# Activities/ Resources for Unit II Outcomes

## Activities/ Resources for Outcome #1



### Career Guide to Industries, 2010-11 Edition

### Healthcare

- Nature of the Industry
- Working Conditions
- Employment
- Occupations in the Industry
- Training and Advancement
- Outlook
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### **Significant Points**

- As one of the largest industries in 2008, healthcare provided 14.3 million jobs for wage and salary workers.
- Ten of the 20 fastest growing occupations are healthcare related.
- Healthcare will generate 3.2 million new wage and salary jobs between 2008 and 2018, more than any other industry, largely in response to rapid growth in the elderly population.
- Most workers have jobs that require less than 4 years of college education, but health diagnosing and treating practitioners are highly educated.

### **Nature of the Industry**

Combining medical technology and the human touch, the healthcare industry diagnoses, treats, and administers care around the clock, responding to the needs of millions of people—from newborns to the terminally ill.

Industry organization. About 595,800 establishments make up the healthcare industry; they vary greatly in terms of size, staffing patterns, and organizational structures. About 76 percent of healthcare establishments are offices of physicians, dentists, or other health practitioners. Although hospitals constitute only 1 percent of all healthcare establishments, they employ 35 percent of all workers (table 1).

Table 1. Percent distribution of employment and establishments in health services by detailed industry sector, 2008

Industry segment	Employment	Establishments
Total	100.0	100.0
Ambulatory healthcare services	42.6	87.3
Offices of physicians	17.0	36.0
Home healthcare services	7.2	3.7
Offices of dentists	6.2	20.4

Table 1. Percent distribution of employment and establishments in health services by detailed industry sector, 2008

Industry segment	Employment	Establishments			
Offices of other health practitioners	4.7	19.6			
Outpatient care centers	4.0	3.6			
Other ambulatory healthcare services	1.8	1.4			
Medical and diagnostic laboratories	1.6	2.4			
Hospitals	34.6	1.3			
General medical and surgical hospitals	32.5	1.0			
Other specialty hospitals	1.4	0.2			
Psychiatric and substance abuse hospitals	0.7	0.1			
Nursing and residential care facilities	22.8	11.4			
Nursing care facilities	12.2	2.8			
Community care facilities for the elderly	5.2	3.5			
Residential mental health facilities	4.1	4.0			
Other residential care facilities	1.3	1.1			
SOURCE: BLS Quarterly Census of Employment and Wages, 2008.					

The healthcare industry includes establishments ranging from small-town private practices of physicians who employ only one medical assistant to busy inner-city hospitals that provide thousands of diverse jobs. In 2008, around 48 percent of non-hospital healthcare establishments employed fewer than five workers. In contrast, 72 percent of hospital employees were in establishments with more than 1,000 workers.

The healthcare industry consists of the following segments:

**Hospitals.** Hospitals provide complete medical care, ranging from diagnostic services, to surgery, to continuous nursing care. Some hospitals specialize in treatment of the mentally ill, cancer patients, or children. Hospital-based care may be on an inpatient (overnight) or outpatient basis. The mix of workers needed varies, depending on the size, geographic location, goals, philosophy, funding, organization, and management style of the institution. As hospitals work to improve efficiency, care continues to shift from an inpatient to outpatient basis whenever possible.

Nursing and residential care facilities. Nursing care facilities provide inpatient nursing, rehabilitation, and health-related personal care to those who need continuous nursing care, but do not require hospital services. Nursing aides provide the vast majority of direct care. Other facilities, such as convalescent homes, help patients who need less assistance. Residential care facilities provide around-the-clock social and personal care to children, the elderly, and others who have limited ability to care for themselves. Workers care for residents of assisted-living facilities, alcohol and drug rehabilitation centers, group homes, and halfway houses. Nursing and medical care, however, are not the main functions of establishments providing residential care, as they are in nursing care facilities.

**Offices of physicians.** About 36 percent of all healthcare establishments fall into this industry segment. Physicians and surgeons practice privately or in groups of practitioners who have the same or different specialties. Many physicians and surgeons prefer to join group practices because they afford backup coverage, reduce overhead expenses, and facilitate consultation with peers. Physicians and surgeons are increasingly working as salaried employees of group medical practices, clinics, or integrated health systems.

**Offices of dentists.** About 20 percent of healthcare establishments are dentists' offices. Most employ only a few workers, who provide preventative, cosmetic, or emergency care. Some offices specialize in a single field of dentistry, such as orthodontics or periodontics.

**Home healthcare services.** Skilled nursing or medical care is sometimes provided in the home, under a physician's supervision. Home healthcare services are provided mainly to the elderly. The development of inhome medical technologies, substantial cost savings, and patients' preference for care in the home have helped change this once-small segment of the industry into one of the fastest growing healthcare services.

