

Earnings of Healthcare Workers by Level of Duties and Responsibilities, 2008

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Originally Posted: April 21, 2010

This article presents estimates of earnings for full-time civilian healthcare practitioner and technical and healthcare support occupations, and for specific occupations within these groups, by work level. The data show significant differences between average hourly earnings of the lowest and highest work levels within most healthcare occupations.

Introduction

The rising cost of healthcare is a major issue affecting the lives of Americans and has lead to legislative action on insurance coverage and delivery of healthcare in the United States. Whether one has an employer-provided health plan, is covered by a government program, pays independently for health insurance coverage, or has no health insurance coverage, the use of healthcare services remains strong. In the private sector, employment in the healthcare industry as a percentage of total employment has been rising for decades. Even during economic downturns, as thousands of jobs are lost, healthcare workers--who provide the indispensable services that people need in emergencies as well as for maintaining health--typically remain at high employment levels. Furthermore, with the ageing of the U.S. population and technological improvements in medicine, healthcare occupations are expected to experience employment growth over the next several years.

Considering the growth in demand for healthcare services and recent Federal Government policy changes affecting the healthcare industry, a review of wages currently earned by workers in healthcare occupations is timely. This article presents an analysis of healthcare workers wages using 2008 National Compensation Survey (NCS) data.⁶ The NCS provides estimates of average hourly earnings for hundreds of occupations.⁷ The survey is unique in that it collects data and publishes earnings estimates not only by occupation but also by work level within an occupation. Work-level earnings data are especially useful because they provide a measure of earnings based on the workers actual duties and responsibilities on the job.⁸ These data can be of particular interest to policy experts and healthcare providers; for example, as healthcare providers strive to cut costs, wage data by work level give a more complete picture of the wage structure. Also, the data are useful for job seekers and employed healthcare workers to assess a range of earnings rates that are associated with a specific occupation.

This analysis focuses primarily on hourly earnings of full-time⁹ workers in healthcare practitioner and technical occupations and healthcare support occupations, by work level, in the U.S. civilian sector. Healthcare workers are employed in establishments such as hospitals, clinics, private practices of physicians and dentists, pharmacies, nursing homes, outpatient surgical centers, diagnostic imaging centers, ambulance and Medevac services, and educational institutions, large businesses, and government agencies that run an employee or student health unit. The NCS defines civilian workers as those in private industry and in State and local government. The NCS excludes the military, Federal Government workers, household workers, and the self-employed from its surveys. Sampled occupations are defined by the Standard Occupational Classification (SOC) system.¹⁰ The analysis shows that for certain healthcare occupations, there are significant differences in hourly earnings by work level. This study does not include an analysis of work-level wage differences between full-time and part-time workers, nor between State and local government and private industry workers. Both of these factors may affect earnings estimates by work level.

Occupational Earnings Estimates

Table 1 lists the average earnings for selected occupations and occupational groups. The 2008 NCS published national, civilian sector, full-time earnings estimates for 48 occupations and minor occupational groups under the major group healthcare practitioner and technical occupations and for 18 occupations and minor occupational groups under the major group healthcare support occupations.



Table 1. Mean hourly earnings of healthcare occupations, full-time civilian workers, National Compensation Survey, 2008

Occupation	All work levels
Healthcare practitioner and technical occupations*	\$ 30.23
Dentists	63.24
Dentists, general	61.81
Dietitians and nutritionists*	23.48
Optometrists	54.01
Pharmacists*	51.54
Physicians and surgeons*	76.46
Anesthesiologists	108.49
Family and general practitioners*	77.95
Internists, general	74.16
Pediatricians, general	53.51
Psychiatrists	74.83
Surgeons	86.23
Physician assistants*	42.58
Registered nurses*	31.54
Therapists*	31.11
Audiologists	33.19
Occupational therapists*	34.26
Physical therapists*	33.74
Radiation therapists	39.99
Recreational therapists	18.76
Respiratory therapists*	24.96
Speech-language pathologists*	35.01
Veterinarians	43.30
Clinical laboratory technologists and technicians*	20.43
Medical and clinical laboratory technologists*	24.55
Medical and clinical laboratory technicians*	17.50
Dental hygienists*	31.32
Diagnostic related technologists and technicians*	27.39
Cardiovascular technologists and technicians*	26.50
Diagnostic medical sonographers*	32.17
Nuclear medicine technologists	36.32
Radiologic technologists and technicians*	26.01
Emergency medical technicians and paramedics*	15.74
Health diagnosing and treating practitioner support technicians*	16.67
Dietetic technicians	11.05
Pharmacy technicians*	14.89
Psychiatric technicians*	16.89

Note: An asterisk (*) denotes two or more work-level estimates published for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 3, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm.



