

FEATURE STORY

Paul Shoemaker
Thomas M. Schuhmann



trends in hospitals' use of contract labor

Too much reliance on contract labor to fill clinical vacancies can undermine a hospital's financial well-being. Yet a recent study suggests that over-reliance on contract labor is all too common among U.S. hospitals.

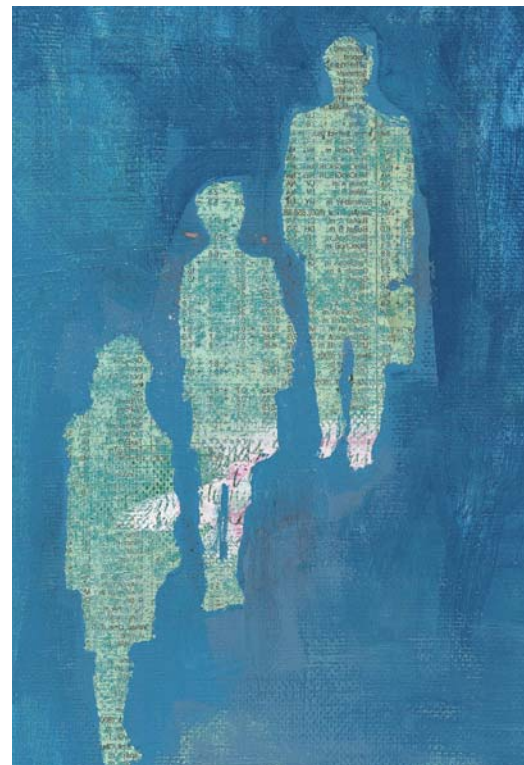
The use of contract labor appears to be on the rise in short-term acute care hospitals. A study of Medicare cost reports over a recent nine-year period found that short-term acute care hospitals have increased their use of contract labor to supplement scarce resources such as nurses from 1.3 percent of personnel expense in 1997 to more than 3 percent by the end of 2005. This increase may indicate that hospitals are substituting more expensive contract labor for salaried staff—a trend that should be of concern to hospital financial executives, given that personnel expense can easily consume more than half of a hospital's operating revenue.

Nationwide, short-term acute care hospitals in the United States spend nearly \$7 billion each year on contract labor. Because rates paid for contract labor can be twice what staff employees are paid, the opportunity for improvement in staffing costs may be as much as \$3.5 billion. This

cost difference points to significant potential opportunity to reduce personnel expense. The study of Medicare cost report data focused on trends in personnel expense and the use of contract labor to provide comparative information that hospitals could use to examine their own operations and identify potential opportunities to reduce staffing costs.

Why Contract Labor?

Hospitals' current high levels of contract labor use trace back, in part, to the increasing financial pressures they have faced because of changes in Medicare payment and the growth of managed care. These financial pressures have forced many hospitals in recent years to trim operations and staffing to the point where personnel vacancies have become problematic—even sometimes critical. As a result, many hospital executives regard today's shortages of qualified personnel as one of their chief concerns.



Recruiting and retaining the right mix of qualified personnel have always been challenges for hospitals, and these tasks have become even more difficult in recent years for a number of reasons. For one, the available workforce is shrinking as experienced workers age and as fewer young people enter health careers. The result is considerable competition for qualified nurses and other clinical professionals.

In addition, in an aging workforce with competitive dynamics, more workers want flexibility in the hours and times that they work. Yet high-quality healthcare delivery requires adequate levels of qualified staffing that generally cannot be safely reduced, substituted with less-skilled personnel, or replaced by technology, which limits a healthcare organization's ability to offer flexible work schedules. Financial incentives for workers could be used as a motivating factor, but financial incentives are not always possible because of economic pressures on hospitals.

These challenges help explain why hospitals sometimes turn to contract labor, and indeed the prudent use of contract labor can help maintain operations during fluctuations in census. Nonetheless, it should never be considered a solution to normal turnover.

Recent Changes in Personnel Expense and Contract Labor Usage

As noted previously, the cost report study identified a rising trend in use of contract labor

among various types of healthcare facilities from 1997 through 2005. This trend was reflected in the facilities' reporting of total personnel expense and contract labor expense on Medicare cost reports during this time.

