

each State's unemployment insurance database. Establishments that have at least 50 initial claims filed against them during a 3-week period are targeted for contact by the State agency to determine the permanency of these separations, the total number of persons separated, and the reasons for these separations. Establishments are identified by industry and location and detailed socioeconomic characteristics of unemployment insurance claimants, such as age, race, sex, ethnic group, and place of residence, are noted. The program yields information on the entire period of insured unemployment of individuals, to the point where their regular unemployment insurance benefits are exhausted.

As indicated previously, 11 States provided data in the program for all of 1986; by the second half of that year, 26 States were fully participating. (Data are also provided in the report for those 26 States, aggregated over the last half of 1986.) Currently, 47 States and the District of Columbia are participating in the program.

Copies of the report to the Congress are available from the Bureau of Labor Statistics, Division of Local Area Unemployment Statistics, 441 G Street, NW, Room 2083, Washington, DC 20212.

— FOOTNOTES —

¹ For related information, see Sharon P. Brown, "How often do workers receive advance notice of layoffs?" *Monthly Labor Review*, June 1987, pp. 13-17.

² The reporting system covers layoff events of 30 days or more in which at least 50 initial claims for unemployment compensation were filed in a 3-week period by separated workers against their former employer.

Pay-for-knowledge compensation plans: hypotheses and survey results

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In recent years, the U.S. business environment has been characterized by fierce international competition and rapid technological change. This has been accompanied by a surge of workplace innovations such as quality-of-worklife programs, autonomous work groups, and employee stock ownership plans, to name a few. One particular innovation which has received national attention is "pay-for-knowledge" compensation plans, also referred to as skill-based pay or knowledge-based pay plans.¹ Unlike tradi-

tional compensation systems which base employees' wages on the specific jobs they actually do, pay-for-knowledge plans base wages on the repertoire of jobs that the employee is trained to do. Under such plans, a typical employee starts at a base rate, and as he or she learns different jobs in the organization, the pay rate increases simultaneously. One respondent provided a description of the pay-for-knowledge system in his organization that is fairly typical of the structure of these systems:

Our pay-for-knowledge system has seven levels of pay. LEVEL ONE is the level at which the employee is hired. LEVEL TWO is the next level that an employee progresses to once he or she has learned to complete one job in a work team in a satisfactory manner. The person progresses to LEVEL THREE when that person has learned to perform a sufficient number of jobs in that work team to be considered a flexible team member so that the person can move around and share work with other people, replace other people when they are absent, and so forth LEVEL FOUR is when the person has learned to perform all of the jobs in a team in a satisfactory manner. The person then reaches LEVEL FIVE by transferring to another team and achieving the requirements of level three on that new team The person then progresses to LEVEL SIX when they have learned all the jobs on the second team. The last level, which is LEVEL SEVEN, is a team coordinator or team leader type level. Typically, only one employee on the team can be designated as a team coordinator and the team is usually the one that designates which team member can function as a team leader.

Pay-for-knowledge plans have been hypothesized to offer many advantages to organizations and employees. For example, many analysts suggest that organizations experience greater work force flexibility, leaner staffing, greater work force stability, higher quality of output, lower absenteeism, less turnover, and higher productivity.² Likewise, analysts also say that employees in pay-for-knowledge systems may benefit from higher motivation, higher job satisfaction, higher pay satisfaction, increased feelings of self-worth, more opportunities for growth and development, increased job security, improvements in the quality of worklife, and higher organizational commitment.³

Unfortunately, to date, only limited information about pay-for-knowledge systems has been available to assess the validity of these claims. To be sure, much of the information known about these systems comes from case reports, anecdotes, and speculation. Systematic, empirical data on these compensation plans are rare. In an effort to begin remedying this deficiency, we studied pay-for-knowledge plans in 20 plants.⁴ A detailed questionnaire on the workings of pay-for-knowledge systems was completed by the personnel directors of these plants.

Of the plants surveyed, 19 were manufacturing facilities and one was in a service industry. Only two plants were unionized.⁵ The plants employed an average of 500 people, of whom about two-thirds were men. About 70 percent of all employees were covered by the pay-for-knowledge plan, and most had at least a high school education.