Offices of other health practitioners. This segment of the industry includes the offices of chiropractors, optometrists, podiatrists, occupational and physical therapists, psychologists, audiologists, speech-language pathologists, dietitians, and other health practitioners. Demand for the services of this segment is related to the ability of patients to pay, either directly or through health insurance. Hospitals and nursing facilities may contract out for these services. This segment also includes the offices of practitioners of alternative medicine, such as acupuncturists, homeopaths, hypnotherapists, and naturopaths.

**Ambulatory healthcare services.** This segment includes outpatient care center and medical and diagnostic laboratories. These establishments are diverse and include kidney dialysis centers, outpatient mental health and substance abuse centers, blood and organ banks, and medical labs that analyze blood, do diagnostic imaging, and perform other clinical tests.

Recent developments. In the rapidly changing healthcare industry, technological advances have made many new procedures and methods of diagnosis and treatment possible. Clinical developments, such as infection control, less invasive surgical techniques, advances in reproductive technology, and gene therapy for cancer treatment, continue to increase the longevity and improve the quality of life of many Americans. Advances in medical technology also have improved the survival rates of trauma victims and the severely ill who need extensive care from therapists and social workers as well as other support personnel.

In addition, advances in information technology have a perceived improvement on patient care and worker efficiency. Devices such as hand-held computers are used to record a patient's medical history. Information on vital signs and orders for tests are transferred electronically to a main database; this process eliminates the need for paper and reduces recordkeeping errors. Presently, however, adoption of electronic health records is relatively low.

Cost containment also is shaping the healthcare industry, as shown by the growing emphasis on providing services on an outpatient, ambulatory basis; limiting unnecessary or low-priority services; and stressing preventive care, which reduces the potential cost of undiagnosed, untreated medical conditions. Enrollment in managed care programs—predominantly preferred provider organizations, health maintenance organizations, and hybrid plans such as point-of-service programs—continues to grow. These prepaid plans provide comprehensive coverage to members and control health insurance costs by emphasizing preventive care. Cost effectiveness also is improved with the increased use of integrated delivery systems, which combine two or more segments of the industry to increase efficiency through the streamlining of functions, primarily financial and managerial. These changes will continue to reshape not only the nature of the healthcare workforce, but also the manner in which healthcare is provided.

Various healthcare reforms are presently under consideration. These reforms may affect the number of people covered by some form of health insurance, the number of people being treated by healthcare providers, and the number and type of healthcare procedures that will be performed.

### **Working Conditions**

Recent developments. Average weekly hours of nonsupervisory workers in private healthcare varied among the different segments of the industry. Workers in offices of dentists averaged only 27.4 hours per week in 2008, while those in psychiatric and substance abuse hospitals averaged 35 hours, compared with 33.6 hours for all private industry.

Many workers in the healthcare industry are on part-time schedules. Part-time workers made up about 20 percent of the healthcare workforce as a whole in 2008, but accounted for 37 percent of workers in offices of dentists and 32 percent of those in offices of other health practitioners. Many healthcare establishments operate around the clock and need staff at all hours. Shift work is common in some occupations, such as registered nurses. It is not uncommon for healthcare workers to hold more than one part-time job.

Work environment. In 2008, the incidence of occupational injury and illness in hospitals was higher than the average for private industry overall. Nursing care facilities had an even higher rate.

Healthcare workers involved in direct patient care must take precautions to prevent back strain from lifting patients and equipment; to minimize exposure to radiation and caustic chemicals; and to guard against infectious diseases. Home care personnel and other healthcare workers who travel as part of their job are exposed to the possibility of being injured in highway accidents.

### **Employment**

As one of the largest industries in 2008, healthcare provided 14.3 million jobs for wage and salary workers. About 40 percent were in hospitals; another 21 percent were in nursing and residential care facilities; and 16 percent were in offices of physicians.

Healthcare jobs are found throughout the country, but they are concentrated in metropolitan areas.

### **Occupations in the Industry**

Healthcare firms employ large numbers of workers in professional and service occupations. Together, these two occupational groups account for 76 percent of jobs in the industry (table 2). The next largest share of jobs, 18 percent, is in office and administrative support. Management, business, and financial operations occupations account for only 4 percent of employment. Other occupations in healthcare make up only 2 percent of the total.

Professional occupations, such as *physicians and surgeons, dentists, registered nurses, social workers*, and *physical therapists*, usually require at least a bachelor's degree in a specialized field or higher education in a specific health field, although *registered nurses* also may enter through associate degree or diploma programs. Professional workers often have high levels of responsibility and complex duties. In addition to providing services, these workers may supervise other workers or conduct research. Some professional occupations, such as medical and health services managers, have little to no contact with patients.