Occupation	All work levels
Respiratory therapy technicians*	22.53
Surgical technologists*	19.32
Veterinary technologists and technicians	14.32
Licensed practical and licensed vocational nurses*	19.04
Medical records and health information technicians*	16.48
Opticians, dispensing	18.14
Miscellaneous health technologists and technicians*	18.50
Occupational health and safety specialists and technicians*	26.99
Occupational health and safety specialists*	26.75
Miscellaneous healthcare practitioner and technical workers	20.27
Athletic trainers	18.43
Healthcare support occupations*	12.90
Nursing, psychiatric, and home health aides*	11.53
Home health aides*	10.24
Nursing aides, orderlies, and attendants*	11.71
Psychiatric aides*	12.55
Occupational therapist assistants and aides*	18.73
Occupational therapist assistants	22.05
Occupational therapist aides	12.65
Physical therapist assistants and aides*	18.49
Physical therapist assistants*	24.21
Physical therapist aides*	11.88
Massage therapists	20.03
Miscellaneous healthcare support occupations*	14.45
Dental assistants*	17.24
Medical assistants*	13.70
Medical equipment preparers*	14.80
Medical transcriptionists*	15.04
Pharmacy aides*	11.99
Veterinary assistants and laboratory animal caretakers	12.56

Note: An asterisk (*) denotes two or more work-level estimates published for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 3, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm.

As shown in table 1, nationally, civilian full-time healthcare practitioner and technical occupations as a whole earned an occupational mean of \$30.23 per hour in 2008. Full-time workers in healthcare support occupations as a whole earned an occupational mean of \$12.90 per hour. The mean hourly earnings of specific occupations under healthcare support ranged from \$10.24 per hour for home health aides to \$24.21 per hour for physical therapist assistants. The mean hourly earnings of occupations under healthcare practitioner and technical ranged from \$11.05 per hour for dietetic technicians to \$108.49 per hour for anesthesiologists.

Estimating Average Earnings By Work Level

The Federal Government conducts several surveys that publish wage data.¹¹ The NCS is unique in that it provides estimates by work level within the occupation. When the NCS samples a job in an establishment, the field economist who collects the



data matches the job to an occupation defined by the SOC and the employers classification of the job; then he or she determines work level within that matched occupation using a point-factor system for job evaluation. There are four factors in the system used by the NCS: (1) knowledge, (2) job controls and complexity, (3) contacts, and (4) physical environment. Points are assigned for each of the factors; the greater the duties and responsibilities within each factor, the higher are the number of points. For example, a sampled job of fire fighter might receive 100 points for the physical environment factor because the job requires strenuous, high risk activities, whereas a typical secretarial occupation might receive only 10 points because the job is not strenuous and is performed in a relatively low-risk environment.¹²

All surveyed jobs are measured against the same point-factor standards for job controls and complexity, contacts, and physical environment factors. Knowledge is the only factor that assigns points differently for different occupational groups. ¹³ For healthcare practitioners and technical occupations, such as registered nurses, surgeons, pharmacists, dentists, physical therapists, and psychiatrists, the field economist uses the *Knowledge Guide for Professional Medical Jobs* to level this factor and determine the knowledge points for the surveyed job. ¹⁴ For healthcare support occupations, such as nursing aides, orderlies, and attendants, the field economist uses the *Knowledge Guide for Medical, Hospital, Dental, Public Health, and Veterinary Technician Jobs* to level the knowledge factor and determine the knowledge points for the surveyed job. ¹⁵ Once the field economist determines the points assigned to each of the four factors, he or she sums the points, and this total indicates the work level of the surveyed occupation. (A work level covers a range of total points. ¹⁶) The NCS then collects earnings data for all of the establishments employees in that unique, matched occupation.