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Hypotheses versus survey findings

The data from the 20 plants were used to assess the accuracy of a variety of speculations and hypotheses regarding pay-for-knowledge plans.

It has been argued that pay-for-knowledge plans are used with production employees only. The data did not support this claim. Although production employees were covered most often, clerical and skilled trades employees were also covered in several instances. Further, three plants had professional and technical employees in their pay-for-knowledge plan, and two included managerial employees or first-line supervisors, or both.

*Lack of support from first-line supervisors is a common problem with pay-for-knowledge plans, largely because the system may threaten traditional roles.*⁶ The data did not confirm this notion. The following tabulation shows the attitudes of first-line supervisors toward pay-for-knowledge plans. Responses ranged from 1 (strongly disagree with statement) to 7 (strongly agree):

	<i>Mean response</i>
Our first-line supervisors are very supportive of the pay-for-knowledge plan	5.5
Using pay-for-knowledge has caused many tensions among our first-line supervisors	2.9
Our first-line supervisors don't like our pay-for-knowledge plan	2.1

In general, respondents disagreed with the statements that such plans created tension among first-line supervisors, or that the supervisors did not like the plan. Alternatively, they agreed that first-line supervisors supported the plan.

*Pay-for-knowledge plans require "start-up" situations (plans put in effect when the plants first open), so that the organization does not have to overcome problems of history, culture, and tradition.*⁷ In our sample, about three-quarters of the pay-for-knowledge plans were "start-ups"; the remainder were changed from a traditional to a pay-for-knowledge compensation system.

The "start-up" plants were compared with the change-over plants along several outcomes—absenteeism and turnover rates, quality of product, staffing levels, and employee attitudes, as well as the overall success of the plan. Interestingly, on none of these dimensions did the start-up plants appear significantly different from the change-over plants.

*The specific mechanics of the pay-for-knowledge plan make a difference in the plan's overall effectiveness.*⁸ Generally, the typical pay-for-knowledge plan had about 10 skill units, although the actual numbers ranged from 4 to 100. The maximum number of skills an employee was allowed to learn was about 15, and the minimum number required was

about three. Employees generally learned about four skills or jobs. The time required to learn the maximum number of skill units was approximately 49 months.

Companies normally spend a lot of time working out the mechanical details of their pay-for-knowledge plans. Presumably, how these details are handled affects the success of the plan. The data, however, did not confirm this. The only factor that had a significant correlation with the various outcome measures was the number of skill units in the plan. It appeared that plants with a large number of skill units had less successful plans than did plants with fewer skill units. It may be that after seven or eight skill units, the pay-for-knowledge plan starts becoming unmanageable, or that employees cannot understand the pay system.

In any case, the number of skill units was the sole predictor of success among the plan characteristics measured in this study. From an administrative perspective, this finding could be viewed as disappointing. Clearly, it would benefit those involved in administering or designing the plan to know on what details they should focus. Unfortunately, the data do not leave the researchers in this position, but rather, in the position to say that it does not matter how pay-for-knowledge plans are operated.

Other success factors

We searched for factors that would discriminate between the more and less successful pay-for-knowledge plans. First, we tested length of time that the plan had been in operation, because it was hypothesized that more mature plans would have had time for the "kinks" in the system to show up. The results yielded no significant differences. Because pay-for-knowledge plans are usually embedded in a network of innovations, the analysis also involved looking at the other innovations that accompanied the plan—employee stock ownership plans, team approach to management, autonomous work groups, employee participation in major personnel decisions (hiring, performance appraisals, terminations) and alternative work schedules, to name a few. None of these innovations appeared to be related to plan success, however.

Pay-for-knowledge plans are hypothesized to succeed only with the "right" employees.⁹ In our data, differences in the demographic and background characteristics of employees in the different plans provided no help in explaining the plan's success. The bottom line is that after exploring a variety of commonly held and intuitive hypotheses explaining the success of pay-for-knowledge plans, almost invariably the results did not confirm these hypotheses. The reported success of pay-for-knowledge plans simply did not correlate with any of these predictors.