For purposes of the study, *total personnel* expense was defined as the sum of salary expense, benefits, contract labor, and other wages and related costs. Although some hospitals appear to combine the cost of benefits in the salary expense reported, the practice does not interfere with the calculation of total personnel expense as defined. The definition of *contract labor* used for the study excluded home office costs, physician services, and other labor costs not typically considered as contract labor.

Contract labor expense is included in total personnel expense but has also been reported separately to illustrate its relationship to other personnel expenses such as home office costs (e.g., mobile nurse corps), physician services, and other labor costs that are neither salary expense nor typically considered as contract labor. (Contract labor expense is taken from the Medicare worksheet S-3, part 2, line 9.)

According to the cost reports, use of contract labor varies among types of facilities. The rates of use have increased markedly during the study period for rehabilitation and short-term facilities. Contract labor in long-term care facilities also have seen a steady increase in use of contract labor, from less than 1 percent of total personnel

AT A GLANCE

- > During the period of 1997-2005, total personnel expense for the nation's short-term hospitals averaged about 51.1 percent of total operating revenue.
- > Contract labor expense as a percentage of total personnel expense increased from 1.3 percent to more than 3 percent during this period.
- > By making more judicious use of contract labor, short-term acute care hospitals nationwide could reduce their staffing costs by as much as \$3.5 billion.

ABOUT THE COST REPORT STUDY

This study of cost report data analyzed Medicare cost reports for hospital fiscal years ending in 1997 through 2005. Comprehensive data for years prior to 1997 are not readily available from federal sources. Data for 2006 are preliminary and are not yet available for most hospitals.

Hospitals that participate in Medicare are required to submit annual financial reports that detail their operations. These reports are subsequently made available in electronic form by the Centers for Medicare and Medicaid Services. The Healthcare Cost Report Information System dataset contains data elements from the most recent version (i.e., as submitted, settled, or reopened) of each cost report filed since federal FY96.

Although hospitals that participate in Medicare are legally required to submit accurate and timely cost reports, data are sometimes incorrect or incomplete. Further, some hospitals may be exempt from filing complete cost reports or may operate on a basis other than fee-for-service. Cost reports were excluded from the study if they had missing revenue, expense, or salary data. The majority of the study focused on short-term hospitals, including both short-term acute care and critical access hospitals.

PERSONNEL EXPENSE AND CONTRACT LABOR BY TYPE OF FACILITY DURING 2005 (\$ IN MILLIONS)

Type of Facility	Number of Facilities	Salary Expense	Contract Labor	Fringe Benefits	Operating Revenue*	Personnel Expense†	Contract Labor‡
Childrens	55	\$5,897	\$18	\$560	\$12,685	51.5%	0.3%
Critical access	1,119	\$5,790	\$25	\$1,145	\$13,575	51.6%	0.4%
Long term	375	\$2,939	\$215	\$503	\$7,753	48.7%	5.7%
Psychiatric	344	\$4,236	\$6	\$546	\$6,033	79.7%	0.1%
Rehabilitation	174	\$1,514	\$27	\$256	\$3,353	55.3%	1.5%
Short term	3,479	\$162,403	\$6,974	\$26,973	\$414,542	50.4%	3.3%
Totals	5,545	\$182,779	\$7,265	\$29,983	\$457,940	50.8%	3.1%

*Total operating revenue is the net patient revenue after contractual allowances and discounts.

†Personnel expense as a percentage of operating revenue.

‡Contract labor as a percentage of personnel expense.

expenses before 1999 to 5.7 percent in 2005. This increase is most likely due to a 79 percent increase in the number of facilities. It is to be expected that a proliferation of facilities would lead to increased demand for qualified personnel.

From this point, the discussion will focus on short-term acute care facilities. Long-term care facilities are excluded because of operational differences among these facilities and the relatively few facilities for which data are available. Children's hospitals, psychiatric facilities, and rehabilitation facilities also are excluded because of their relatively few numbers and because there were no remarkable increases in the use of contract labor for these types of facilities during the study period.

