GSG

Labor Demand Healthcare

Northeast Missouri Development Partnership

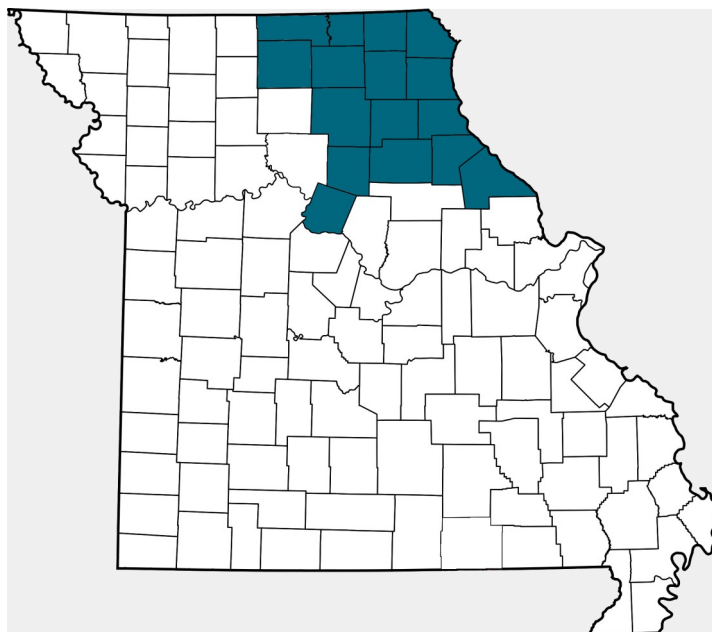Employment   Skills   Practices   Compensation

Northeast Missouri Development Partnership Labor Demand Certification

Partners in Economic Development

NMDP
Northeast Missouri Development Partnership

NEMO
Workforce Development Board

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GSG
GROWTHSERVICESGROUP

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Introduction

The Northeast Missouri Development Partnership (NMDP) in collaboration with NEMO Workforce Development Board commissioned a Labor Demand Healthcare study to obtain a measure of labor demand and needs for the healthcare employers and the labor market region. Further, to support quality economic growth for the region, this data provides local officials and key stakeholders information to promote a better understanding of the skill needs in today's labor market, to develop the strategies for improving the skills, quality and availability of the workforce, and to enable the Northeast Missouri Region and its healthcare providers to provide services for one of the faster growing sectors in the economy.

The profile of responding healthcare firms represents an employment level range from under 25 employees to over 500 employees with an average of 169 employees with 85 percent full time or salaried positions. The employer revenues range from under $1 million to over $100 million. The average age for employees is 36.9. The Education attainment level is 62.7 percent with some college or higher. (See page 3 and 4)

Key Labor Demand Findings

The primary findings are in the relative demand of skills and occupations for healthcare providers. A key finding in the occupation cluster is the divergence of increased demand for the Healthcare and Support occupation cluster relative to the Practitioner and Technical and Administration and Operations occupation clusters. The increased demand at the Practitioner and Technical and Healthcare and Support in higher relative wage costs and difficulty indices appears to add credibility of a skills gap particularly at the hands-on work level of healthcare. The demand indicators are earnings, job openings, age over 55, expanded search, and difficulty in finding the right applicants. The specific occupations with indicators of most stress on availability are on page 18-21. They are Medical and Health Services Manager, Licensed Practical Nurse, Medical and Clinical Laboratory Technicians, Nurse Practitioner, Pharmacists, Pharmacy Technicians, Radiologic Technologists, Registered Nurses, Respiratory Therapists, Nursing Assistants, and Physical Therapists.

The relative labor costs for All Locations for Healthcare and Support cluster is only 5.2 percent lower than the comparable occupation at the USA BLS Overall. The Practitioner and Technical cluster is 11.7 percent lower and the Administration and Operations cluster 41.0 percent lower than the USA BLS Overall. (See Page 9 and 10) The O Net Knowledge or hard skills at 3.27 are rated more difficult in finding qualified applicants than Work Style or soft skills at 2.41. (See page 16 and 17)

Indicators, Practices, and Compensation Findings

Employment Indicators show:
- Average Length of Employment for Overall is 8.3 years (see page 5)
- Average Turnover Rate for all employers is 10.9 percent (see page 5)
- Average Commuting Distance for Overall is 22.3 miles (see page 5)

Employer Practices show:

- Pre-employment Testing for Drugs for all employers is 70.6 percent and 80.0 percent for Hospital and Ambulatory (see page 6)
- Occasional to constant use of Temporary/Contingent workers for all employers is 27.7 percent (see page 6)
- Employment Agencies are utilized by 58 percent of all employers (see page 6)

Compensation shows:

- Employee Health Insurance benefits are provided by 35.2 percent of all employers providing 75 percent or more of premiums (see page 7)
- Employee Life Insurance benefits are provided by 58.8 percent for all employers providing 75 percent or more of premiums (see page 7)
- Employee Dental Insurance benefits are provided by 17.7 percent for all employers providing 75 percent or more of premiums (see page 7)
- Employee Vision Insurance benefits are provided by 5.9 percent for all employers providing 75 percent or more of premiums (see page 7)
- Retirement Plans are provided by 82.4 percent for all employers with 5.9 percent providing both types of retirement plans (see page 7)
- Paid Leave for all employers is 88.2 percent vacation, 70.6 percent funeral, and 58.8 percent jury duty (multi-select question, see page 8)
- Fringe Benefits for all employers is 41.2 percent wellness programs (see page 8)
- Average Hourly Wages for all employers for Administration and Operations is $24.35, $27.01 for Practitioner and Technical, and $16.76 for Healthcare and Support (see page 9)
- The highest Average Monthly Earnings in the Administration and Operations cluster for all employers is Human Resource Managers at $31.53 followed by Medical and Health Services Managers at $31.30 (see page 9)
- The highest Average Monthly Earnings in the Practitioner and Technical cluster for all employers is Nurse Practitioner at $51.39 followed by Pharmacists at $48.33 (see page 9)
- The highest Average Monthly Earnings in the Healthcare and Support cluster for all employers is Physical Therapists at $30.69 followed by Nursing Assistants at $12.72 (see page 19)

Healthcare employers throughout the nation are facing challenges in recruiting and retaining qualified workers, making it even more important that local and regional stakeholders, such as education, government, and workforce development, collaborate to supply skilled workers for the healthcare industry. Since younger workforce retention is an important part of rural communities, these jobs can be career opportunities for people who enjoy their communities and want to remain in their communities.

An important element about this study is that it attempts to look at all three sectors in the healthcare field, rather than focusing only on hospitals. With an aging population, the Nursing and Residential Care sector is becoming important, particularly in rural areas. Because of the education and certification requirements, workforce development is a long term process and requires planning for supply to meet demand.

Employment Profile

Introduction

The Labor Demand Study is the result of a survey of healthcare employers conducted by the Northeast Missouri Development Partnership (NMDP). The survey is a collaborative effort between local officials, NMDP, and the NEMO Workforce Development Board to measure the healthcare labor needs in Northeast Missouri. The goal of the NMDP labor study is to provide information for strategic workforce initiative through collaboration of the various stakeholders (education, health-care employers, government, and local workforce and economic development organizations) by analyzing the current healthcare labor needs and growing demand and thus increase employment and retain the younger worker.

Because of the respondent sample size and similarities of type of employment skills and education attainment, we are comparing only two employment groups (combined Hospital and Ambulatory Services group and the Nursing and Residential group). By comparing the relative earnings, job openings, difficulty in finding and hiring applicants, and the percentage of over age 55 for potential replacement, the findings can help stakeholders, such as education, by improving the communication process to better address labor demand and supply issues.

The work style characteristics and knowledge areas are skills sourced from O*NET, the nation's primary source of occupation information. O*NET acts as a medium for exchanging information. Workers and students benefit by exploring career options and learning which skills employers seek for specific types of work. Employers identify necessary skills to increase the efficiency of recruit-ment and training. Educational planners need O*NET to design instructional programs but teach the skills demanded in the workplace.

Responses

A total of 17 healthcare employers' completed the online Labor Demand Healthcare survey with 36 opening the survey and 17 completing the survey. This represents 36.2 percent of the 47 firms who were sent the survey.

Annual Revenue/Budget

The Healthcare Employers represent operations with annual revenues or budgets from under $1 million to over $100 million. Seven employers, all in hospital and ambulatory services, have over $10 million in revenue with none from the nurs-ing and residential services.

Annual Revenue/Budget

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Average Revenue	$24.3M		$38.4M	$4.2M
Under $1M	2	11.8%	0.0%	28.6%
$1M - $10M	8	47.1%	30.0%	71.4%
$11M - $25M	3	17.6%	30.0%	0.0%
$26M - $50M	1	5.9%	10.0%	0.0%
$51M - $100M	1	5.9%	10.0%	0.0%
Over $100M	2	11.8%	20.0%	0.0%

Service/Facility Type

There are a total of seventeen participating healthcare employers with four (23.5%) in Am-bulatory Healthcare Services, six (35.3%) in Hos-pitals, and seven (41.2%) in the Nursing and Resi-dential Services.

Service/Facility Type

Category	Count	Percent
Ambulatory Healthcare Service	4	23.5%
Hospital	6	35.3%
Nursing and Residential Care Facility	7	41.2%

Employment Size

Thirty-five percent of all employers have under 50 employees. Those with 50 or more employees represent 64.7 percent of all employment. Hospitals total 1,965 and average 328. Ambulatory Services total 265 and average 66. Nursing and Residential Service total 644 and average 92. None of the Nursing and Residential Services were over 250 employees.