Health technologists and technicians work in many fast-growing occupations, such as *medical records and health information technicians, diagnostic medical sonographers, radiologic technologists and technicians,* and *dental hygienists*. These workers may operate medical equipment and assist health diagnosing and treating practitioners. These technologists and technicians are typically graduates of 1-year or 2-year postsecondary training programs. Service occupations attract many workers with little or no specialized education or training. For instance, some of these workers are *nursing aides, home health aides, building cleaning workers, dental assistants, medical assistants,* and *personal and home care aides. Nursing* or *home health aides* provide health-related services for ill, injured, disabled, elderly, or infirm individuals either in institutions or in their homes. By providing routine personal care services, *personal and home care aides* help elderly, disabled, and ill persons live in their own homes instead of in an institution. With experience and, in some cases, further education and training, service workers may advance to higher-level positions or transfer to new occupations.

Each segment of the healthcare industry provides a different mix of wage and salary health-related jobs.

<u>Hospitals</u>. Hospitals employ workers with all levels of education and training, thereby providing a wider variety of opportunities than is offered by other segments of the healthcare industry. About 28 percent of hospital workers are registered nurses. Hospitals also employ many physicians and surgeons, therapists, and social workers. About 21 percent of hospital jobs are in a service occupation, such as nursing, psychiatric, and home

health aides, or building cleaning workers. Hospitals also employ large numbers of office and administrative support workers.

<u>Nursing and residential care facilities</u>. About 63 percent of nursing and residential care facility jobs are in service occupations, primarily nursing, psychiatric, and home health aides. Professional and administrative support occupations make up a much smaller percentage of employment in this segment, compared with other parts of the healthcare industry. Federal law requires nursing facilities to have licensed personnel on hand 24 hours a day and to maintain an appropriate level of care.

<u>Offices of physicians</u>. Many of the jobs in offices of physicians are in professional and related occupations, primarily physicians, surgeons, and registered nurses. About 37 percent of all jobs, however, are in office and administrative support occupations, such as receptionists and information clerks.

<u>Offices of dentists</u>. Roughly 35 percent of all jobs in this segment are in service occupations, mostly dental assistants. The typical staffing pattern in dentists' offices consists of one dentist with a support staff of dental hygienists and dental assistants. Larger practices are more likely to employ office managers and administrative support workers.

<u>Home healthcare services</u>. About 59 percent of jobs in this segment are in service occupations, mostly home health aides and personal and home care aides. Nursing and therapist jobs also account for substantial shares of employment in this segment.

Offices of other health practitioners. About 42 percent of jobs in this industry segment are professional and related occupations, including physical therapists, occupational therapists, dispensing opticians, and chiropractors. Healthcare practitioners and technical occupations and office and administrative support occupations also accounted for a significant portion of all jobs—35 percent and 31 percent, respectively.

<u>Ambulatory healthcare services</u>. Outpatient care centers employed high percentages of professional and related workers like counselors and registered nurses. Medical and diagnostic laboratories predominantly employ clinical laboratory and radiological technologists and technicians. Emergency medical technicians and paramedics are also employed in ambulatory services.

Table 2. Employment of wage and salary workers in healthcare, 2008 and projected change, 2008-2018. (Employment in thousands)

	Employment, 2008		Percent Change,	
Occupation	Number	Percent	2008-18	
All Occupations	14,336.0	100.0	22.5	
Management, business, and financial occupations	614.6	4.3	16.8	
Professional and related occupations	6,283.9	43.8	22.5	
Counselors	171.3	1.2	22.6	
Social workers	206.7	1.4	19.5	
Dietitians and nutritionists	35.5	0.3	9.8	
Pharmacists	67.5	0.5	14.0	
Physicians and surgeons	512.5	3.6	26.0	
Physician assistants	66.2	0.5	41.3	
Registered nurses	2,192.4	15.3	23.4	
Clinical laboratory technologists and technicians	278.8	1.9	14.0	

Table 2. Employment of wage and salary workers in healthcare, 2008 and projected change, 2008-2018.

(Employment in thousands)

	Employment, 2008		Percent Change,	
Occupation	Number	Percent	2008-18	
Emergency medical technicians and paramedics	142.1	1.0	9.2	
Licensed practical and licensed vocational nurses	619.1	4.3	21.9	
Office and administrative support occupations	2,540.3	17.7	19.7	
Billing and posting clerks and machine operators	194.8	1.4	19.7	
Receptionists and information clerks	386.3	2.7	16.1	
Secretaries and administrative assistants	770.7	5.4	26.5	

NOTE: Columns may not add to total due to omission of occupations with small employment.

SOURCE: BLS National Employment Matrix, 2008-18.