Contract Labor in Short-Term Facilities

The short-term facilities studied include both short-term acute care hospitals and critical

access hospitals. Although CAHs are a relatively new designation, most of them were formerly short-term acute care hospitals, and because both types of short-term hospitals were included in the study, there should have been no distortion of data due to the conversions to critical access status. Nonetheless, it is important to note that the use of contract labor is much lower in CAHs, which are rural hospitals with no more than 25 beds and which offer less intensive levels of service.

Total personnel expense for short-term hospitals has averaged about 51.1 percent of total operating revenue during the period of 1997-2005. During this same period, however, contract labor expense as a percentage of total personnel expense increased from 1.3 percent to more than 3 percent.

Most recent data indicate that the observed increase in contract labor expense may have abated. There have not been continuing increases during the past several years. Contract labor as a percentage of total personnel expense declined in 2004 and has remained below the highest level measured in 2003.

Levels of personnel expense for short-term acute care hospitals may be influenced by factors such as ownership, size, and intensity of services. The study included several analyses to test the influence of these factors.

TRENDS IN PERSONNEL EXPENSE AND CONTRACT LABOR AMONG SHORT-TERM HOSPITALS

Hospital Fiscal Years	Number of Hospitals	Personnel Expense as a Percentage of Total Operating Revenue*	Contract Labor as a Percentage of Total Personnel Expense
1997	5,122	50.6%	1.3%
1998	5,080	51.0%	1.6%
1999	5,071	51.7%	1.8%
2000	5,036	51.0%	2.2%
2001	5,066	51.3%	2.8%
2002	4,961	51.7%	3.4%
2003	4,956	51.5%	3.5%
2004	4,972	51.1%	3.0%
2005	4,598	50.4%	3.2%

* Total operating revenue is the net patient revenue after contractual allowances and discounts.

PERSONNEL EXPENSE AND CONTRACT LABOR BY TYPE OF CONTROL DURING 2005 (\$ IN MILLIONS)

Type of Control (Short-Term Hospitals)	Number Facilities	Salary Expense	Contract Labor	Fringe Benefits	Operating Revenue*	Personnel Expense [†]	Contract Labor [‡]
Government	1,168	\$31,791	\$1,456	\$4,865	\$69,083	58.7%	3.6%
Proprietary (for-profit)	895	\$19,352	\$1,231	\$2,598	\$59,481	41.4%	5.0%
Voluntary (not-for-profit)	2,535	\$117,110	\$4,312	\$20,663	\$299,731	50.3%	2.9%
Totals	4,598	\$168,253	\$6,999	\$28,126	\$428,294	50.4%	3.2%

* Total operating revenue is the net patient revenue after contractual allowances and discounts.

[†]Personnel expense as a percentage of operating revenue.

[‡]Contract labor as a percentage of personnel expense.

Effects of ownership or type of control. Staffing and management practices may differ among hospitals according to ownership or type of control. For example, a hospital that is operated for profit may be more aggressive in managing staffing levels.

Government hospitals exhibit the highest levels of personnel expense and use more contract labor than voluntary hospitals. This may indicate an opportunity for government hospitals to reduce both staffing levels and the use of contract labor.

Proprietary hospitals, on the other hand, have the lowest personnel expense as a percentage of operating revenue, which may indicate staffing practices that are more in concert with fluctuations in census or intensity. Surprisingly, however, the proprietary hospitals seem to have the highest use of contract labor. This may indicate that the use of contract labor may be higher when staffing levels are more aggressively managed.

Effects of hospital size. To measure the effects of hospital size, all hospitals were ranked by total

operating revenue and then divided into five equivalently sized groups ranging from the lowest revenues (first quintile) to the highest revenues (fifth quintile).

There appear to be economies of scale in personnel expense. Personnel expense as a percentage of operating revenue declines as operating revenues increase. There also appears to be a noticeable relationship between hospital size and the use of contract labor. As previously discussed, this may be due to the low use of contract labor in critical access hospitals.

Effects of service intensity. The Medicare case mix index for federal FY05 was used to rank hospitals according to the intensity of services provided. All hospitals were ranked according to their CMI and then divided into five equivalently-sized groups with the lowest CMIs in the first quintile and the highest CMIs in the fifth quintile.