Employment Size

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Avg. Employment	169		223	92
Under 50	6	35.3%	30.0%	42.9%
50 - 100	1	5.9%	0.0%	14.3%
101 - 250	7	41.2%	40.0%	42.9%
251 - 500	1	5.9%	10.0%	0.0%
Over 500	2	11.8%	20.0%	0.0%

Employment Status

The 17 firms employ 2,874 with an average of 169 employees per firm. Of the 2,874 total, there are: 1,954 full-time hourly, 419 part-time hourly , and 501 salaried. The Nursing and Residential has the largest percent of part-time employees with 23.4 percent and the lowest in salaried at 5.4 percent.

Employment Status

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Full Time Hourly	1,954	68.0%	67.1%	71.1%
Part Time Hourly	419	14.6%	12.0%	23.4%
Salaried	501	17.4%	20.9%	5.4%
Total Employment	2,874	100.0%	100.0%	100.0%

Employment Age

The age range of 30-54 represents 52.5 percent of all employees. This compares to 19.7 percent in the 55 years or older and 27.8 percent in 29 years or younger groups. The Nursing and Residential has an older component in employment with 23.6 percent in the 55 years or older group and 20.9 percent in 29 years or younger group.

Employment Age

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Avg. Age	36.9		35.9	40.3
22 or younger	168	5.9%	6.0%	5.5%
23 - 29	630	21.9%	23.8%	15.4%
30 - 54	1,509	52.5%	51.7%	55.4%
55 - 64	414	14.4%	13.2%	18.5%
65 or older	153	5.3%	5.4%	5.1%

Education Attainment

The range of Education Attainment of the employed labor force for healthcare in the NMDP region is 34.1 percent for those with bachelor degrees or higher and 28.6 percent for those with some college or associate degree. This compares to Nursing and Residential with 10.4 percent bachelor degrees or higher and 20.0 percent for those with some college or associate degree.

Education Attainment

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Less than high school	84	2.9%	0.9%	10.0%
High school or equivalent	988	34.4%	27.1%	59.7%
Some college or Associate Degree	821	28.6%	31.1%	20.0%
Bachelor's Degree	722	25.1%	29.8%	9.0%
Advanced Degree	260	9.0%	11.2%	1.4%

Employment Indicators

Length of Employment

The length of employment range of 4 to 10 years covers 58.8 percent of employers. The range 3 years or less encompasses 11.8 percent while 11 years or more covers 29.4 percent. Shorter tenure appears to represent the Nursing and Residential employers with a higher percentage of 3 years or less and a lower percentage of 11 years or more.

Length of Employment

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Average Length of Employment	8.3		9.4	6.7
3 years or less	2	11.8%	0.0%	28.6%
4 - 10 years	10	58.8%	60.0%	57.1%
11 - 15 years	5	29.4%	40.0%	14.3%
16 years or more	0	0.0%	0.0%	0.0%

Commuting Distance

The commuting distance for all employers of under 30 miles is 73.0 percent compared to the Nursing and Residential of 80.2 percent, showing that Nursing and Residential workers choose to be closer to work.

Commuting Distance

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Average Commute	22.3		22.8	20.5
Less than 10 miles	1,115	38.8%	38.1%	41.4%
10 - 30 miles	983	34.2%	32.9%	38.8%
31 - 50 miles	595	20.7%	22.6%	14.0%
51+ miles	180	6.3%	6.4%	5.8%

Turnover Rate

The under 6% Turnover Range is represented by 17.6 percent for all healthcare employers while the Nursing and Residential has none, showing a substantial higher turnover rate for the Nursing and Residential employers.

Turnover Rate

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Average Turnover	10.9%		8.9%	13.8%
Under 6%	3	17.6%	30.0%	0.0%
6 to 12%	9	52.9%	60.0%	42.9%
13 to 20%	4	23.5%	10.0%	42.9%
Over 20%	1	5.9%	0.0%	14.3%

Job Non-Acceptance

Many applicants will often fall outside the normal local commute. The biggest reason provided by employers as to why applicants decline a position is Compensation (Wages and/or Benefits), as reported by 76.5 percent of firms. This is followed by Employment opportunities for Spouse or family at 58.8 percent. Other reasons for declining job offers are Restaurants and Shopping at 35.3 percent and Cultural and Recreational at 23.5 percent.

Job Non-Acceptance

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Available Housing	3	17.6%	0.0%	42.9%
Cost of Living	1	5.9%	0.0%	14.3%
Compensation	13	76.5%	70.0%	85.7%
Employment Opportunities	10	58.8%	60.0%	57.1%
Educational System	3	17.6%	30.0%	0.0%
Cultural and Recreational	4	23.5%	40.0%	0.0%
Proximity to an Airport	0	0.0%	0.0%	0.0%
Medical Services	0	0.0%	0.0%	0.0%
Community Acceptance	2	11.8%	10.0%	14.3%
Restaurants and Shopping	6	35.3%	60.0%	0.0%

Employer Practices

Pre-Employment Testing

The most common pre-employment testing is for Drugs, conducted by 70.6 percent of employers. Skills, personality, and integrity testing were tied for second at 17.6 percent each. Twenty-nine percent of healthcare employers do not require testing with Nursing and Residential at 42.9 percent. One hundred percent of all employers with 100 or more employees require drug testing and other testing represented by only the larger over 100 or more employees.

Pre-Employment Testing

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Do not require testing	5	29.4%	20.0%	42.9%
Skills	3	17.6%	20.0%	14.3%
Mental Abilities	2	11.8%	20.0%	0.0%
Personality	3	17.6%	20.0%	14.3%
Integrity	3	17.6%	20.0%	14.3%
Drugs	12	70.6%	80.0%	57.1%

Temporary or Contingent Workers

Only 17.7 percent of firms use temporary or contingent workers Frequently or Constantly. Twenty-nine percent of the firms never use them. Smaller healthcare employers tend to use temporary or contingent workers more frequently or constantly than larger firms.

Temporary or Contingent Workers

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Constantly	1	5.9%	0.0%	14.3%
Frequently	2	11.8%	10.0%	14.3%
Occasionally	4	23.5%	30.0%	14.3%
Seldom	5	29.4%	30.0%	28.6%
Never	5	29.4%	30.0%	28.6%

Employment Agencies

Seventeen percent of the healthcare employers use both public and private employment agencies to hire employees. Twenty-nine percent only use public while 11.8 percent only use private and 41.2 percent do not use any employment agencies. Seventy-one percent of Nursing and Residential do not use any employment agencies.

Employment Agencies

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
Do not use	7	41.2%	20.0%	71.4%
Public	5	29.4%	40.0%	14.3%
Private	2	11.8%	20.0%	0.0%
Both	3	17.6%	20.0%	14.3%

Compensation Benefits and Earnings

Benefits

Insurance Benefits

A variety of benefit programs are made available to employees. Seventy-six percent of the firms responding contribute or provide health insurance for their employees with six, or 35 percent, of the firms contributing 75 percent or more coverage. Twenty-nine percent of the employers contribute 50 percent or more to dental insurance programs and 24 percent contribute to vision care programs.

Dependent coverage for health insurance is offered with contributions by 59 percent of the firms responding to the survey. Twelve percent of the firms contribute to dependent vision insurance coverage. Group Insurance for dependents is available for 15 of the 17 employers with only ten paying the premiums.

Employee Insurance Benefits

	100%		75 - 99%		50 - 74%		1 - 49%		No Employer Contribution		Program Not Provided	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Group Life Insurance	10	58.8%	0	0.0%	1	5.9%	1	5.9%	2	11.8%	3	17.6%
Health Insurance	3	17.6%	3	17.6%	4	23.5%	3	17.6%	2	11.8%	2	11.8%
Dental Insurance	2	11.8%	1	5.9%	2	11.8%	2	11.8%	7	41.2%	3	17.6%
Vision Care	1	5.9%	0	0.0%	2	11.8%	1	5.9%	10	58.8%	3	17.6%

Dependent Insurance Benefits

	100%		75 - 99%		50 - 74%		1 - 49%		No Employer Contribution		Program Not Provided	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Group Life Insurance	0	0.0%	0	0.0%	0	0.0%	0	0.0%	12	70.6%	5	29.4%
Health Insurance	0	0.0%	1	5.9%	4	23.5%	5	29.4%	5	29.4%	2	11.8%
Dental Insurance	1	5.9%	0	0.0%	1	5.9%	5	29.4%	7	41.2%	3	17.6%
Vision Care	1	5.9%	0	0.0%	1	5.9%	0	0.0%	10	58.8%	5	29.4%

Retirement Plans

Six percent of the employers offer both a pension plan (defined benefits) and a 401(k) plan or similar (defined contribution plans) and 77.0 percent offer only a 401(k) plan. None of the employers offer only a Pension Plan.

Retirement Plans

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
No Plan	3	17.6%	10.0%	28.6%
IRA (401K, 403B, 457, etc.)	13	76.5%	80.0%	71.4%
Pension	0	0.0%	0.0%	0.0%
Both	1	5.9%	10.0%	0.0%

Paid Leave

Eighty-eight percent of all employers provide vacation pay. Larger employers, such as Hospital and Ambulatory, offer the most paid leave options with vacation the highest followed by funeral and jury duty.