### **Training and Advancement**

A wide variety of people with various educational backgrounds are necessary for the healthcare industry to function. The healthcare industry employs some highly educated occupations that often require many years of training beyond graduate school. However, most of the occupations in the healthcare industry require less than four years of college.

A variety of postsecondary programs provide specialized training for jobs in healthcare. People interested in a career as a health diagnosing and treating practitioner—such as physicians and surgeons, optometrists, physical therapists, or audiologists—should be prepared to complete graduate school coupled with many years of education and training beyond college. A few healthcare workers need bachelor's degrees like social workers, health service managers, and some RNs. A majority of the technologist and technician occupations require a certificate or an associate degree; these programs usually have both classroom and clinical instruction and last about 2 years.

The healthcare industry also provides many job opportunities for people without specialized training beyond high school. In fact, 47 percent of workers in nursing and residential care facilities have a high school diploma or less, as do 20 percent of workers in hospitals.

Some healthcare establishments provide on-the-job or classroom training, as well as continuing education. Most healthcare workers that do not have postsecondary healthcare training and work directly with patients will receive some on-the-job training. These occupations include nursing aides, orderlies, and attendants; psychiatric aides; home health aides; physical therapist aides; and EKG technicians. Hospitals are more likely than other facilities to have the resources and incentive to provide training programs and advancement opportunities to their employees. In other segments of healthcare, the variety of positions and advancement opportunities are more limited. Larger establishments usually offer a broader range of opportunities.

Some hospitals provide training or tuition assistance in return for a promise to work at their facility for a particular length of time after graduation. Nursing facilities may have similar programs. Some hospitals have cross-training programs that train their workers—through formal college programs, continuing education, or in-house training—to perform functions outside their specialties.

Persons considering careers in healthcare should have a strong desire to help others, genuine concern for the welfare of patients and clients, and an ability to deal with people of diverse backgrounds in stressful situations. Many of the healthcare jobs that are regulated by State licensure require healthcare professionals to complete continuing education at regular intervals to maintain valid licensure.

Opportunities for advancement will vary depending on the occupation itself. Healthcare service assistants and aides may advance to positions with more responsibility with years of experience or additional education or training. Health technologists and technicians often advance by becoming credentialed in a specialty within their field or with additional education or training. Health professionals may advance to managerial or administrative positions.

### **Outlook**

Healthcare will generate 3.2 million new wage and salary jobs between 2008 and 2018, more than any other industry, largely in response to rapid growth in the elderly population. Ten of the twenty fastest growing occupations are related to healthcare. Many job openings should arise in all healthcare employment settings as a result of employment growth and the need to replace workers who retire or leave their jobs for other reasons.

Employment change. Wage and salary employment in the healthcare industry is projected to increase 22 percent through 2018, compared with 11 percent for all industries combined (table 3). Employment growth is expected to account for about 22 percent of all wage and salary jobs added to the economy over the 2008-18 period. Projected rates of employment growth for the various segments of the industry range from 10 percent in hospitals, the largest and slowest growing industry segment, to 46 percent in the much smaller home healthcare services.

Table 3. Employment in healthcare by industry segment, 2008 and projected change, 2008-18 (Employment in thousands)

Industry segment	2008 Employment	2008-18 Percent change			
Healthcare, total	14,336.0	22.5			
Hospitals, public and private	5,667.2	10.1			
Nursing and residential care facilities	3,008.0	21.2			
Offices of physicians	2,265.7	34.1			
Home healthcare services	958.0	46.1			
Offices of dentists	818.8	28.5			
Offices of other health practitioners	628.8	41.3			
Outpatient care centers	532.5	38.6			
Other ambulatory healthcare services	238.5	6.8			
Medical and diagnostic laboratories	218.5	39.8			
SOURCE: BLS National Employment Matrix, 2008-18					

Employment in healthcare will continue to grow due to many contributing factors. The proportion of the population in older age groups will grow faster than the total population between 2008 and 2018. In addition, older persons have a higher incidence of injury and illness and often take longer to heal from maladies. As a result, demand for healthcare will increase, especially in employment settings specializing in gerontology care for the elderly. Employment in home healthcare and nursing and residential care should increase rapidly as life expectancies rise, and families are less able to care for their elder family members and rely more on long-term care facilities.

Advances in medical technology will continue to improve the survival rate of severely ill and injured patients, who will then need extensive therapy and care. New technologies will continue to enable earlier diagnoses of many diseases which often increase the ability to treat conditions that were previously not treatable. Industry growth also will occur as a result of the shift from inpatient to less expensive outpatient and home healthcare

because of improvements in diagnostic tests and surgical procedures, along with patients' desires to be treated at home.