As the NCS processes the collected data, the work level associated with each surveyed job is used to create estimates of average hourly wages for each work level within each occupation. NCS publishes wage estimates for 15 work levels; however, no individual occupation matches at all 15 work levels. For example, entry-level physicians might receive 1,250 points for the knowledge factor, which, when combined with the other three factors, typically results in a work level no lower than level 9. By contrast, the greatest number of knowledge points home health aides would likely be evaluated with is 950. Even factoring the highest number of points for physical environment (100) it follows that home health aides are rarely matched at work levels higher than level 5.

For the 2008 survey year, the NCS published occupational wage estimates by work level for almost all of the published full-time civilian occupations under the category healthcare support; however, the NCS published no wage estimates by work level for several occupations under the category healthcare practitioner and technicians. For example, civilian full-time anesthesiologists earn a mean of \$108.49 per hour, but no work level data for this occupation were published. Another example is the occupation dentists. Dentists perform a wide range of procedures. At lower work levels, dentists work would typically involve detecting cavities and restoring teeth; extracting decayed or impacted teeth; and preparing teeth for and fitting veneers, crowns, and bridges. In the middle range of work levels, dentists typically perform demanding dental procedures and oral surgery, including bone grafts, root canal therapy, and tooth implants. At the highest work levels, dentists might lead a team of medical experts engaged in maxillofacial surgery, which is performed to repair birth defects or damage from traumatic injuries.

Despite the various levels of work conducted by those sharing the occupational title of *dentists*, the 2008 NCS survey did not publish work-level estimates for this occupation. Wage estimates are not published if the sample does not yield enough observations to meet respondent confidentiality requirements established by the Bureau of Labor Statistics or if the relative error of the sampled data was too great to provide statistically reliable estimates. Therefore, this study continues the analysis only on those healthcare occupations for which wage estimates were published for two or more work levels.

Hourly Wages By Work Level

Table 2 shows mean hourly wages by occupation and by work level within occupations for full-time civilian workers in the categories healthcare practitioner and technical occupations and healthcare support occupations.



Table 2. Mean hourly earnings by work level of selected healthcare occupations, full-time civilian workers, National Compensation Survey, 2008

Occupation	Work level													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Healthcare practitioner and technical occupations	(-)	\$11.20	\$12.35	\$15.06	\$18.34	\$21.12	\$25.07	\$29.26	\$32.14	\$39.41	\$45.68	\$86.51	\$86.95	\$106.50
Dietitians and nutritionists	(-)	(-)	(-)	(-)	(-)	(-)	20.69	21.57	25.69	(-)	(-)	(-)	(-)	(-)
Pharmacists	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	51.69	50.46	52.24	54.08	(-)	(-)
Physicians and surgeons	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	21.57	19.65	37.71	94.38	89.06	107.08
Family and general practitioners	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	43.96	87.76	(-)	(-)
Physician assistants	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	38.77	(-)	43.57	(-)	(-)	(-)
Registered nurses	(-)	(-)	(-)	(-)	18.79	22.94	25.79	29.34	31.05	41.56	42.09	59.53	(-)	(-)
Therapists	(-)	(-)	(-)	(-)	20.13	22.63	23.96	30.55	33.86	38.74	43.69	(-)	(-)	(-)
Occupational therapists	(-)	(-)	(-)	(-)	(-)	(-)	(-)	32.06	33.32	41.04	(-)	(-)	(-)	(-)
Physical therapists	(-)	(-)	(-)	(-)	(-)	(-)	26.42	34.75	34.62	37.05	(-)	(-)	(-)	(-)
Respiratory therapists	(-)	(-)	(-)	(-)	(-)	21.48	24.38	26.71	29.45	(-)	(-)	(-)	(-)	(-)
Speech-language pathologists	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	34.10	40.60	41.92	(-)	(-)	(-)
Clinical laboratory technologists and technicians	(-)	(-)	12.63	15.33	18.37	22.23	24.90	24.02	29.26	(-)	(-)	(-)	(-)	(-)
Medical and clinical laboratory technologists	(-)	(-)	(-)	(-)	17.69	25.04	25.23	23.88	29.26	(-)	(-)	(-)	(-)	(-)
Medical and clinical laboratory technicians	(-)	(-)	12.63	15.38	18.67	21.75	19.61	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Dental hygienists	(-)	(-)	(-)	(-)	21.58	31.69	32.04	35.11	40.15	(-)	(-)	(-)	(-)	(-)
Diagnostic related technologists and technicians	(-)	(-)	(-)	16.50	21.34	23.88	29.41	31.75	37.74	(-)	(-)	(-)	(-)	(-)
Cardiovascular technologists and technicians	(-)	(-)	(-)	13.77	23.83	23.15	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Diagnostic medical sonographers	(-)	(-)	(-)	(-)	(-)	(-)	32.76	31.11	33.86	(-)	(-)	(-)	(-)	(-)
Radiologic technologists and technicians	(-)	(-)	(-)	(-)	20.54	23.47	27.65	31.68	34.54	(-)	(-)	(-)	(-)	(-)
Emergency medical technicians and paramedics	(-)	(-)	(-)	11.26	14.86	17.23	18.87	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Health diagnosing and treating practitioner support technicians	(-)	(-)	12.24	13.97	18.45	19.57	20.78	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Pharmacy technicians	(-)	(-)	11.11	13.85	17.64	18.15	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Psychiatric technicians	(-)	(-)	(-)	12.34	18.38	21.12	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Respiratory therapy technicians	(-)	(-)	(-)	(-)	(-)	22.33	21.95	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Surgical technologists	(-)	(-)	(-)	17.19	18.91	20.76	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Licensed practical and licensed vocational nurses	(-)	(-)	(-)	16.45	18.31	20.24	20.88	(-)	(-)	(-)	(-)	(-)	(-)	(-)