Paid Leave

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
No Paid Leave	1	5.9%	0.0%	14.3%
Sick	10	58.8%	70.0%	42.9%
Jury Duty	10	58.8%	80.0%	28.6%
Military	5	29.4%	50.0%	0.0%
Funeral	12	70.6%	90.0%	42.9%
Vacation	15	88.2%	100.0%	71.4%

Fringe Benefits

Thirty-five percent of all healthcare employers offer none of the listed fringe benefits. Forty-one percent of employers offered wellness programs, followed by performance/bonus pay at 35 percent and uniforms at 29 percent. No healthcare employers provide on-site child care.

Fringe Benefits

Category	Overall		Hospital and Ambulatory	Nursing Residential
	Count	Percent	Percent	Percent
No Fringe Benefits	6	35.3%	40.0%	28.6%
Performance/ bonus pay	6	35.3%	40.0%	28.6%
Wellness Program	7	41.2%	50.0%	28.6%
On-site Child Care	0	0.0%	0.0%	0.0%
Uniforms	5	29.4%	40.0%	14.3%

Earnings

The monthly earning comparisons consist of 26 job classifications in 3 occupation clusters, representing a sample of more common occupations in the Healthcare industry. The occupations are broken into three occupation clusters: Administration and Operations, Practitioner and Technical, and Healthcare and Support. And are compared between Overall, Hospital and Ambulatory, Nursing and Residential, BLS State, and BLS National. A highly competitive labor cost structure is critical for qualified workers due to skill requirements and government policies. While the USA earnings may represent a significant variance to the Overall NMDP data, the GSG survey data represents a consistent comparison for smaller and larger employers researched under a common methodology. Further, the BLS occupation data represents all industries in 2015 while GSG occu-

	Overall				Hospital and Ambulatory				BLS - State	BLS - National
	Low Starting Wage	High Starting Wage	Starting Hourly Wage	Average Hourly Wage	Low Starting Wage	High Starting Wage	Starting Hourly Wage	Average Hourly Wage	Average Hourly Wage	Average Hourly Wage
Administration and Operations	**$12.32**	**$25.88**	**$18.62**	**$24.35**	**$13.94**	**$24.69**	**$19.40**	**$25.66**	**$38.76**	**$41.29**
Administrative/Office Manager	$11.35	$35.00	$19.93	$25.58	$11.35	$25.50	$18.46	$23.93	$40.48	$45.60
Computer Support Specialist	$13.20	$21.50	$16.14	$23.86	$13.20	$21.50	$16.03	$24.32	$28.00	$32.33
Financial/Controller Manager	$15.00	$32.00	$23.44	$30.64	$15.00	$32.00	$24.16	$31.19	$60.65	$64.58
Human Resource Manager	$11.00	$38.46	$24.16	$31.53	$17.00	$38.46	$27.90	$36.83	$56.48	$56.29
Medical and Health Services Manager	$14.00	$31.00	$25.17	$31.30	$18.50	$31.00	$27.21	$34.29	$49.16	$50.99
Bookkeeping, Accounting, and Auditing Clerk	$12.00	$20.07	$14.63	$21.81	$13.50	$20.07	$15.30	$23.99	$34.37	$36.19
Human Resource Specialists	$13.50	$17.00	$15.02	$17.56	$14.50	$17.00	$15.73	$18.31	$28.33	$30.63
Receptionist & Information Clerk	$8.50	$12.00	$10.47	$12.50	$8.50	$12.00	$10.42	$12.45	$12.57	$13.67
Secretary & Administrative Assistant	$10.04	$16.50	$12.75	$15.13	$10.04	$16.50	$13.18	$15.70	$24.77	$22.34
Practitioner and Technical	**$15.63**	**$27.05**	**$21.29**	**$27.01**	**$17.38**	**$26.72**	**$21.79**	**$27.62**	**$28.01**	**$30.61**
Billing/Coding Medical Records and Info Technicians	$8.00	$19.00	$14.38	$17.74	$10.00	$19.00	$14.72	$17.69	$18.65	$19.44
Diagnostic Medical Sonographers	$12.00	$25.40	$21.08	$27.03	$21.68	$25.40	$23.82	$29.67	$31.91	$34.08
Licensed Practical and Licensed Vocational Nurses	$10.50	$18.00	$14.23	$16.86	$10.50	$16.50	$13.75	$16.43	$18.45	$21.17
Medical and Clinical Laboratory Technologists	$10.00	$16.40	$13.66	$17.39	$10.00	$15.00	$13.50	$17.45	$27.44	$29.74
Medical and Clinical Laboratory Technicians	$12.50	$15.50	$14.35	$18.99	$12.50	$15.50	$14.35	$18.99	$18.15	$19.91
Nurse Practitioner	$18.00	$48.00	$34.38	$51.39	$29.00	$48.00	$37.53	$54.94	$43.47	$48.68
Occupational Therapists	$15.00	$25.40	$20.68	$25.04	$15.00	$25.40	$20.24	$24.77	$35.92	$39.27
Pharmacists	$35.00	$49.00	$41.67	$48.33	$35.00	$49.00	$41.67	$48.33	$58.21	$57.34
Pharmacy Technicians	$19.50	$25.00	$21.20	$25.62	$19.50	$25.00	$21.20	$25.62	$13.99	$15.23
Radiologic Technologists	$15.00	$20.00	$17.77	$25.76	$15.00	$20.00	$17.79	$25.23	$24.89	$28.13
Registered Nurse/Nurse Practitioner	$15.00	$48.00	$25.70	$31.95	$15.00	$48.00	$27.34	$35.01	$28.44	$34.14
Respiratory Therapists	$18.50	$25.00	$22.16	$25.83	$18.50	$23.50	$21.79	$25.86	$24.55	$28.67
Surgical Technologists	$14.20	$17.00	$15.58	$19.14	$14.20	$17.00	$15.58	$19.14	$20.11	$22.09
Healthcare and Support	**$12.63**	**$15.63**	**$14.32**	**$16.76**	**$15.17**	**$17.50**	**$16.38**	**$18.95**	**$15.13**	**$16.45**
Home Health Aides	$9.50	$10.00	$9.75	$11.25	N/A	N/A	N/A	N/A	$10.73	$11.00
Medical Assistants	$8.00	$11.50	$10.28	$12.39	$9.50	$11.50	$10.57	$12.15	$14.17	$15.34
Nursing Assistants	$8.00	$12.50	$10.20	$12.72	$9.50	$12.50	$11.08	$13.37	$11.48	$12.89
Physical Therapists	$25.00	$28.50	$27.06	$30.69	$26.50	$28.50	$27.50	$31.33	$24.15	$26.56
Overall	**$13.93**	**$24.53**	**$19.07**	**$24.16**	**$15.72**	**$24.55**	**$20.03**	**$25.48**	**$29.21**	**$31.40**

pation data only reflects Healthcare. The USA Overall comparison is used to reflect the relative relationship of the three major Occupation Clusters and show where major stress levels may be occurring in the demand for labor. A good indicator of the stress in labor demand and cost is the relative difference in the Administration and Operations for NMDP Overall averages compared to the state and national overall averages. The GSG research reflects significantly lower labor costs for Administration and Operations. The labor costs for Healthcare Overall in the Administration and Operations cluster is 41.0 percent lower than the USA Overall (Bureau of Labor Statistics) while the Practitioner and Technical cluster is 11.7 percent lower and the Healthcare and Support cluster is 1.1 percent higher. Three of the thirteen occupations in the Practitioner and Technical cluster for the Hospital and Ambulatory sector were higher than the corresponding occupation at the USA level, including: Nurse Practitioners, Pharmacy Technicians, and Registered Nurse.