Interpreting the results

What factors could be responsible for these "no results"? It may be that the size of our sample was too small. It is, after all, more difficult to find significant correlations using

Table 1. Factors contributing to the success of pay-for-knowledge plans

Factor	Mean response ¹
Emphasis on employee growth and development	5.6
Local managerial commitment to the plan	5.6
Employee commitment	5.5
The overall management philosophy of the organization	5.3
Ability to move employees from one job to another as needed	5.3
Emphasis on employee training	5.2
Employee selection procedures	5.2
Employee participation in the administration of the plan	5.1

¹ The question was: To what extent do the elements listed below account for any successes you have had using your pay-for-knowledge plan? Response options were: 1—not at all; 3—to some extent; 5—to a large extent; and 7—to a very great extent.

a sample size of 20 than with a sample size of, say, 200. While that may be so, the plants in the sample represent the gamut of pay-for-knowledge plans and environments. One might also posit that there was not enough variance in the outcome measures. The data did not support this notion, but instead, raised questions about whether some of the issues that people have discussed about pay-for-knowledge plans are in fact valid. Perhaps the thinking about pay-for-knowledge systems needs to be revised.

The results of this study suggest that, in the past, researchers and practitioners have misguidedly focused on “nitty-gritty” issues with respect to the use of pay-for-knowledge plans. Much attention has been directed at the importance of working out the specific details, anticipating potential problems, and monitoring the system closely. Such a focus has been predicated on the assumption that it is the specifics of the pay-for-knowledge plan that account for success or failure. It may be, however, that these specifics are merely the background, and that it is a number of intangibles that the use of pay-for-knowledge conveys that actually account for its effectiveness.

For instance, using pay-for-knowledge systems may be significant in that it signals employees that management cares about employee growth and development. One might argue that it does not matter whether the maximum pay rate can be attained in 50 weeks or in 100 weeks. Rather, what matters is that employees can increase their pay rates, that they can attain higher pay levels than possible in a traditional compensation system, and that the maximum rate is within reach.

Likewise, it may not matter that the pay-for-knowledge plan has “kinks” that show up periodically. Rather, what is important is how these kinks are handled—whether management retains its commitment to the pay-for-knowledge plan in the face of difficulties, whether employees are involved in making modifications, whether employees get blamed for difficulties, and so forth. In other words, man-

agement’s way of handling the problems, rather than the problems themselves, may be critical in this regard.¹⁰

Although some of these issues were not addressed directly in the study, respondents were asked about factors they thought responsible for the relative success of their pay-for-knowledge plans. (See table 1.) Clearly, the “intangibles,” the emphasis on employee growth and development, the commitment of employees and management, the overall managerial philosophy of the organization, and so forth, are viewed by the respondents as critical to the success of pay-for-knowledge plans.

These data suggest further that the emphasis in designing and implementing pay-for-knowledge plans should shift from the specifics to the general. That is, the focus should be on systemic issues with respect to the use of pay-for-knowledge. For example, the proposed Chrysler-UAW pay-for-knowledge plan undoubtedly involved hours of meticulous planning, as the United Auto Workers and management at Chrysler hammered out specific details of the plan. However, the results of this study suggest that attending to such specifics may be far less important than heretofore believed, and that such efforts may be better devoted to broad issues such as managerial attitudes, philosophies, and commitment.

Future of pay-for-knowledge plans

We asked the respondents several questions about the future of pay-for-knowledge plans. The respondents showed moderately positive attitudes toward their pay-for-knowledge plans. (See table 2.) Most indicated it would be

Table 2. Overall attitudes toward pay-for-knowledge plans

Statement	Mean response ¹
I think it would be a big mistake to discontinue our pay-for-knowledge plan	6.1
Pay-for-knowledge has given us greater flexibility to respond to changes in our product market	5.6
If we were to stop using pay-for-knowledge, I would seriously consider quitting	3.3
If we had things to do all over again, I would recommend against using a pay-for-knowledge plan	1.5
I really wish we didn't use a pay-for-knowledge plan	1.4
If I had my way, we would use pay-for-knowledge plans in all our facilities	5.1
Overall, our pay-for-knowledge plan has been very successful	5.4
If other companies knew of our experiences, they would want to begin using pay-for-knowledge plans immediately	4.6
I would try to use pay-for-knowledge in any other organization where I might work	5.2
All in all, the costs of pay-for-knowledge plans far outweigh the benefits	3.3
Pay for knowledge plans don't come anywhere near their touted benefits	2.6