Note: A dash (-) indicates that no statistically reliable or otherwise publishable estimate is available for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm.



Occupation	Work level													
Occupation	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Medical records and health information technicians	(-)	(-)	12.34	14.69	16.06	19.77	25.20	(-)	(-)	(-)	(-)	(-)	(-)	(-
Miscellaneous health technologists and technicians	(-)	(-)	(-)	15.96	17.32	22.69	23.72	(-)	(-)	(-)	(-)	(-)	(-)	(-
Occupational health and safety specialists and technicians	(-)	(-)	(-)	(-)	(-)	16.46	26.39	29.55	28.79	(-)	(-)	(-)	(-)	(-
Occupational health and safety specialists	(-)	(-)	(-)	(-)	(-)	15.70	23.33	29.55	28.79	(-)	(-)	(-)	(-)	(-
Healthcare support occupations	\$ 9.27	10.61	11.66	13.72	16.66	19.99	22.96	(-)	(-)	(-)	(-)	(-)	(-)	(-
Nursing, psychiatric, and home health aides	9.85	10.44	11.35	12.85	14.90	14.55	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Home health aides	(-)	9.95	9.88	11.71	12.29	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Nursing aides, orderlies, and attendants	9.85	10.64	11.64	12.94	14.57	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Psychiatric aides	(-)	10.31	11.57	13.32	16.08	16.12	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Occupational therapist assistants and aides	(-)	(-)	(-)	12.40	(-)	24.04	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Physical therapist assistants and aides	(-)	14.07	11.15	11.66	18.76	(-)	22.94	(-)	(-)	(-)	(-)	(-)	(-)	(-
Physical therapist assistants	(-)	(-)	(-)	(-)	18.76	(-)	22.94	(-)	(-)	(-)	(-)	(-)	(-)	(-
Physical therapist aides	(-)	14.07	11.15	11.07	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Miscellaneous healthcare support occupations	8.57	11.15	12.87	14.40	16.93	18.95	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Dental assistants	(-)	(-)	16.25	16.93	19.13	19.05	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Medical assistants	(-)	11.55	11.64	13.72	16.26	17.44	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Medical equipment preparers	(-)	13.33	13.24	15.43	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Medical transcriptionists	(-)	(-)	13.85	13.69	16.17	21.70	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-
Pharmacy aides	(-)	11.12	11.80	12.67	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-

Note: A dash (-) indicates that no statistically reliable or otherwise publishable estimate is available for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm.

Clearly, earnings estimates by occupational wage levels give more information on the pay structure of healthcare workers than earnings estimates by occupation alone. Healthcare support occupations as a whole earned from \$9.27 per hour at work level 1 to \$22.96 at work level 7. Healthcare practitioner and technical occupations as a whole earned from \$11.20 per hour at work level 2 to \$106.50 at work level 14. Much of the difference in work levels between these two major occupational groups can be explained by the fact that, in general terms, healthcare support occupations involve duties that are less complex in nature and require less specialized knowledge and need for judgment than do healthcare practitioner and technical occupations.