	Overall				Nursing				BLS - State	BLS - National
	Low Starting Wage	High Starting Wage	Starting Hourly Wage	Average Hourly Wage	Low Starting Wage	High Starting Wage	Starting Hourly Wage	Average Hourly Wage	Average Hourly Wage	Average Hourly Wage
Administration and Operations	**$12.32**	**$25.88**	**$18.62**	**$24.35**	**$12.71**	**$22.50**	**$17.31**	**$22.05**	**$38.76**	**$41.29**
Administrative/Office Manager	$11.35	$35.00	$19.93	$25.58	$12.00	$35.00	$22.04	$27.93	$40.48	$45.60
Computer Support Specialist	$13.20	$21.50	$16.14	$23.86	$14.70	$18.50	$16.60	$22.00	$28.00	$32.33
Financial/Controller Manager	$15.00	$32.00	$23.44	$30.64	$15.00	$30.00	$21.50	$29.17	$60.65	$64.58
Human Resource Manager	$11.00	$38.46	$24.16	$31.53	$11.00	$26.00	$17.63	$22.25	$56.48	$56.29
Medical and Health Services Manager	$14.00	$31.00	$25.17	$31.30	$14.00	$28.00	$22.30	$27.10	$49.16	$50.99
Bookkeeping, Accounting, and Auditing Clerk	$12.00	$20.07	$14.63	$21.81	$12.00	$16.00	$13.70	$18.74	$34.37	$36.19
Human Resource Specialists	$13.50	$17.00	$15.02	$17.56	$13.50	$14.50	$14.07	$16.57	$28.33	$30.63
Receptionist & Information Clerk	$8.50	$12.00	$10.47	$12.50	$9.50	$12.00	$10.67	$12.67	$12.57	$13.67
Secretary & Administrative Assistant	$10.04	$16.50	$12.75	$15.13	$11.00	$13.00	$11.88	$14.00	$24.77	$22.34
Practitioner and Technical	**$15.63**	**$27.05**	**$21.29**	**$27.01**	**$15.70**	**$20.99**	**$18.35**	**$24.11**	**$28.01**	**$30.61**
Billing/Coding Medical Records and Info Technicians	$8.00	$19.00	$14.38	$17.74	$8.00	$18.00	$13.63	$17.88	$18.65	$19.44
Diagnostic Medical Sonographers	$12.00	$25.40	$21.08	$27.03	$12.00	$16.50	$14.25	$20.45	$31.91	$34.08
Licensed Practical and Licensed Vocational Nurses	$10.50	$18.00	$14.23	$16.86	$13.50	$18.00	$14.79	$17.36	$18.45	$21.17
Medical and Clinical Laboratory Technologists	$10.00	$16.40	$13.66	$17.39	$12.00	$16.40	$14.20	$17.20	$27.44	$29.74
Medical and Clinical Laboratory Technicians	$12.50	$15.50	$14.35	$18.99	N/A	N/A	N/A	N/A	$18.15	$19.91
Nurse Practitioner	$18.00	$48.00	$34.38	$51.39	$18.00	$25.50	$21.75	$37.20	$43.47	$48.68
Occupational Therapists	$15.00	$25.40	$20.68	$25.04	$19.40	$25.00	$22.20	$26.00	$35.92	$39.27
Pharmacists	$35.00	$49.00	$41.67	$48.33	N/A	N/A	N/A	N/A	$58.21	$57.34
Pharmacy Technicians	$19.50	$25.00	$21.20	$25.62	N/A	N/A	N/A	N/A	$13.99	$15.23
Radiologic Technologists	$15.00	$20.00	$17.77	$25.76	$17.40	$18.00	$17.70	$27.60	$24.89	$28.13
Registered Nurse/Nurse Practitioner	$15.00	$48.00	$25.70	$31.95	$19.50	$26.50	$23.36	$27.57	$28.44	$34.14
Respiratory Therapists	$18.50	$25.00	$22.16	$25.83	$21.50	$25.00	$23.25	$25.75	$24.55	$28.67
Surgical Technologists	$14.20	$17.00	$15.58	$19.14	N/A	N/A	N/A	N/A	$20.11	$22.09
Healthcare and Support	**$12.63**	**$15.63**	**$14.32**	**$16.76**	**$12.63**	**$14.38**	**$13.41**	**$16.25**	**$15.13**	**$16.45**
Home Health Aides	$9.50	$10.00	$9.75	$11.25	$9.50	$10.00	$9.75	$11.25	$10.73	$11.00
Medical Assistants	$8.00	$11.50	$10.28	$12.39	$8.00	$10.50	$9.25	$13.25	$14.17	$15.34
Nursing Assistants	$8.00	$12.50	$10.20	$12.72	$8.00	$10.50	$8.88	$11.75	$11.48	$12.89
Physical Therapists	$25.00	$28.50	$27.06	$30.69	$25.00	$26.50	$25.75	$28.75	$24.15	$26.56
Overall	**$13.93**	**$24.53**	**$19.07**	**$24.16**	**$13.84**	**$19.97**	**$16.78**	**$21.47**	**$29.21**	**$31.40**

Occupation Earnings Comparisons

The Administration and Operations earnings for the GSG research shows wages and salaries are highly competitive compared with state and national BLS averages, and least competitive at the Healthcare and Support level.

At the Hospital and Ambulatory level there were seven occupations higher in wage than the state average and four occupations higher in both state and national averages, these occupations are: Nurse Practitioner, Pharmacy Technician, Registered Nurse, and Physical Therapists.

Occupation Cluster Average Hourly Wages
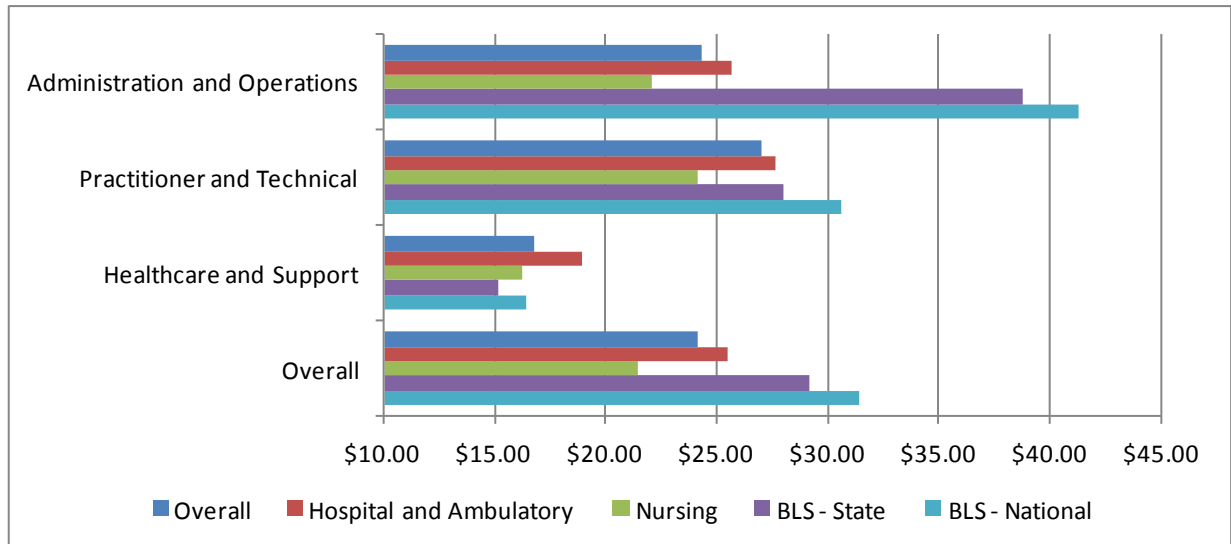
Occupation Cluster Starting Wage Ranges
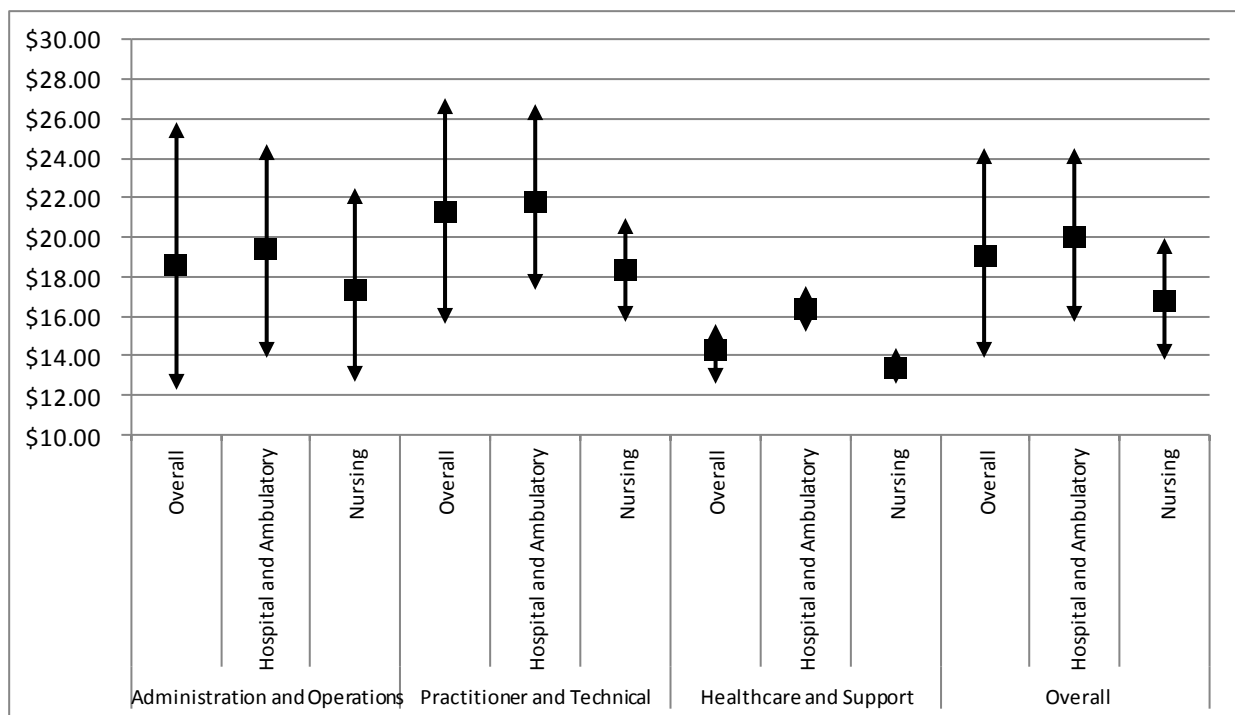
Skills and Occupations Challenges and Opportunities

Work Style/Soft Skill Characteristics

Eight O*NET work style skill characteristics were rated by responding employers based on the difficulty of finding applicants with these work style skills.

For the difficulty rating, the skill characteristics were rated by employers on a scale of five−expanded search to one−easy. A rating of three is considered difficult or normal because of the subjective nature. Analytical thinking and Attention to Detail were tied and rated 2.94 as most difficult. Dependability and Accountability were rated 2.82. In the difficulty ratings the overall rating is generally below the statistical average of 3.00. The overall difficulty index is 2.41.

