If some colleges and schools are restricting availability because learning activities for this experience are limited or more narrowly defined compared with other institutions, such variability also may contribute to reduced capacity. All of these results would suggest that experiential program faculty members should focus their preceptor development and training efforts on recruiting capacity in the inpatient settings while striving to achieve greater placement stability in the community pharmacy setting.

By combining capacity ratio results with internal assessments (eg, preceptor surveys, focus groups, student evaluations, and other methods), other published feedback about preceptor workloads, and concerns about quality experiential program directors can generate valuable information for assessing program outcomes, quality, and cost effectiveness. The AACP Experiential Education Section could disseminate such information to assist experiential directors in working with administrative officials in their respective colleges and schools to ensure appropriate support of experiential education.

Comparing actual NWPEC capacity ratios for 2010-2011 with projections of ASHP and SPEEC in 2008 and 2009, respectively demonstrates how the capacity ratio serves as a benchmark for solvency across colleges/schools and regions. Trends can be measured over time with actual data and then projections made for the future. Further use of the capacity ratio and breakdown of its components may help to identify national trends and assist efforts to allocate appropriate resources for experiential education nationwide. The greatest impact of the capacity ratio at the individual college or school may be in prioritizing which types of sites and preceptors on which to focus development efforts. Instead of calculating a capacity ratio for the entire experiential program, doing so for each

type of APPE and IPPE the college or school offers can reveal strengths and weaknesses and facilitate resource management.

CONCLUSION

The capacity ratio can be used to measure solvency in experiential education, but more importantly, the data used to calculate the capacity ratio provide valuable information about specific components of experiential programs. When used to examine specific subsets of practice experiences, such as core required APPEs and IPPEs, the capacity ratio can be used to guide decisions about preceptor recruitment and training as well as manage the resources of experiential program faculty and staff members. The capacity ratio also facilitates comparison of capacity between schools and regions. Using a ratio rather than actual counts of site availability and student placements removes consideration of class size when colleges and schools of differing sizes perform benchmarking. This approach also takes into account changes to placements, which is an essential component in measuring capacity because it more accurately represents the workload of experiential program faculty and staff members.

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