Mean earnings of specific occupations within the category healthcare practitioner and technical ranged from \$107.08 per hour for physicians and surgeons at level 14 to \$11.11 per hour for pharmacy technicians at level 3. Mean earnings for specific occupations within healthcare support ranged from \$8.57 per hour for workers in miscellaneous healthcare support occupations at work level 1 to physical therapist assistants at \$22.94 per hour at work level 7.



Registered nurses (RNs) comprise the largest number of workers among all healthcare occupations. ¹⁷ Full-time civilian RNs earn an average of \$31.54 per hour, ranging from an average of \$18.79 per hour at level 5 to \$59.53 per hour at level 12. This range of earnings reflects the wide range of duties performed by RNs--from administering basic procedures and recording patient data such as temperature, blood pressure, and weight--to assisting in surgery and helping to stabilize patients in emergency care. For the NCS, RNs include those workers with a 2-, 3-, or 4-year college degree in nursing and who have passed a State nursing registration exam, ¹⁸ as well as nurse practitioners, who have completed a post-graduate nursing degree. The wide range of formal education encompassed by the title *registered nurse* seems to be, in turn, reflected in the types of duties they are qualified for and actually perform.

Significantly Different Wage Rates Between Work Levels

A cursory look at table 2 shows that higher work levels are generally associated with higher pay. Although the NCS does not use pay as a factor in determining work level, earnings estimates tend to increase as work levels increase. Note that for some occupations, earnings levels appear to decrease with the step to the next higher work level. For example, pharmacists at work level 9 earn an average of \$51.69 per hour and \$50.46 at work level 10; although the mean wage appears to decline from level 9 to level 10, the difference in pay between the two levels is not statistically significant. When a higher level wage estimate appears to be lower than a lower level wage estimate within the same occupation, it is called *pay inversion*. Pay inversion can occur when there are different employment patterns among sampled establishments or geographic areas. For example, if large establishments are paying higher wages for level 9 pharmacists than are small establishments, but large establishments employ fewer level 10 pharmacists than do small establishments, the survey result may be a higher wage estimate or a wage estimate that statistically is not different for work level 9 than work level 10.

Because NCS data come from a sample rather than a census of workers, a test is needed to determine whether sample estimates are statistically different from one another. A test at the 90-percent confidence level shows that many sampled occupations have significantly higher wage rates at the highest work level than at the lowest. Table 3 lists several full-time healthcare occupations for which earnings in the lowest and highest published work levels differed significantly.

Table 3. Mean hourly wages by work level for selected occupations, full-time civilian workers, National Compensation Survey, 2008

Occupation	Earnings at the lowest published work level	Work level	Earnings at the highest published work level	Work level
Healthcare practitioner and technical occupations	\$11.20	2	\$106.50	14
Dietitians and nurtritionists	20.69	7	25.69	9
Physicians and surgeons(1)	21.57	9	107.08	14
Registered nurses	18.79	5	59.53	12
Therapists	20.13	5	43.69	11
Occupational therapists	32.06	8	41.04	10
Physical therapists	26.42	7	37.05	10
Respiratory therapists	21.48	6	29.45	9
Speech-language pathologists	34.10	9	41.92	11

Footnotes:

- (1) Physicians and surgeons earned \$19.65 per hour at level 10, which is significantly less than they earned at level 14.
- (2) Medical and clinical laboratory technicians earned \$21.75 at level 6, which is significantly more than they earned at level 3.
- (3) Cardiovascular technologists and technicians earned \$23.83 per hour at level 5, which is significantly more than they earned at level 4.
- (4) Home health aides earned \$9.88 at level 3, which is significantly less than they earned at level 5.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm.