Work Styles Hiring Difficulty Overall Ranking

	Requires expanded state and national search	Very Difficult	Difficult	Slightly Difficult	Easy	Overall Index	Hospital and Ambulatory Index	Nursing Index
Adaptability/Flexibility	0	1	5	10	1	2.35	2.20	2.57
Analytical Thinking	0	4	8	5	0	2.94	2.90	3.00
Attention to Detail	1	3	7	6	0	2.94	2.90	3.00
Concern for Others	0	0	2	9	6	1.76	1.70	1.86
Cooperation	0	0	3	9	4	1.94	1.90	2.00
Dependability/ Accountability	0	5	6	4	2	2.82	2.50	3.29
Integrity	0	0	5	8	4	2.06	1.70	2.57
Stress Tolerance	0	2	4	10	1	2.41	2.30	2.57
Overall	1	15	40	61	18	2.41	2.26	2.62

Work Styles Industry Hiring Difficulty
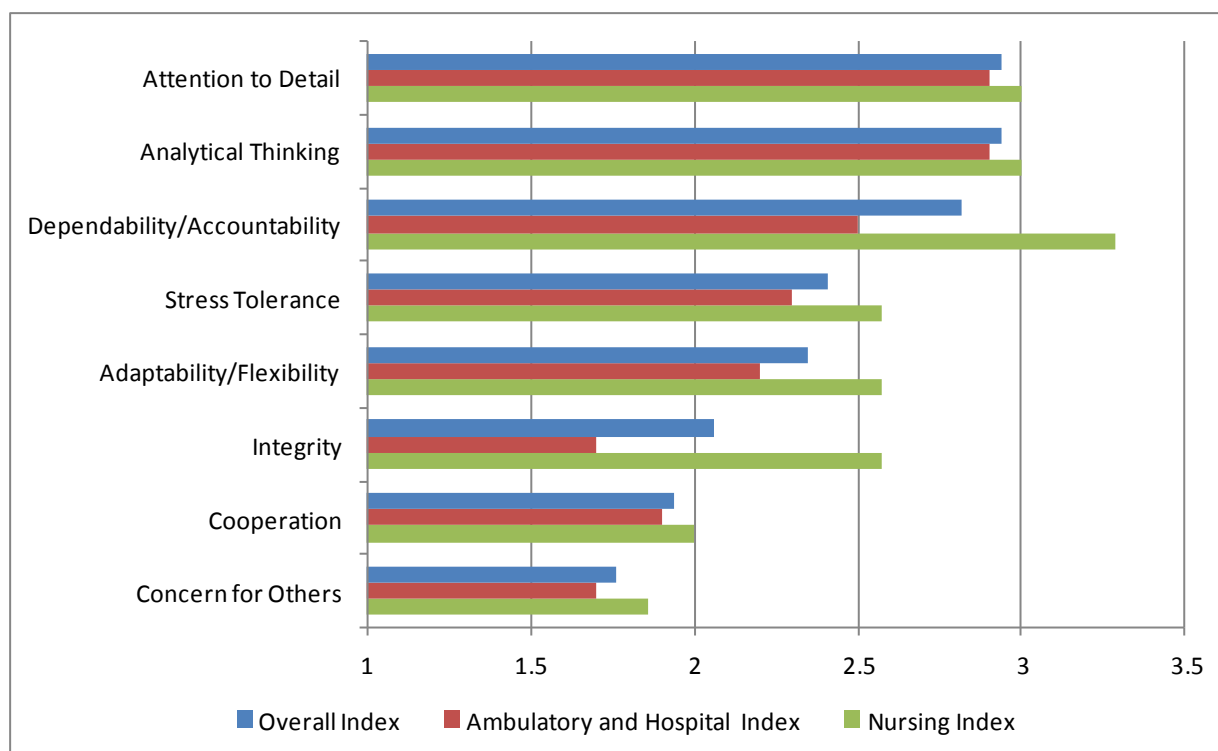
Work Styles Difficulty
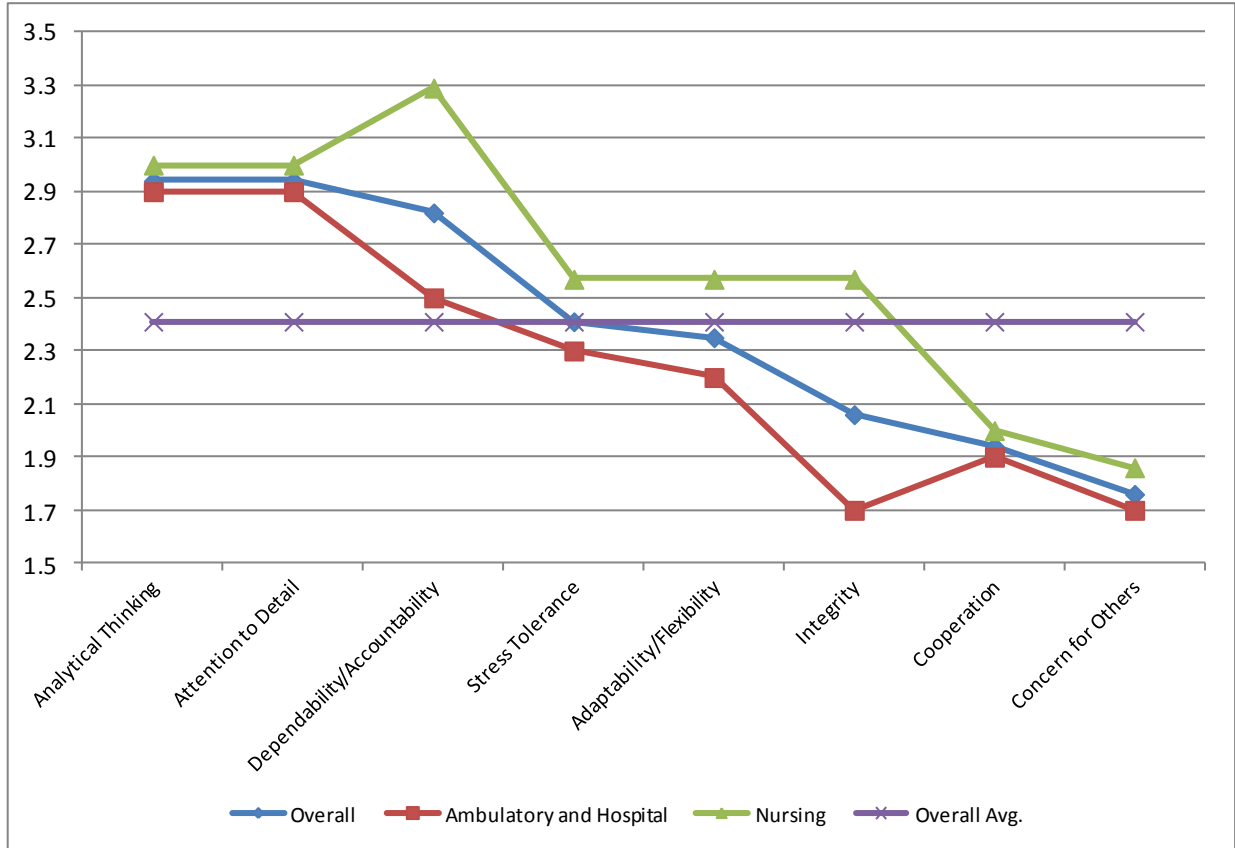
In the Work Styles chart, one can see the divergence and convergence to the Overall average. The Nursing and Residential Industry sector has a bigger issue with Dependability and Integrity with its higher difficulty ratings relative to the Hospital and Ambulatory sector.

Knowledge/Hard Skill Characteristics

Eight O*NET knowledge area characteristics were rated by responding employers on the difficulty of finding applicants with knowledge skills. Knowledge areas are generally considered specific, teachable abilities that are based on fact. The particular occupation and work culture can play a large role on the importance of knowledge characteristics in the work place.

For the difficulty in finding rating, the skill characteristics were rated by employers on a scale of five−expanded search to one−easy. A rating of three is considered difficult or normal because of the subjective nature. Medicine and Dentistry was rated most difficult at 3.80. Customer Services along with one other was rated the easiest to find at 2.31. In the difficulty ratings the overall rating is generally below the statistical average of 3.00. The overall difficulty index is 3.27.

Knowledge Skills Hiring Difficulty Overall Ranking

	Requires expanded state and national search	Very Difficult	Difficult	Slightly Difficult	Easy	Overall Index	Ambulatory and Hospital Index	Nursing Index
Administration and Management	4	4	5	2	1	3.50	3.10	4.17
Biology	2	3	1	3	0	3.44	3.50	3.33
Chemistry	3	3	2	2	0	3.70	3.57	4.00
Computers and Electronics	1	4	5	3	3	2.81	2.60	3.17
Customer and Personal Service	1		5	7	3	2.31	2.11	2.57
Foreign Language (Spanish)	1	3	5	3	0	3.17	2.88	3.75
Medicine and Dentistry	5	5	3	1	1	3.80	3.50	4.40
Therapy and Counseling	4	5	2	3	0	3.71	3.86	3.57
Overall	**21**	**27**	**28**	**24**	**8**	**3.27**	**3.09**	**3.56**