Many of the occupations projected to grow the fastest in the economy are concentrated in the healthcare industry. For example, over the 2008-18 period, total employment of home health aides is projected to increase by 50 percent, medical assistants by 34 percent, physical therapist assistants by 33 percent, and physician assistants by 39 percent.

Rapid growth is expected for workers in occupations concentrated outside the inpatient hospital sector, such as pharmacy technicians and personal and home care aides. Because of cost pressures, many healthcare facilities will adjust their staffing patterns to reduce labor costs. Where patient care demands and regulations allow, healthcare facilities will substitute lower paid providers and will cross-train their workforces. Many facilities have cut the number of middle managers, while simultaneously creating new managerial positions as the facilities diversify. Traditional inpatient hospital positions are no longer the only option for many future healthcare workers; persons seeking a career in the field must be willing to work in various employment settings. Hospitals will be the slowest growing segment within the healthcare industry because of efforts to control hospital costs and the increasing use of outpatient clinics and other alternative care sites.

Demand for dental care will rise due to greater retention of natural teeth by middle-aged and older persons, greater awareness of the importance of dental care, and an increased ability to pay for services. Dentists will use support personnel such as dental hygienists and assistants to help meet their increased workloads.

Job prospects. Many job openings should arise in all employment settings as a result of employment growth and the need to replace workers who retire or leave their jobs for other reasons. Tougher immigration rules that are slowing the numbers of foreign healthcare workers entering the United States should make it easier to get a job in this industry.

Occupations with the most replacement openings are usually large, with high turnover stemming from low pay and status, poor benefits, low training requirements, and a high proportion of young and part-time workers. Nursing aides, orderlies and attendants, and home health aides are among the occupations adding the most new jobs in this industry between 2008 and 2018, about 592,200 combined. In contrast, occupations with relatively few replacement openings—such as physicians and surgeons—are characterized by high pay and status, lengthy training requirements, and a high proportion of full-time workers.

Another occupation that is expected to have many openings is registered nurses. The median age of registered nurses is increasing, and not enough younger workers are replacing them. As a result, employers in some parts of the country are reporting difficulties in attracting and retaining nurses. Healthcare workers at all levels of education and training will continue to be in demand. In many cases, it may be easier for jobseekers with health-specific training to obtain jobs and advance in their careers. Specialized clinical training is a requirement for many jobs in healthcare and is an asset even for many administrative jobs that do not specifically require it.

### **Earnings**

Industry earnings. Average earnings of nonsupervisory workers in most healthcare segments are higher than the average for all private industry, with hospital workers earning considerably more than the average and those employed in nursing and residential care facilities and home healthcare services earning less (table 4). Average earnings often are higher in hospitals because the percentage of jobs requiring higher levels of education and training is greater than in other segments. Those segments of the industry with lower earnings employ large numbers of part-time service workers.

Table 4. Average earnings and hours of nonsupervisory workers in healthcare by industry segment, 2008

	Earı	Earnings	
Industry segment	Hourly	Weekly	Weekly hours
Total, private industry	\$18.08	\$608	33.6
Healthcare	20.38	678	33.2
Hospitals, public and private	23.99	866	36.1
Medical and diagnostic laboratories	23.21	804	34.6
Offices of dentists	22.36	613	27.4
Offices of physicians	22.09	732	33.1
Outpatient care centers	21.13	718	34.0
Offices of other health practitioners	19.35	543	28.0
Home healthcare services	16.17	478	29.6
Other ambulatory healthcare services	15.76	571	36.3
Nursing and residential care facilities	13.70	439	32.1
SOURCE: BLS Current Employment Statistics, 2008.			

As in most industries, professionals and managers working in healthcare typically earn more than other workers in the industry. Wages in individual healthcare occupations vary as widely as the duties, level of education and training, and amount of responsibility required by the occupation (table 5). Some establishments offer tuition reimbursement, paid training, child day care services, and flexible work hours. Healthcare establishments that must be staffed around the clock to care for patients and handle emergencies often pay premiums for overtime and weekend work, holidays, late shifts, and time spent on call.

	Table 5. Median hourly	v wages of the	largest occupations in	ı healthcare, Ma	v 2008
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Occupation	Ambulatory healthcare services	Hospitals	Nursing and residential care services	All industries
Registered nurses	\$28.65	\$30.71	\$27.20	\$30.03
Licensed practical and licensed vocational nurses	17.82	18.37	19.44	18.77
Dental assistants	15.53	16.17	14.46	15.57
Medical secretaries	14.31	14.21	13.49	14.27
Medical assistants	13.59	14.32	11.83	13.60
Receptionists and information clerks	12.33	12.75	10.64	11.80
Office clerks, general	11.96	13.33	11.91	12.17
Nursing aides, orderlies, and attendants	11.37	12.03	11.07	11.46
Home health aides	9.73	11.58	9.81	9.84
Maids and housekeeping cleaners	9.62	10.28	9.21	9.13
SOURCE: BLS Occupational Employment	ent Statistics, May 2008.			