¹ Response options were: 1—strongly disagree; 2—disagree; 3—slightly disagree; 4—neither agree nor disagree; 5—slightly agree; 6—agree; and 7—strongly agree.

Table 3. Relationship of anticipated benefits with actual benefits and overall success of pay-for-knowledge plans

Anticipated benefit	Relationship with actual benefit ¹	Relationship with overall success
Better labor-management relationships .....	.70	.26
More employee commitment .....	.64	.37
Enhanced employee motivation .....	.78	.35
Labor-cost reductions .....	.60	.24
Improved employee satisfaction .....	.61	.26
Smaller work force .....	.60	.04

¹ p < .01.
² p < .05.

a mistake to discontinue the plan, and many believed pay-for-knowledge should be used in all their facilities. Opinions were mixed about the cost-benefit balance of pay-for-knowledge plans, and about the discrepancy between the anticipated and actual benefits of the plan. The results shown in table 3 suggest, however, that the mixed feelings associated with anticipated versus actual benefits are not of great concern because the reasons for using pay-for-knowledge were significantly correlated with the outcomes they promoted.

In short, the future of pay-for-knowledge plans appears positive. Most users are reasonably happy with their plan and, given the right circumstances, would use these plans again.

More research needed

The results of this study support the notion that pay-for-knowledge plans are capable of providing significant benefits to the organization. Such benefits include increasing work force flexibility, promoting employee growth and development, leaner staffing, and lower absenteeism and turnover. The data also suggest that much of the established thinking about pay-for-knowledge may need to be revised. For instance, based on our survey of the 20 plants, we conclude that pay-for-knowledge plans can work in both start-up or change-over situations, with managerial as well as production employees, in manufacturing and service facilities, and in unionized and nonunionized plants.

Most important, however, the data suggest that for pay-for-knowledge plans to succeed, it is important to focus on attitudes and less tangible issues, rather than on specific details of the plan. Organizations considering such plans would be well-advised to look at their managerial philosophies, their commitment to pay-for-knowledge, their attitudes toward employees, and so forth, in at least as much depth as they do the kinds of plants and plans that generally typify pay-for-knowledge.

While exploratory in nature, this study has been useful in

gathering and analyzing information relating to the dynamics and effectiveness of pay-for-knowledge systems. Clearly, more research is warranted in this area to develop a better understanding of these plans. □

FOOTNOTES

¹ G. D. Jenkins, Jr. and Nina Gupta, "The payoffs of paying for knowledge," *National Productivity Review*, Spring 1985, pp. 121-30; E. E. Lawler III and G. E. Ledford, Jr., "Skill-based pay: A concept that's catching on," *Personnel*, September 1985, pp. 30-37; and H. Tosi and L. Tosi, "What managers need to know about knowledge-based pay," *Organizational Dynamics*, Winter 1986, pp. 52-64.

² L. M. Aparc, "Work-rule programs spread to union plants," *The Wall Street Journal*, Apr. 16, 1985, p. 6; Jenkins and Gupta, "The Payoffs"; Nina Gupta, G. D. Jenkins, and W. P. Curington, "Paying for knowledge: Myths and realities," *National Productivity Review*, Spring 1986, pp. 107-23; T. S. Kochan, H. C. Katz, and N. R. Mower, *Worker participation in American unions* (Kalamazoo, MI, W. E. Upjohn Institute for Employment Research, 1984), pp. 12-96; Lawler and Ledford, "Skill-based pay"; and R. E. Walton, "The Topeka work system: Optimistic visions, pessimistic hypotheses, and reality," in R. E. Walton, ed., *The innovative organization: Productivity programs in action* (New York, Pergamon, 1982), pp. 260-87.