Knowledge Skill Industry Hiring Difficulty
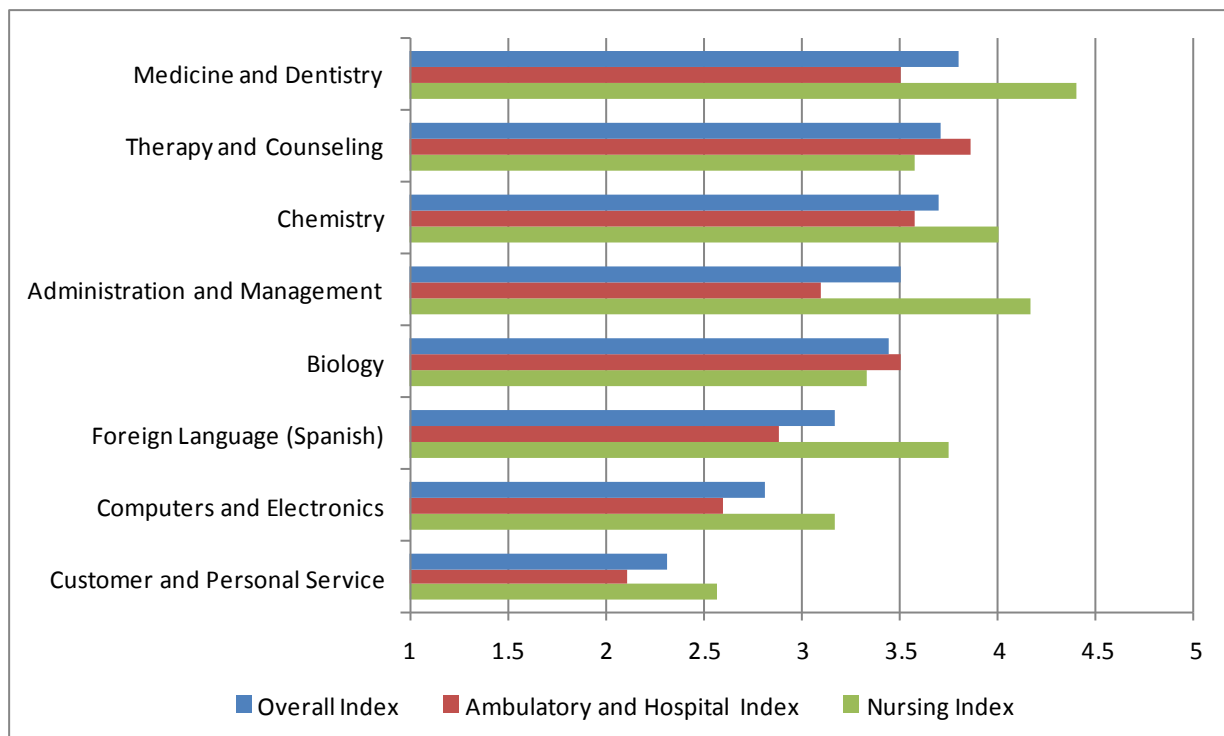
Knowledge Difficulty
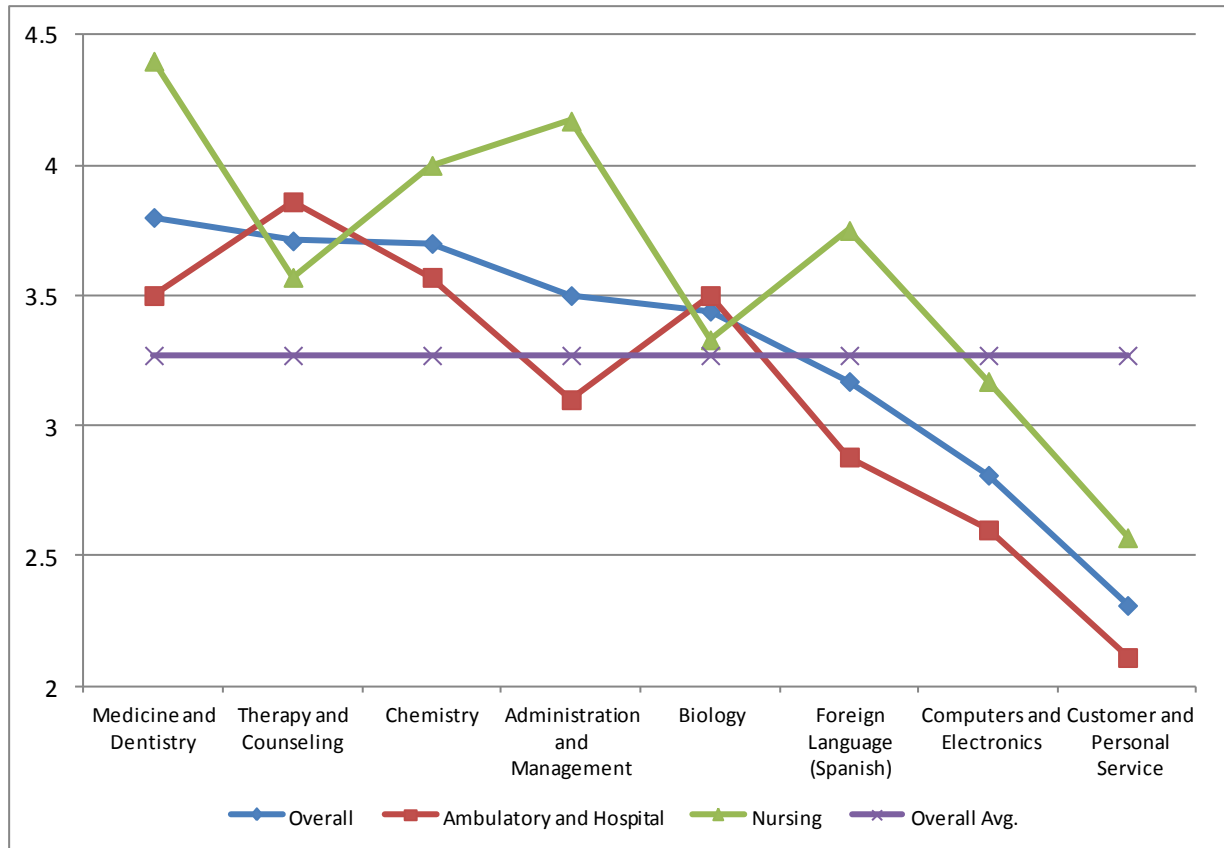
In the Knowledge chart, one can see the divergence and convergence to the Overall average. The Nursing and Residential Industry sector has a bigger issue with Medicine and Dentistry, Administration and Management, and Foreign Language (Spanish) with its higher difficulty ratings relative to the Hospital and Ambulatory sector.

The Ambulatory and Hospital sector have only two Knowledge skills ranked more difficult than the Nursing sector, including Therapy and Counseling and Biology.

Occupation Difficulty and Needs

The purpose of presenting individual occupational difficulty and needs indicators is to show the relative degree of stress and qualified applicant shortages. This can provide good information for stakeholders in workforce development, education, government, and economic development to address the challenges and issues in getting labor supply in line with labor demand.

The occupations most difficult to find in Northeast Missouri are: Pharmacists, Medical and Health Services Managers, and Medical and Clinical Laboratory Technicians. The Hospital and Ambulatory group may differ from the Nursing and Residential group.

	Overall				Hospital and Ambulatory			
	# of employees	Difficulty	Job Openings	% 55+	# of employees	Difficulty	Job Openings	% 55+
Administration and Operations	**441**	**3.01**	**33**	**18.8%**	**395**	**2.90**	**32**	**18.0%**
Administrative/Office Manager	157	3.29	8	16.9%	140	3.00	8	16.7%
Computer Support Specialist	22	3.22	2	15.7%	21	3.25	2	14.7%
Financial/Controller Manager	17	3.55	0	19.3%	14	3.50	0	17.0%
Human Resource Manager	14	3.55	0	20.9%	10	3.71	0	16.8%
Medical and Health Services Manager	73	4.00	10*	21.7%	66	3.86	9*	20.8%
Bookkeeping, Accounting, and Auditing Clerk	34	2.67	0	21.1%	27	2.43	0	19.4%
Human Resource Specialists	12	2.17	2	21.3%	10	2.00	2	19.6%
Receptionist & Information Clerk	83	1.85	7	18.3%	80	1.70	7	17.9%
Secretary & Administrative Assistant	29	2.80	4	19.6%	27	2.63	4	19.9%
Practitioner and Technical	**945**	**3.36**	**91**	**23.6%**	**837**	**3.36**	**68**	**20.9%**
Billing/Coding Medical Records and Info Technicians	31	2.83	4	17.3%	27	2.78	4	16.3%
Diagnostic Medical Sonographers	12	3.60	0	19.8%	12	3.60	0	19.8%
Licensed Practical and Licensed Vocational Nurses	196	2.63	24*	18.2%	145	2.44	12	16.2%
Medical and Clinical Laboratory Technologists	32	3.25	5	18.8%	31	3.43	5	18.5%
Medical and Clinical Laboratory Technicians	123	4.00	0	22.7%	123	4.00	0	22.7%
Nurse Practitioner	27	3.89	4	16.6%	26	3.88	4	16.1%
Occupational Therapists	20	3.13	6	19.2%	18	3.29	6	18.1%
Pharmacists	18	4.17	1	19.2%	18	4.17	1	19.2%
Pharmacy Technicians	11	2.60	0	19.5%	11	2.60	0	19.5%
Radiologic Technologists	22	3.50	5	18.8%	21	3.43	5	18.3%
Registered Nurse/Nurse Practitioner	405	3.41	35*	18.5%	358	3.20	24*	18.1%
Respiratory Therapists	18	3.71	3	19.8%	17	3.83	3	19.2%
Surgical Technologists	30	3.00	4	14.1%	30	3.00	4	14.1%
Healthcare and Support	**238**	**2.62**	**39**	**18.8%**	**120**	**2.12**	**24**	**18.3%**
Home Health Aides	18	2.50	4	29.0%	0	N/A	N/A	N/A
Medical Assistants	35	2.13	6	17.1%	32	2.14	6	16.0%
Nursing Assistants	170	2.11	22*	17.9%	75	2.33	11	19.2%
Physical Therapists	15	3.75	7	20.9%	13	4.00	7	19.1%
Overall	**1,624**	**3.13**	**163**	**21.6%**	**1,352**	**3.01**	**124**	**19.8%**

*Respondents showed they had "5 or more" open positions in addition to specific job openings

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Registered Nurses have the largest number of job openings followed by Licensed Practical Nurses and Nursing Assistants.