Earnings vary not only by type of establishment and occupation, but also by size; salaries tend to be higher in larger hospitals and group practices. Geographic location also can affect earnings.

Benefits and union membership. Healthcare workers generally receive standard benefits, such as health insurance, paid vacation and sick leave, and pension plans. However, benefits can vary greatly by occupation and by employer.

Although some hospitals have unions, the healthcare industry is not heavily unionized. In 2008, 17 percent of workers in hospitals were members of unions or covered by union contracts, while all other healthcare sectors had rates below the 14 percent average for all industries.

### **Sources of Additional Information**

### **Disclaimer:**

Links to non-BLS Internet sites are provided for your convenience and do not constitute an endorsement.

For additional information on specific health-related occupations, contact:

 American Medical Association/Health Professions Career and Education Directory, 515 N. State St., Chicago, IL 60654. Internet: http://www.ama-assn.org/go/alliedhealth

For information on physician careers and applying to medical school, contact:

• Association of American Medical Colleges, 2450 N St. NW., Washington, DC 20037. Internet: <a href="http://www.aamc.org/students">http://www.aamc.org/students</a>

General information on healthcareers is available from:

 Bureau of Health Professions, Room 8A-09, 5600 Fishers Lane, Rockville, MD 20857. Internet: http://bhpr.hrsa.gov/

For a list of accredited programs in allied health fields, contact:

 Commission on Accreditation of Allied Health Education Programs, 1361 Park St., Clearwater, FL 33756. Internet: <a href="http://www.caahep.org">http://www.caahep.org</a>

A wealth of information on healthcareers and job opportunities also is available through the Internet, schools, libraries, associations, and employers.

Information on the following occupations may be found in the 2010-11 edition of the *Occupational Outlook Handbook*:

- Audiologists
- Cardiovascular technologists and technicians
- <u>Chiropractors</u>
- Clinical laboratory technologists and technicians
- <u>Dental assistants</u>
- <u>Dental hygienists</u>
- <u>Dentists</u>
- Diagnostic medical sonographers
- Dietitians and nutritionists

- Emergency medical technicians and paramedics
- Home health aides and personal and home care aides
- Licensed practical and licensed vocational nurses
- Medical and health services managers
- Medical assistants
- Medical, dental, and ophthalmic laboratory technicians
- Medical records and health information technicians
- Medical transcriptionists
- Nuclear medicine technologists
- Nursing and psychiatric aides
- Occupational therapist assistants and aides
- <u>Occupational therapists</u>
- Opticians, dispensing
- Optometrists
- Pharmacists
- Pharmacy technicians and aides
- Physical therapist assistants and aides
- Physical therapists
- Physician assistants
- Physicians and surgeons
- Podiatrists
- Psychologists
- Radiation therapists
- Receptionists and information clerks
- Recreational therapists
- Registered nurses
- Respiratory therapists
- Respiratory therapy technicians
- Social and human service assistants
- Speech-language pathologists
- Surgical technologists

### **NAICS Coverage**

NAICS 621, 622, 623

### Note:

The data presented in this statement follow the industry coverage of these NAICS codes. Text references may not strictly follow NAICS industry definitions.

**Suggested citation:** Bureau of Labor Statistics, U.S. Department of Labor, *Career Guide to Industries, 2010-11 Edition*, Healthcare, on the Internet at <a href="http://www.bls.gov/oco/cg/cgs035.htm">http://www.bls.gov/oco/cg/cgs035.htm</a> (visited *May 10, 2011*).

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### What is HIPAA?

(Adapted from HIPAA for Allied Health Careers, Cynthia Newby, CPC, 2009)

**HIPAA** (the **Health Insurance Portability and Accountability Act of 1996**) became Public Law 104-191 on August 21, 1996. The purposes of the act are to:

- Improve the efficiency and effectiveness of health care delivery by creating a national framework for health privacy protection that builds on efforts by states, health systems, and individual organizations and individuals
- Protect and enhance the rights of patients by providing them with access to their health information and controlling the inappropriate use or disclosure of that information.
- Improve the quality of health care by restoring trust in the health care system among consumers, health care professionals, and the multitude of organizations and individuals committed to the delivery of care.

HIPAA has two parts. *Title I*, health insurance reform, is the law on continuation of health insurance coverage when individuals change jobs. *Title II*, known as the Administrative Simplification standards, affects individuals' private health information and is the major subject of this program.