Occupation	Earnings at the lowest published work level	Work level	Earnings at the highest published work level	Work level
Clinical laboratory technologists and technicians	12.63	3	29.26	9
Medical and clinical laboratory technologists	17.69	5	29.26	9
Medical and clinical laboratory technicians(2)	12.63	3	19.61	7
Dental hygienists	21.58	5	40.15	9
Diagnostic related technologists and technicians	16.50	4	37.74	9
Cardiovascular technologists and technicians(3)	13.77	4	23.15	6
Radiologic technologists and technicians	20.54	5	34.54	9
Emergency medical technicians and paramedics	11.26	4	18.87	7
Health diagnosing and treating practitioner support technicians	12.24	3	20.78	7
Pharmacy technicians	11.11	3	18.15	6
Psychiatric technicians	12.34	4	21.12	6
Surgical technologists	17.19	4	20.76	6
Licensed practical and licensed vocational nurses	16.45	4	20.88	7
Medical records and health information technicians	12.34	3	25.20	7
Healthcare support occupations	9.27	1	22.96	7
Home health aides(4)	9.95	2	12.29	5
Nursing aides, orderlies, and attendants	9.85	1	14.57	5
Psychiatric aides	10.31	2	16.12	6
Occupational therapist assistants and aides	12.40	4	24.04	6
Miscellaneous healthcare support occupations	8.57	1	18.95	6
Dental assistants	16.25	3	19.05	6
Medical assistants	11.55	2	17.44	6

Footnotes:

- (1) Physicians and surgeons earned \$19.65 per hour at level 10, which is significantly less than they earned at level 14.
- (2) Medical and clinical laboratory technicians earned \$21.75 at level 6, which is significantly more than they earned at level 3.
- (3) Cardiovascular technologists and technicians earned \$23.83 per hour at level 5, which is significantly more than they earned at level 4.
- (4) Home health aides earned \$9.88 at level 3, which is significantly less than they earned at level 5.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm.

As noted previously, mean hourly earnings for registered nurses at the highest publishable work level (level 12) were \$59.53, which is significantly higher than the rate of \$18.79 per hour that registered nurses earned at level 5. Licensed practical and licensed vocational nurses also work in a range of work levels.²⁰ At the lowest work levels, nurses in this occupation typically provide nursing support by taking and recording temperature, blood pressure, and pulse rate; administer commonly



prescribed oral medication; and change sterile dressings. Licensed practical and licensed vocational nurses in the middle range of work levels may administer prescribed medications and observe patients for contraindications; respond to emergency situations such as cardiopulmonary arrest; monitor vital signs of donors during blood donation; and care for, monitor, and report on critically ill patients. At the highest work levels, these nurses may perform more complex procedures, such as procedures to control and maintain artificial airways and other devices used to support critically ill patients. Licensed practical and licensed vocational nurses earned a mean of \$20.88 per hour at the highest work level (level 7), which is significantly higher than the mean of \$16.45 per hour they earned at the lowest work level (level 4).

Therapists as a whole had significantly higher hourly earnings at level 11 than at level 5 (\$43.69 and \$20.13, respectively). Occupational therapists, physical therapists, respiratory therapists, and speech-language pathologists, each of which falls under the category therapists, had mean hourly earnings at the highest publishable work level that were significantly different than the mean hourly earnings at the occupations lowest publishable work level.

While physicians and surgeons earn an average of \$76.46 per hour, their pay by work level varies widely--from \$19.65 per hour at level 10²¹ to \$107.08 at level 14. At work levels 9 and 10, physicians and surgeons are likely to be general practice interns, or residents, in their first year of residency, in which they gain clinical experience. At levels 10 through 12, physicians and surgeons are likely to include family and general practitioners, and specialists and surgeons in residency in fields such as oncology or orthopedics. Family and general practitioners earned significantly more at level 12 (\$87.76 per hour) than they earned at level 11 (43.96 per hour). At level 13, the category physicians and surgeons includes many Board Certified Physicians, who are have additional training and credentials in a specific area of medicine. Level 13 also includes physicians that diagnose and treat patients with highly complex medical problems. At the highest work levels, physicians and surgeons include those who advise on or perform the most advanced, specialized diagnostic and treatment procedures; this may include those who develop medical theories and techniques in emerging fields of medicine.