³ Gupta and others, "Paying for knowledge"; Jenkins and Gupta, "The payoffs"; E. E. Lawler III, "Reward systems," in J. R. Hackman and J. L. Suttle, eds., *Improving life at work* (Santa Monica, Goodyear, 1977), pp. 163-226; E. E. Lawler III, G. D. Jenkins, and G. E. Herline, *Initial data feedback to General Foods Topeka pet food plant: Selected survey items* (Ann Arbor, MI, Institute for Social Research, 1977); E. J. Poza and M. L. Markus, "Success story: the team approach to work restructuring," *Organizational Dynamics*, Winter 1980, pp. 3-25; and R. E. Walton, "Work Innovations in the United States," *Harvard Business Review*, Winter 1979, pp. 88-98.

⁴ The study was conducted in 1985 under contract with the U.S. Department of Labor, Bureau of Labor-Management Relations and Cooperative Programs.

⁵ This suggests that pay-for-knowledge plans can be implemented in both nonunionized and unionized settings. The fact that the sample did not contain a greater proportion of unionized plants with pay-for-knowledge plans may be partially attributable to the commonly held myth that such plans are in inherent conflict with many union preferences (such as rigid jurisdictional boundaries). For a discussion of labor-related issues in pay-for-knowledge systems, see W. P. Curington, N. Gupta, and G. D. Jenkins, Jr., "Labor issues and skill-based compensation systems," *Labor Law Journal*, August 1986, pp. 581-86.

⁶ Jenkins and Gupta, "The payoffs"; E. E. Lawler III, "The new plant revolution," *Organizational Dynamics*, Winter 1978, pp. 2-12; Poza and Markus, "Success story"; R. E. Walton, "The Topeka work system"; and R. E. Walton and L. A. Schlesinger, "Do supervisors thrive in participative work systems?" *Organizational Dynamics*, Winter 1979, pp. 24-38.

⁷ Aparc, "Work-rule programs"; Jenkins and Gupta "The payoffs"; and Lawler and Ledford, "Skill-based pay."

⁸ Jenkins and Gupta, "The payoffs."

⁹ Walton, "The Topeka work system."

¹⁰ E. E. Lawler III, *Pay and Organizational Development* (Reading, MA, Addison-Wesley, 1981).

Hospital occupational pay in 23 metropolitan areas

Occupational pay levels in hospitals spanned a broad range in August 1985, according to a Bureau of Labor Statistics

wage survey.¹ For each of the 23 metropolitan areas studied,² earnings information was developed for full- and part-time workers in 47 occupations. These occupations accounted for one-half of the total non-Federal hospital employment in most of the areas and were selected from two major employee categories—professional or technical and nonprofessional.

Full-time general duty nurses typically averaged between \$11 and \$13 an hour, with the lowest average recorded in Buffalo (\$10.11) and the highest in San Francisco (\$15.52). General duty nurses typically averaged 30 to 40 percent more than licensed practical nurses and 60 to 75 percent more than nursing aides in the same area. However, head nurses usually averaged 20 to 30 percent more than general duty nurses in the same area, while the corresponding pay advantages for supervisors of nurses were usually 30 to 40 percent.

Area pay levels varied widely among the other jobs surveyed. Pharmacists, supervisors of physical therapists, medical record administrators, and supervisors of radiographers generally averaged between \$13 and \$16 an hour among the areas studied. Physical therapists, medical and psychiatric social workers, dietitians, librarians, electricians, engineers, and biomedical technicians typically averaged between \$11 and \$14 an hour. Other technicians (pharmacy, medical record, EKG), surgical technologists, licensed practical nurses, and clerical and service workers

(such as laundry and kitchen employees) commonly recorded area averages below \$8.50 an hour. (See table 1.)

The 58,000 nursing aides—largest of the nonprofessional group—averaged from \$5.43 an hour in Dallas-Fort Worth to \$9.76 in San Francisco. Psychiatric aides averaged more than nursing aides in 10 of the 12 areas where comparisons were made, but their hourly pay advantages were less than 10 percent.