### Title I: Health Insurance Reform

Many people in the United States have medical insurance coverage through government entitlement programs such as Medicare and Medicaid. These individuals have federal rights concerning their insurance. For example, no medical condition can be used to block a person from Medicare eligibility.

Other people are covered by private insurance that is offered by their employers. Their rights regarding eligibility for coverage were limited before passage of **HIPAA Title I**, health insurance reform.

### Three major sources of private health insurance are:

- 1. Employer-sponsored group health plans
- 2. The Federal Employees Health Benefits program
- 3. Individual plans

Centers for Medicare and Medicaid Services (CMS): The main federal government agency responsible for health care is the Centers for Medicare and Medicaid Services, known as CMS. CMS administers the Medicare and Medicaid programs to more than 90 million Americans. CMS implements annual federal budget acts and laws such as the Medicare Prescription Drug program.

COBRA: The Consolidated Omnibus Budget Reconciliation Act (1985; amended 1986) gives an employee who is leaving a job the right to continue health coverage

under the employer's plan for a limited time at his or her own expense. COBRA participants usually pay more than do active employees, since the employer usually pays part of the premium for an active employee, while a COBRA participant generally pays the entire premium. However, COBRA is ordinarily less expensive than individual health coverage.

### **Title II: Administrative Simplification**

**Title II** of **HIPAA**, known as **Administrative Simplification**, substantially affected the entire health care industry. Implementation of its rules changed administrative, financial, and case management policies and procedures. The law contained strict new requirements for the uniform transfer of electronic health care data such as for billing and payment; new patient rights regarding personal health information, including the right to access this information and to limit its disclosure; and broad new security rules that health care organizations must put in place to safeguard the confidentiality of patients' medical information.

The Department of Health and Human Services (HHS) established national standards for electronic health care transactions. The HHS also addressed the security and privacy of the health data that are exchanged electronically.

The Office for Civil Rights (OCR) is an agency of HHS. One of the purposes of the OCR is to enforce the privacy standards, because the right to privacy is considered a civil right. Civil violations of the HIPAA privacy standards are enforced by the OCR.

**Protected Health Information (PHI)** is the HIPAA terminology for individually identifiable health information in any form, except such information maintained in education records covered by the **Family Educational Rights and Privacy Act (FERPA)** and employment records.

### **Discussion for Review and Critical Thinking**

HIPAA Cases: How is each incident related to issues of patient privacy and confidentiality?

- 1. A hospital requires its personnel to wear ID badges; visitors must sign in at the front desk.
- 2. A laboratory faxes a patient's medical test results to a physician after verifying the fax number and including a confidentiality notice on the fax cover sheet.
- 3. A business associate turns off its antivirus program while upgrading its computer system and forgets to turn it on again, with the result that a worm enters its computers and destroys thousands of medical billing records.
- 4. An employee notices that someone has been tampering with her computer, but she does not report the incident.
- 5. A hospital uses an encrypted system to e-mail an organ donor's medical information to another hospital that is treating the organ recipient.
- 6. A report is filed that a healthcare provider has left a laptop computer with personal health information (PHI) on a bus.
- 7. An employee of the Department of Veterans' Affairs is accused on a complaint form by another employee of stealing veterans' names and social security numbers from the office computer and selling them.
- 8. A hospital patient complains that she has not been allowed to see the medical record covering her recent hospitalization.
- Without patient authorization, a medical insurance specialist sends a patient's asthma history to the insurance company to resolve a claim that is being questioned.
- 10. A hospital pins patients' thank you letters to a bulletin board in the main lobby.

HIPAA: copy of basic release form: http://www.healthcare-information-guide.com/support-files/basic-hipaa-release-form.pdf

HIPAA violations: http://www.youtube.com/watch?v=4N5dvGpVUGE&feature=related

Medical Information Release Form			
(HIPAA Release Form)			
Name:	Date of Birth:	/	/
Release of Information			
[] I authorize the release of information including the examination rendered to me and claims information to:  [] Spouse	. This information n		released
[] Child(ren)			
[] Information is not to be released to anyone. This <i>Release of Information</i> will remain in effect up	ntil terminated by m	ıe in wı	riting.
Messages			
Please call [] my home [] my work [] my cell numb	er:		
If unable to reach me:			
[] you may leave a detailed message			
[] please leave a message asking me to return your	r call		
The best time to reach me is (day)	between (til	me)	
Signed:	Date:/_	/	
Witness:	Date:/	/	

## Activities/ Resources for Outcome #2

### Basic Nurse Assistant

<u>Definition of role</u>: Basic Nurse Assistants work under the direction of physicians, Registered Nurses (RNs), and Licensed Practical Nurses (LPNs) providing routine care or treatment.