Personnel expense as a percentage of operating revenue declined as the intensity of services

PERSONNEL EXPENSE AND CONTRACT LABOR BY SHORT-TERM HOSPITAL SIZE DURING 2005 (\$ MILLIONS)

Quintile	Highest Revenue	Number Facilities	Salary Expense	Contract Labor	Fringe Benefits	Operating Revenue*	Personnel Expense [†]	Contract Labor [‡]
1	\$9.9	920	\$2,594	\$67	\$434	\$5,172	60.9%	2.1%
2	\$24.6	920	\$6,311	\$184	\$1,201	\$14,841	52.9%	2.3%
3	\$58.9	920	\$14,338	\$629	\$2,645	\$36,188	50.5%	3.4%
4	\$139.5	919	\$33,082	\$1,464	\$6,086	\$85,637	49.7%	3.4%
5	\$2,285.2	919	\$111,928	\$4,655	\$17,760	\$286,457	50.3%	3.2%
Total		4,598	\$168,253	\$6,999	\$28,126	\$428,294	50.4%	3.2%

*Total operating revenue is the net patient revenue after contractual allowances and discounts.

[†]Personnel expense as a percentage of operating revenue.

[‡]Contract labor as a percentage of personnel expense.

PERSONNEL EXPENSE AND CONTRACT LABOR FOR SHORT-TERM HOSPITALS BY CASE MIX INDEX DURING 2005 (\$ MILLIONS)

Quintile	Highest Revenue	Number Facilities	Salary Expense	Contract Labor	Fringe Benefits	Operating Revenue*	Personnel Expense†	Contract Labor‡
1	0.9658	908	\$4,805	\$131	\$875	\$9,985	59.6%	2.2%
2	1.1049	908	\$9,605	\$355	\$1,776	\$22,058	55.3%	2.9%
3	1.2450	908	\$21,723	\$1,074	\$4,370	\$53,376	53.6%	3.8%
4	1.4409	907	\$41,095	\$1,948	\$7,718	\$102,382	52.6%	3.6%
5	3.0741	907	\$90,714	\$3,487	\$13,352	\$239,886	47.9%	3.0%
N/A§		60	\$311	\$4	\$35	\$607	59.7%	1.0%
Total		4,598	\$168,253	\$6,999	\$28,126	\$428,294	50.4%	3.2%

* Total operating revenue is the net patient revenue after contractual allowances and discounts.

†Personnel expense as a percentage of operating revenue.

‡Contract labor as a percentage of personnel expense.

§CMI data not available for 37 hospitals (e.g., certain specialty and government hospitals).

increased. This finding is most likely due to the higher revenues generated by more intense services, but it also may indicate economies of scale in larger hospitals.

In contrast, contract labor expense increased as the intensity of services increased. The more specialized skills associated with more intense services may result in a greater need for contract labor, as do the more complex workplace issues surrounding more intense care levels. Because hospitals with the most intense services tend to be located in larger cities, there may also be more competitive labor markets for those hospitals.

The low use of contract labor in CAHs may also be a factor that explains why the data show higher contract labor expense in association with greater service intensity. It is difficult to separate the issues of size and intensity because larger hospitals typically offer more intense services. Not surprisingly, data focusing on service intensity are similar to data focusing on size—i.e., larger hospitals and hospitals with greater service intensity tend to show high rates of contract labor use. It is useful to consider both factors because some smaller specialty hospitals, such as cardiac and surgical facilities, have high intensities.

Finding the Right Balance

There are good reasons why hospitals, particularly larger hospitals or those with greater service intensities, should continue to use contract labor.

As noted previously, for example, using contract labor may be an effective way to maintain effective levels of staffing during fluctuations in census or intensity. Use of contract labor becomes a problem when hospitals rely too much on it to fill staffing vacancies that result from normal turnover. The study of Medicare cost reports points to a significant challenge facing many U.S. short-term facilities, in particular. Solutions to this challenge may lie in efforts to increase the nation's supply of qualified nurses and clinical support personnel—efforts that should be supported by hospital financial leaders whose organizations are striving to meet this challenge. ●

About the authors



Paul Shoemaker, FACHE,
president, Cost Report Data Resources,
LLC, Louisville, Ky.



Thomas M. Schuhmann, JD, CPA,
senior vice president, finance, Cost
Report Data Resources, LLC, Louisville,
Ky.