The occupations with the largest number of employees 55 and older are Home Health Aides and Medical and Clinical Laboratory Technicians. This indicator provides information on future replacement needs.

The occupations with the highest number of employers requiring leaving the area for a state and national search are the Medical and Health Services Managers at 44 percent and Physical Therapists at 38 percent (see pages 18–21 for more on individual occupations).

	Overall				Nursing			
	# of employees	Difficulty	Job Openings	% 55+	# of employees	Difficulty	Job Openings	% 55+
Administration and Operations	**441**	**3.01**	**33**	**18.8%**	**46**	**3.24**	**1**	**25.1%**
Administrative/Office Manager	157	3.29	8	16.9%	17	3.71	0	18.8%
Computer Support Specialist	22	3.22	2	15.7%	1	3.00	0	37.0%
Financial/Controller Manager	17	3.55	0	19.3%	3	3.67	0	30.0%
Human Resource Manager	14	3.55	0	20.9%	4	3.25	0	31.3%
Medical and Health Services Manager	73	4.00	10*	21.7%	7	4.20	1	29.9%
Bookkeeping, Accounting, and Auditing Clerk	34	2.67	0	21.1%	7	3.00	0	27.7%
Human Resource Specialists	12	2.17	2	21.3%	2	2.50	0	29.5%
Receptionist & Information Clerk	83	1.85	7	18.3%	3	2.33	0	30.3%
Secretary & Administrative Assistant	29	2.80	4	19.6%	2	3.50	0	15.5%
Practitioner and Technical	**945**	**3.36**	**91**	**23.6%**	**108**	**1.89**	**23**	**44.0%**
Billing/Coding Medical Records and Info Technicians	31	2.83	4	17.3%	4	3.00	0	24.0%
Diagnostic Medical Sonographers	12	3.60	0	19.8%	0	N/A	N/A	0.0%
Licensed Practical and Licensed Vocational Nurses	196	2.63	24*	18.2%	51	2.86	12*	23.8%
Medical and Clinical Laboratory Technologists	32	3.25	5	18.8%	1	2.00	0	29.0%
Medical and Clinical Laboratory Technicians	123	4.00	0	22.7%	0	N/A	N/A	0.0%
Nurse Practitioner	27	3.89	4	16.6%	1	4.00	0	29.0%
Occupational Therapists	20	3.13	6	19.2%	2	2.00	0	29.0%
Pharmacists	18	4.17	1	19.2%	0	N/A	N/A	N/A
Pharmacy Technicians	11	2.60	0	19.5%	0	N/A	N/A	N/A
Radiologic Technologists	22	3.50	5	18.8%	1	4.00	0	29.0%
Registered Nurse/Nurse Practitioner	405	3.41	35*	18.5%	47	3.71	11*	21.2%
Respiratory Therapists	18	3.71	3	19.8%	1	3.00	0	29.0%
Surgical Technologists	30	3.00	4	14.1%	0	N/A	N/A	N/A
Healthcare and Support	**238**	**2.62**	**39**	**18.8%**	**118**	**2.29**	**15**	**19.3%**
Home Health Aides	18	2.50	4	29.0%	18	2.50	4	29.0%
Medical Assistants	35	2.13	6	17.1%	3	2.00	0	29.0%
Nursing Assistants	170	2.11	22*	17.9%	95	1.67	11*	16.8%
Physical Therapists	15	3.75	7	20.9%	2	3.00	0	33.0%
Overall	**1,624**	**3.13**	**163**	**21.6%**	**272**	**2.42**	**39**	**30.1%**

*Respondents showed they had "5 or more" open positions in addition to specific job openings

Indicators of Occupation Stress

While shortages and indicators vary from occupation to occupation, the following are a list of 11 important occupations that have been identified at having significant relative shortages of qualified applicants as identified by the 17 healthcare employers. Several indicators were used to identify shortages in occupations: Job Openings, Difficulty in hiring rating (a five point rating index with 5 as requiring expanded search and 1 as Easy), Expanded out of area state and national search, and Wages as compared to all industry state and national averages. The following is overall healthcare data. The sub-industry healthcare data is available on pages 9-10 and 16-17. For occupation descriptions see Appendix C.

Administration and Operations Occupations

Medical and Health Services Manager				Job Description
SOC BLS #	11-9111	Expanded Search	44%	Plan, direct, or coordinate medical and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.
Employers	9	Earnings		
Reported Employees	73	Starting Average Wage	$25.17	
Occupation/Cluster Difficulty Rating	4.00/3.01	Average Hourly Wage	$31.30	
Job Openings	10 or more	Missouri Average Wage	$49.16	
Age Over 55 Percent	21.7%	National Average Wage	$50.99	

Practitioner and Technical Occupations

Licensed Practical Nurse				Job Description
SOC BLS #	29-2061	Expanded Search	None	Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.
Employers	16	Earnings		
Reported Employees	196	Starting Average Wage	$14.23	
Occupation/Cluster Difficulty Rating	2.63/3.36	Average Hourly Wage	$16.86	
Job Openings	24 or more	Missouri Average Wage	$18.45	
Age Over 55 Percent	18.2%	National Average Wage	$21.17	

Medical and Clinical Laboratory Technicians				Job Description
SOC BLS #	29-2012	Expanded Search	20%	Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.
Employers	5	Earnings		
Reported Employees	123	Starting Average Wage	$14.35	
Occupation/Cluster Difficulty Rating	4.00/3.36	Average Hourly Wage	$18.99	
Job Openings	None	Missouri Average Wage	$18.15	
Age Over 55 Percent	22.7%	National Average Wage	$19.19	
Disclosure: Respondents may have confused Technologist with Technician.				

Nurse Practitioner				Job Description
SOC BLS #	29-1171	Expanded Search	43%	
Employers	7	Earnings		
Reported Employees	27	Starting Average Wage	$34.34	
Occupation/Cluster Difficulty Rating	3.89/3.36	Average Hourly Wage	$51.39	
Job Openings	4	Missouri Average Wage	$43.47	
Age Over 55 Percent	16.6%	National Average Wage	$48.68	

Job Description (Nurse Practitioner): Diagnose and treat acute, episodic, or chronic illness, independently or as part of a healthcare team. May focus on health promotion and disease prevention. May order, perform, or interpret diagnostic tests such as lab work and x rays. May prescribe medication. Must be registered nurses who have specialized graduate education.

Pharmacists				Job Description
SOC BLS #	29-1051	Expanded Search	33%	
Employers	6	Earnings		
Reported Employees	18	Starting Average Wage	$41.67	
Occupation/Cluster Difficulty Rating	4.17/3.36	Average Hourly Wage	$48.33	
Job Openings	1	Missouri Average Wage	$58.21	
Age Over 55 Percent	19.2%	National Average Wage	$57.34	

Job Description (Pharmacists): Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.

Pharmacy Technicians				Job Description
SOC BLS #	29-2025	Expanded Search	None	
Employers	5	Earnings		
Reported Employees	11	Starting Average Wage	$21.20	
Occupation/Cluster Difficulty Rating	2.60/3.36	Average Hourly Wage	$25.62	
Job Openings	None	Missouri Average Wage	$13.99	
Age Over 55 Percent	19.5%	National Average Wage	$15.23	

Job Description (Pharmacy Technicians): Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.

Radiologic Technologists				Job Description
SOC BLS #	29-2034	Expanded Search	13%	
Employers	8	Earnings		
Reported Employees	22	Starting Average Wage	$17.77	
Occupation/Cluster Difficulty Rating	3.50/3.36	Average Hourly Wage	$25.76	
Job Openings	5	Missouri Average Wage	$24.89	
Age Over 55 Percent	18.8%	National Average Wage	$28.13	

Job Description (Radiologic Technologists): Take x rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Includes technologists who specialize in other scanning modalities.

Registered Nurses				Job Description
SOC BLS #	29-1141	Expanded Search	12%	Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.
Employers	17	Earnings		
Reported Employees	405	Starting Average Wage	$25.70	
Occupation/Cluster Difficulty Rating	3.41/3.36	Average Hourly Wage	$31.95	
Job Openings	35 or more	Missouri Average Wage	$28.44	
Age Over 55 Percent	18.5%	National Average Wage	$34.14	

Respiratory Therapists				Job Description
SOC BLS #	29-1126	Expanded Search	None	Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment.
Employers	7	Earnings		
Reported Employees	18	Starting Average Wage	$22.16	
Occupation/Cluster Difficulty Rating	3.71/3.36	Average Hourly Wage	$25.83	
Job Openings	3	Missouri Average Wage	$24.35	
Age Over 55 Percent	19.8%	National Average Wage	$28.67	

Healthcare Support

Nursing Assistants				Job Description
SOC BLS #	31-1014	Expanded Search	None	Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens. May transfer or transport patients. Includes nursing care attendants, nursing aides, and nursing attendants.
Employers	9	Earnings		
Reported Employees	170	Starting Average Wage	$10.20	
Occupation/Cluster Difficulty Rating	2.11/2.62	Average Hourly Wage	$12.72	
Job Openings	22 or more	Missouri Average Wage	$11.48	
Age Over 55 Percent	17.9%	National Average Wage	$12.89	

Physical Therapists				Job Description
SOC BLS #	31-2021	Expanded Search	38%	Assist physical therapists in providing physical therapy treatments and procedures. May, in accordance with State laws, assist in the development of treatment plans, carry out routine functions, document the progress of treatment, and modify specific treatments in accordance with patient status and within the scope of treatment plans established by a physical therapist. Generally requires formal training.
Employers	8	Earnings		
Reported Employees	15	Starting Average Wage	$27.06	
Occupation/Cluster Difficulty Rating	3.75/2.62	Average Hourly Wage	$30.69	
Job Openings	7	Missouri Average Wage	$24.15	
Age Over 55 Percent	20.9%	National Average Wage	$26.56	

Appendices

Appendix A—Methodology

Growth Services Group, LLC (GSG) is a local and regional labor market provider for assessing labor demand by measuring the difficulty in finding skilled and qualified applicants, local employment indicators, employer practices, compensation both wage and benefits, and skill gap comparisons. The Labor Demand Healthcare is an industry specific assessment of employers' labor needs based on their current skill and occupation requirements. Changes in labor markets come primarily from organic expansion and contraction of industries. Other factors also drive demand of skills and occupations at the local and regional level, such as national economic and demographic changes and trends, technology and innovation, and government policies. Emerging technologies alter the demand for particular occupations based on product obsolescence and the introduction of new products and services. In healthcare, an aging population is one factor driving labor demand at the local and regional level.