Even within the same occupation and area, earnings of full-time workers spanned broad ranges. For example, in private hospitals, the differences between the highest and lowest paid employee frequently exceeded \$4 an hour. This reflects differences in pay levels of individual hospitals in the same area as well as the range-of-rate pay systems employed by most hospitals. Also contributing to differences in occupational pay among hospitals in the same area were type of facility; pay differentials for licensed, certified, or registered employees; size of facility; and whether the workers were covered by collective bargaining agreements.

Where comparisons were possible, occupational pay levels were usually higher in private hospitals than in State and local government hospitals. This continued the reversal of pay relationships between these two types of hospitals, first noted in the Bureau's August 1981 survey.³ Examples of pay comparisons favoring private hospitals ranged from supervisors of nurses to ward clerks, with average differences usually falling below 10 percent. Areas where State and

Table 1. Pay ranges for selected occupations in hospitals, selected areas, August 1985

Occupation	Average hourly earnings ¹				
	Lowest-paying area	Pay levels	Highest-paying area	Pay levels	Mid-range of area pay levels ²
Registered professional nurses:					
Supervisors of nursing	Buffalo	\$13.28	Oakland	\$19.53	\$14.97–\$16.46
Head nurses	Buffalo	11.69	San Francisco	18.39	13.68–15.15
General duty nurses	Buffalo	10.11	San Francisco	15.52	11.12–12.44
Technicians and technologists:					
EKG technicians	Houston	6.48	San Francisco	10.58	7.21–8.36
Laboratory technicians	Houston	7.24	San Francisco	13.75	8.38–9.60
Medical technologists	Baltimore	10.07	Oakland	15.98	10.52–12.26
Radiographers	Baltimore	8.41	Oakland	13.38	9.05–10.29
Surgical technologists	Atlanta	6.71	Oakland	10.74	7.63–8.94
Therapists and social workers:					
Occupational therapists	Boston	10.03	Oakland	14.17	10.61–11.73
Physical therapists	Boston	10.12	Oakland	14.52	11.07–12.69
Other professional and technical:					
Dietitians	Baltimore	10.34	San Francisco	14.22	10.64–11.81
Licensed practical nurses	Atlanta	7.20	San Francisco	10.80	8.33–9.16
Pharmacists	Boston	12.47	Los Angeles	20.68	14.07–16.87
Pharmacy technicians	Dallas	6.23	San Francisco	10.96	6.70–7.99
Nonprofessional health services:					
Nursing aides	Dallas	5.43	San Francisco	9.76	6.38–7.26
Ward clerks	Dallas	5.97	San Francisco	9.78	6.49–7.75
Office clerical:					
Admitting clerks	Atlanta	6.01	San Francisco	9.68	6.63–7.85
Switchboard operators	Houston	5.81	New York	9.24	6.55–7.48
Other nonprofessional:					
Cleaners	Dallas	4.88	San Francisco	9.35	5.86–7.13
Food service helpers	Atlanta	4.83	San Francisco	9.13	5.69–6.89

¹ See text footnote 1.

the range of averages shown. Federal hospitals were not surveyed.

² Of the areas analyzed, one-fourth reported occupational averages above and one-fourth below

local government workers typically averaged more than their private counterparts included Buffalo, Denver, and Detroit.

All hospitals studied provided paid holidays. Private hospitals generally provided 8 to 12 days annually, compared with 10 to 13 days in non-Federal government hospitals. Paid vacations (after qualifying periods of service) also were provided by all hospitals covered by the survey. Typical provisions called for at least 2 weeks of vacation pay after 1 year of service, 3 weeks after 5 years, and at least 4 weeks after 15 years.

Life insurance and health plan coverage for employees, including hospitalization, surgical, medical, and major medical benefits, were nearly always provided by the hospitals studied. However, employees in private hospitals often received at least part of the health benefits package through direct care. For example, at least one-fifth of the employees in 10 metropolitan areas received full coverage through a combination of insurance and direct care. State and local government hospitals rarely dispensed care directly, relying almost exclusively on insurance coverage.