Factors Influencing Pay Other Than Work Level

While the difference in duties and responsibilities from one work level to the next appears to be a strong determining factor in the hourly pay of physicians and surgeons, there are also other factors that influence earnings. One possible factor is the area of medicine or type of medical specialty physicians and surgeons practice. The NCS data show no statistically significant difference in hourly earnings among psychiatrists at level 12, who earn an average of \$75.25 per hour; family and general practitioners at level 12, who earn \$87.76; and general internists at level 12, who earn \$99.47; however, this does not rule out the possibility that area of medicine or medical specialty is a factor in determining earnings.²²

The difference in the number of full-time hours worked per day or week is also an important determinant of mean hourly earnings for this occupation. As mentioned previously, physicians and surgeons at levels 9 and 10 are typically those in residency. Interns and residents work a large number of hours per week, which results in a relatively low hourly rate of pay.²³

Another factor influencing earnings estimates of full-time civilian worker is the scope of the NCS. The NCS excludes the self-employed; therefore, dentists and physicians in private practice are not included in these estimates. A recent study of 2007 NCS wage data by David M. Pongrace and Alan P. Zilberman found that several healthcare occupations were among the relatively few that received higher average hourly wages for part-time work than for full-time work.²⁴ The difference in mean hourly earnings of part-time workers by work level is not part of the present analysis; however, it may be a topic for further research. Furthermore, the earnings and work levels of healthcare workers in the civilian sector are determined to some extent by the type of employer, such as State and local government or private industry. A recent study by Amy Butler using NCS data from the 2007 survey year shows significant differences in occupational wages of physicians and surgeons between State and local government, private for-profit, and private not-for-profit employers.²⁵

Conclusion

This article presented NCS estimates on hourly earnings by work level for full-time, civilian healthcare practitioner and technical and health support occupations, and for specific occupations within these groups. The data show significant differences between average hourly earnings of the lowest and highest work levels within most healthcare occupations. While



earnings estimates by occupational work level do not imply opportunity for advancement or a predictable pattern of earnings growth within an occupation, they do show a distinction in hourly earnings based on the actual work responsibilities and duties of workers. Therefore, occupational wage estimates by work level give more information on the pay structure of healthcare workers than occupational estimates alone.

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Notes

- 1 In 2007, almost 60 percent of Americans received health insurance through an employer. See Carmen DeNavas-Walt, Bernadette D. Proctor, and Jessica C. Smith, *Income, Poverty, and Health Insurance Coverage in the United States: 2007*, Current Population Reports, P60-235, (U.S. Census Bureau, August 2008), p. 19; on the Internet at http://www.census.gov/prod/2008pubs/p60-235.pdf (accessed March 1, 2010).
- 2 Nonprofit hospitals are required to provide "community benefits" as a condition of their tax-exempt status. Hospitals that receive government program funding from the Department of Health and Human Services, such as Medicare, and Medicaid, must treat for emergency care or active labor regardless of the patients' ability to pay, citizenship, or other characteristic, and they must treat them like they would any other patient. See Michael W. Peregrine, "An Overview of the Community Benefit Standard of Federal Tax Exempt Status," on the Internet at http://www.healthlawyers.org/Resources/PI/Documents/2%20Overview%20of%20Community%20Benefit%20by%20Michael%20W%20Peregrine.pdf (accessed March 1, 2010).
- 3 See *BLS Spotlight on Statistics*, November 2009, table entitled "Rising Health Care Employment: Percentage of total nonfarm employment in private-sector heath care industries, 1958-2008"; on the Internet at http://www.bls.gov/spotlight/2009/health_care/data.htm#chart_ces (accessed March 1, 2010).
- 4 For example, in 2008, the unemployment rate for all workers was 5.8 percent, while healthcare practitioner and technical occupations and healthcare support occupations experienced unemployment rates of 1.5 percent and 4.5 percent, respectively. Persons are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. Persons who were not working and were waiting to be recalled to a job from which they had been temporarily laid off are also included as unemployed. The unemployment rate represents the number unemployed as a percent of the labor force. See Current Population Survey, Household Data: Annual Averages, "Unemployed persons by occupation and sex," table 25, p. 237, on the Internet at http://www.bls.gov/cps/cpsaat25.pdf (accessed March 1, 2010).
- 5 See *Employment Projections--2008-18*, USDL-09-1503 (U.S. Department of Labor), Dec. 10, 2009, on the Internet at http://www.bls.gov/news.release/ecopro.nr0.htm. Also, *Occupational Outlook Quarterly*, Winter 2009-10 (Bureau of Labor Statistics), p. 11; on the Internet at http://www.bls.gov/opub/ooq/2009/winter/art02.pdf (accessed March 1, 2010).
- 6 For more information, see *National Compensation Survey: Occupational Earnings in the United States, 2008*, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm (accessed March 1, 2010).
- 7 The National Compensation Survey (NCS) provides comprehensive measures of occupational earnings, such as mean hourly and median hourly wage estimates; and mean and median weekly and annual hours and earnings. The NCS also publishes comprehensive measures of compensation cost trends, the incidence of benefits, and detailed benefit provisions of workers in the civilian sector. By NCS definition, civilian workers are those who work in private industry or in State or local government. Federal workers, the self-employed, the military, and agricultural workers are excluded from the survey.
- 8 The NCS does not collect data on personal characteristics of the worker, such as years of experience on the job, formal education, gender, race or ethnicity, and age.
- 9 The NCS defines the worker as full-time or part-time based on how the employer defines the worker, not on the number of hours worked.
- 10 Information on the Standard Occupational Classification system is available on the BLS Web site, on the Internet at http://www.bls.gov/soc/(accessed March 1, 2010).
- 11 The terms wages, earnings, and pay are used interchangeably in this article. For an overview of the differences among several wage surveys, see Joseph R. Meisenheimer II, "Real compensation, 1979 to 2003: analysis from several data sources," Monthly Labor Review, May 2005, pp.3-22, on the Internet at http://www.bls.gov/opub/mlr/2005/05/art1full.pdf (accessed March 1, 2010).
- 12 National Compensation Survey: Guide for Evaluating Your Firms Jobs and Pay, p. 63, on the Internet at http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf (accessed March 1, 2010).
- 13 lbid, pp 5-7.
- 14 Ibid, pp. 36-37.