Attracting and retaining a skilled and experienced workforce is a key growing demand, and replacement of retired workers. A major goal for GSG is to help local and regional areas address the ongoing labor market information and the needs of both existing and prospective healthcare providers.

Good planning and coordination with a local partner is essential for reliable data for the final product. The labor demand healthcare survey reflects a targeted employer selection, who are invited to participate in the survey normally by local economic development organizations and sometimes other stakeholders such, as Workforce Innovation Boards, Regional Planning Commissions, or Community or Technical Colleges.

Indices are utilized in the report to reflect differences in the difficulty in finding candidate with skills and market availability for the occupations. (See Appendix B in this document for more detail. The Work Style, Knowledge, and Occupation categories have a difficulty in finding the skills and job candidates within each of those categories. This provides a relative rating and a crosswalk for skill, occupation, and area comparisons.

It is recommended that this report be utilized as a strategic assessment tool for all stakeholders to better address the labor demands for the healthcare industry including employers, education providers and government. Only management can determine whether changing employment and compensation practices can help or improve the needs of individual employers.

Appendix B—Skills and Occupation Ratings and Index Weighting

Occupation Difficulty Index Weights

Difficulty in Hiring	Weight
Requires expanded state and national search	5
Very Difficult	4
Difficult	3
Slightly Difficult	2
Easy	1

O*Net Work Style Ratings

Difficulty in Hiring
Requires expanded state and national search
Very Difficult
Difficult
Slightly Difficult
Easy
Not Applicable

O*Net Work Style Index Weights

Difficulty in Hiring	Weight
Requires expanded state and national search	5
Very Difficult	4
Difficult	3
Slightly Difficult	2
Easy	1

O*Net Knowledge Ratings

Difficulty in Hiring
Requires expanded state and national search
Very Difficult
Difficult
Slightly Difficult
Easy
Not Applicable

O*Net Knowledge Index Weights

Difficulty in Hiring	Weight
Requires expanded state and national search	5
Very Difficult	4
Difficult	3
Slightly Difficult	2
Easy	1

About O*Net

The O*NET program is the nation's primary source of occupational information. Central to the project is the O*NET database, containing information on hundreds of standardized and occupation-specific descriptors. The database, which is available to the public at no cost, is continually updated by surveying a broad range of workers from each occupation. Information from this database forms the heart of O*NET OnLine, an interactive application for exploring and searching occupations. The database also provides the basis for our Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers.

Appendix C—Occupation Descriptions

Occupation	Job Description	SOC
Administration and Operation		
Administrative/Office Manager	Plan, direct, or coordinate one or more administrative services of an organization, such as records and information management, mail distribution, facilities planning and maintenance, custodial operations, and other office support services.	11-3011
Computer Support Specialist	Analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption.	15-1152
Financial Controller Manager	Plan, direct, or coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment.	11-3031
Human Resource Manager	Plan, direct, or coordinate human resources activities and staff of an organization.	11-3121
Medical & Health Services Manager	Plan, direct, or coordinate medical and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.	11-9111
Accountant and Auditor	Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.	13-2011
Human Resource Specialists		13-1071
Receptionist & Information Clerk	Answer inquiries and provide information to the general public, customers, visitors, and other interested parties regarding activities conducted at establishment and location of departments, offices, and employees within the organization.	43-4171
Executive Secretary	Provide high-level administrative support by conducting research, preparing statistical reports, handling information requests, and performing clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings. May also train and supervise lower-level clerical staff.	43-6011
Practitioner and Technical		
Billing/Coding Medical Records and Info Technicians	Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards in a manner consistent with the healthcare industry's numerical coding system.	29-2071
Diagnostic Medical Sonographers	Produce ultrasonic recordings of internal organs for use by physicians.	29-2032
Licensed Practical Nurse	Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.	29-2061
Medical and Clinical Laboratory Technologists	Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.	29-2011
Medical and Clinical Lab Technicians	Perform routine medical laboratory tests for the diagnosis, treatment, and prevention of disease. May work under the supervision of a medical technologist.	29-2012
Nurse Practitioner	Diagnose and treat acute, episodic, or chronic illness, independently or as part of a healthcare team. May focus on health promotion and disease prevention. May order, perform, or interpret diagnostic tests such as lab work and x rays. May prescribe medication. Must be registered nurses who have specialized graduate education.	29-1171
Occupational Therapists	Assess, plan, organize, and participate in rehabilitative programs that help build or restore vocational, homemaking, and daily living skills, as well as general independence, to persons with disabilities or developmental delays.	29-1122

Occupation	Job Description	SOC
Practitioner and Technical		
Pharmacists	Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.	29-1051
Pharmacy Technicians	Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.	29-2052
Radiologic Technologists	Take x rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Includes technologists who specialize in other scanning modalities.	29-2034
Registered Nurse/Nurse Practitioners	Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.	29-1141
Respiratory Therapists	Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment.	29-1126
Surgical Technologists	Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeon's assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments.	29-2055
Healthcare Support		
Home Health Aides	Provide routine individualized healthcare such as changing bandages and dressing wounds, and applying topical medications to the elderly, convalescents, or persons with disabilities at the patient's home or in a care facility. Monitor or report changes in health status. May also provide personal care such as bathing, dressing, and grooming of patient.	31-1011
Medical Assistants	Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.	31-9092
Nursing Assistants	Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens. May transfer or transport patients. Includes nursing care attendants, nursing aides, and nursing attendants.	31-1014
Physical Therapists	Assist physical therapists in providing physical therapy treatments and procedures. May, in accordance with State laws, assist in the development of treatment plans, carry out routine functions, document the progress of treatment, and modify specific treatments in accordance with patient status and within the scope of treatment plans established by a physical therapist. Generally requires formal training.	31-2021

Appendix D—Skill Descriptions

Work Style Skill	Description
Adaptability/Flexibility	Job requires being open to change (positive or negative) and to considerable variety in the workplace.
Analytical Thinking	Job requires analyzing information and using logic to address work-related issues and problems.
Attention to Detail	Job requires being careful about detail and thorough in completing work tasks.
Concern for Others	Job requires being sensitive to others' needs and feelings and being understanding and helpful on the job.
Cooperation	Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.
Dependability	Job requires being reliable, responsible, and dependable, and fulfilling obligations.
Integrity	Job requires being honest and ethical.
Stress Tolerance	Job requires accepting criticism and dealing calmly and effectively with high stress situations.

Knowledge Skill	Description
Administration and Management	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
Biology	Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
Chemistry	Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods
Computers and Electronics	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
Foreign Language (Spanish)	Knowledge of the structure and content of a foreign (non-English) language including the meaning and spelling of words, rules of composition and grammar, and pronunciation.
Medicine and Dentistry	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
Therapy and Counseling	Knowledge of principles, methods, and procedures for diagnosis, treatment, and rehabilitation of physical and mental dysfunctions, and for career counseling and guidance.

Appendix E—Glossary of Terms

Defined Benefit Plan: A defined benefit plan refers to a traditional or fixed pension. It is a plan under which an employee receives a set monthly amount upon retirement, guaranteed for their life or the joint lives of the member and their spouse. This benefit may also include a cost of living increase each year during retirement. The monthly benefit amount is based upon the participant's wages and length of service.

Defined Contribution Plan: A defined contribution plan refers to a retirement savings program under which an employer promises certain contributions to a participant's account during employment, but with no guaranteed retirement benefit. The ultimate benefit is based exclusively upon the contributions and investment earnings of the plan. The benefit ceases when the account balance is depleted regardless of the retiree's age or circumstances. Examples include 457, 401(k), and 403(b) plans.

Non-weighted Averages: Non-weighted averages refer to percentage of total survey respondents. This means large employers with hundreds of employees would be weighted the same as small employers with only a few employees.

Weighted Averages: Weighted averages refer to percentage of total employment. Weighted average corrects the distortion which would occur in a simple average if one or more companies have many more employees at a given wage than another group of employers at a different wage. If group A has ten employees in a position at an average wage of $15 per hour and another company has one employee in the same position at $25 per hour, the simple average wage would be $20 per hour, but the weighted average wage would be $15.91 per hour.

Indexing: An index is a relatively simple way to make comparisons for characteristics with a common starting point and weights for each of the classifications. An index provides a single number or measure for all characteristics as rated by respondents in the project study. This indexing methodology can also be used to measure how the respondents from the Goods Producing sector compare with the respondents from the Service Providing sector or the Government/Education sector and with all of the respondents from all industries in the project group.