Retirement pension plans (in addition to Social Security) applied to virtually all private hospital employees in 14 areas. Coverage in the other locations was nine-tenths or more in six areas, approximately four-fifths in Miami and Los Angeles, and three-fifths in Dallas-Fort Worth. Some form of retirement plan was available to virtually all employees in the State and local government hospitals studied. Typically, a combination of an employer-sponsored pension plan and Social Security were provided.⁴ In Boston, Cleveland, and Detroit, however, all hospital workers were covered exclusively by pension plans not funded through Social Security.

The 1,225 hospitals covered by the survey employed 1.3 million workers in August 1985, or nearly two-fifths of the 3.4 million private and State and local government hospital workers in the Nation. Of the survey's total, private hospitals employed just over four-fifths of the workers. In most areas, nine-tenths or more of all private hospital workers were employed in short-term, general hospitals that did not specialize in a particular type of care. Most of the remaining private hospital workers were in psychiatric, children's, and orthopedic facilities. Not-for-profit, secular institutions accounted for nearly two-thirds of the private hospital employment.

State, county, and city government hospitals each accounted for about three-tenths of the 219,737 government hospital workers covered by the survey. Hospital districts and city-county hospitals employed the remainder. Of the total, general hospitals employed four-fifths of the workers; psychiatric hospitals (typically long-term hospitals run by State governments), one-seventh; and the remainder were employed in chronic or convalescent and orthopedic hospitals.

Regularly scheduled part-time employees accounted for one-fourth of the total hospital work force studied. Minneapolis reported the largest ratio of part-timers (about one-

half) and New York, the lowest proportion (about one-seventh). The following occupations were staffed with part-time workers totaling 20 percent or more: nurse anesthetists and practitioners; general duty and licensed practical nurses; EKG and medical laboratory technicians; medical technologists; radiographers; occupational, physical, respiratory, and speech therapists; medical librarians; pharmacists and pharmacy technicians; nursing and psychiatric aides; ward clerks; food service helpers; and several clerical occupations.

Collective bargaining agreements generally applied to greater proportions of workers in State and local government hospitals than in private hospitals. The extent of coverage, however, varied among the metropolitan areas and by occupational group. Surveywide, collective bargaining contracts in government facilities covered two-thirds of the nurses, seven-tenths of the other professional or technical personnel, three-fourths of the office clerical workers, and just over four-fifths of the nonprofessionals. The corresponding proportions in private hospitals were nearly one-fourth of the registered professional nurses; approximately one-fifth each of the other professional or technical employees and office clerical workers; and nearly two-fifths of the other nonprofessional employees.

A comprehensive report on the survey findings, *Industry Wage Survey: Hospitals, August 1985* (Bulletin 2273) may be purchased from the Superintendent of Documents, Washington, DC 20402, or from the Bureau of Labor Statistics, Publications Sales Center, P.O. Box 2145, Chicago, IL 60690. The bulletin provides additional information on occupational pay (including area earnings distributions and averages by type and size of facility and labor-management contract coverage); work schedules and hospital characteristics; and on the incidence of selected employee benefits for full-time workers. □

—FOOTNOTES—

¹ The survey excluded all Federal Government facilities and hospitals with fewer than 100 workers. Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts, as well as the value of room, board, or other perquisites provided in addition to cash wages. Incentive payments, such as those resulting from piecework or production bonus systems, and cost-of-living pay increases (but not bonuses) were included as part of the worker's regular pay. Excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or yearend bonuses, and other nonproduction bonuses.

² Refers to Metropolitan Statistical Areas as defined by the U.S. Office of Management and Budget through June 1983.

³ For an account of the earlier study, see *Industry Wage Survey: Hospitals, October 1981*, Bulletin 2204 (Bureau of Labor Statistics, 1984).

⁴ According to a 1983 amendment to the Social Security Act, effective January 1984, nonprofit hospitals are required to make contributions to Social Security. However, State or local government hospitals are not legally required to make Social Security contributions, but may do so voluntarily. The amendment specifies that any State or local government hospital that provided Social Security before the amendment became effective cannot terminate such coverage.