- 15 Ibid, pp. 38-39.
- 16 lbid, pp. 2-4 and pp. 65-71.
- 17 According to the Occupational Employment Statistics program, 2,542,760 workers were employed as registered nurses in May 2008. See Occupational Employment and Wages, 2008, USDL-09-0457 (U.S. Department of Labor), May 1, on the Internet at http://www.bls.gov/news.release/pdf/ocwage.pdf (accessed March 1, 2010).
- 18 To achieve the RN title, an individual must graduate from a State-approved school of nursing--either a 4-year university program, a 2-year associate degree program, or a 3-year diploma program--and pass a State RN licensing examination called the National Council Licensure Examination for Registered Nurses (NCLEX-RN). See *Nursing World*, "Nursing Education" (American Nursing Association), on the Internet at http://www.nursingworld.org/EspeciallyForYou/StudentNurses/Education.aspx. For information on nurse practitioners and other advanced practice registered nurses, see the Web site at http://www.nursingworld.org/EspeciallyForYou/StudentNurses/RNsAPNs.aspx (accessed March 1, 2010).
- 19 At the 90-percent confidence level, the two wage rates are not significantly different.
- 20 Licensed practical and licensed vocational nurses are listed under healthcare practitioner and technical occupations for the NCS; however they are included in the *Evaluating Your Firms Jobs and Pay*, Knowledge Guide for Medical, Hospital, Dental, Public Health, and Veterinary Technician Jobs, which includes many NCS occupations under *healthcare support*. See: *Evaluating Your Firms Jobs and Pay*, pp. 38-39, at http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf (accessed March 1, 2010).
- 21 Physicians and surgeons earned \$21.57 at level 9, an example of a pay inversion. At level 9 and level 10, physicians and surgeons earned significantly less than they did at level 14.
- 22 See table 8 in *National Compensation Survey: Occupational Earnings in the United States, 2008*, on the Internet at http://www.bls.gov/ncs/ncswage2008.htm (accessed March 1, 2010).
- 23 Interns and residents are almost exclusively full-time workers; NCS published no data on part-time physicians and surgeons at level 9.
- 24 David M. Pongrace and Alan P. Zilberman, "A Comparison of Hourly Wage Rates for Full- and Part-Time Workers by Occupation, 2007," *Compensation and Working Conditions Online*, July 23, 2009, on the Internet at http://www.bls.gov/opub/cwc/cm20090720ar01p1.htm (accessed March 1, 2010).
- 25 See Amy Butler, "Wages in the Nonprofit Sector: Healthcare, Personal Care, and Social Service Occupations," *Compensation and Working Conditions Online*, April 15, 2009, on the Internet at http://www.bls.gov/opub/cwc/cm20090123ar01p1.htm (accessed March 1, 2010).

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