- Answer patient call bells
- Deliver messages
- Serve meals
- Make beds
- Feed, dress and bathe patients

### They may also:

- Provide skin care to patients
- Take temperature, pulse, respiration, blood pressure
- Help patients get in and out of bed
- Keep patient rooms clean and orderly
- Set up equipment
- Move or store supplies

<u>Employment Opportunities:</u> According to the U.S. Department of Labor, projections for Nurse Assistants are excellent, due to an expanding population of older people and advances in medical technologies that extend life.

- Hospitals
- Long-term care facilities
- Urgent care facilities
- Doctors' offices
- Home care

<u>Salary:</u> Median salaries are \$10.05 per hour or \$20,919 (range \$10-15/hour) Add to this shift differential, weekend differential, holiday pay

<u>Requirements:</u> Criminal background check, drug screen, must be at least 16 years old, have a minimum 8<sup>th</sup> grade education, a COMPASS reading test score of 84 or higher, or ACT reading score of 20 or completion of RDG 110 with a grade of C or better, or 12 credit hours of prior course work with a C or better including 3 credit hours in English or reading.

<u>Certification:</u> Upon successful completion of the course work, the Vocational Specialist Certificate in Basic Nurse Assisting is awarded. Students must take the Illinois mandated State Competency Written Evaluation before their names can be placed on the State Nurse Aide Registry, which is required for employment. The written evaluation costs \$50.

Source: <u>The Everything Guide to Careers in Health Care</u>, Quan, 2007, F&W Publications. EEC College Catalog

Activity: Learn places to take pulse and take pulse for one minute

### Dental Assistants

<u>Definition of role:</u> A clinical Dental Assistant works chair-side, anticipating the needs of the dentist in intra-oral procedures like general dentistry, oral and maxillofacial surgery, prosthetic, endodontic, orthodontic and pediatric dentistry. They also instruct patients concerning proper techniques of preventive dentistry. Some other functions of a Dental Assistant include:

- Retrieving records
- Disinfecting and sterilizing of equipment
- Taking and developing x-rays
- Handing instruments to the dentist
- Suctioning the patient's mouth
- Preparing materials
- Taking impressions of teeth and restorations

<u>Employment Opportunities:</u> Dental Assistants work in dental offices and clinics. Their work is generally performed chair-side or in the office setting. Most work 35 to 40 hours per week, which may include some evenings and weekends.

<u>Salaries:</u> The median hourly salary in 2004 was \$13.62, according to the U.S. Department of Labor. Salaries range from \$9.11 to \$19.97 per hour, and depend on duties, qualifications, and experience.

Requirements: Most Dental Assistants now receive training from vocational schools, dental schools, and community colleges. However, some receive on-the-job training in the dentist's office. Formal training programs usually run between 11 to 18 months. Graduates receive a certificate. Not all dental assisting programs are accredited. Accredited programs require a high school diploma or GED<sup>R</sup>, criminal background check and drug screen.

<u>Certification:</u> Students completing the first semester of the dental assisting program receive a certificate of Basic Vocational Specialist in Dental Office Aide. After completing the second semester, students receive a certificate of Basic Vocational Specialist in Preclinical Dental Assisting. After completing all three semesters, a certificate of Vocational Specialist in Clinical Dental Assisting is conferred.

Source: <u>The Everything Guide to Careers in Health Care</u>, Quan, 2007, F&W Publications. ECC college catalog.

### **Phlebotomy**

<u>Definition of Role:</u> Phlebotomists are employed by clinical laboratories—either freestanding or as part of a clinic, hospital, or other health care facility. They draw blood samples from patients either by venipuncture (through a needle in the vein) or by fingerstick, according to the type of sample needed for specific diagnostic tests.

The Phlebotomist receives and reads the order from the practitioner (doctor, physician's assistant, or nurse practitioner) and assembles the needed equipment to obtain the specific blood sample from the patient. Patients can be all ages, from newborn to elderly. Not all veins are created equal, and some require a great deal of patience and skill. Some patients are less likely to be cooperative, such as babies or small children, requiring the Phlebotomist to be skilled as well as patient.

After samples are drawn, the Phlebotomist carefully labels the samples with all necessary patient identifying information and delivers the blood samples to the laboratory to run the ordered tests.

<u>Employment Opportunities</u>: Phlebotomists work in many different settings such as hospitals, clinics, doctors' offices, and commercial laboratories. Depending on the setting, the work hours will vary from 24-hour hospital coverage (meaning all shifts, weekends, holidays) to early morning and evenings.

<u>Salary:</u> The median hourly salary for 2004 according to the U.S. Department of Labor was \$11.13 for hospital Phlebotomists, \$10.57 for those working in private clinics, and \$10.50 for those who worked in physicians' offices. The current salary range is from \$18,000 to \$26,000 annually.

<u>Requirements:</u> A high school diploma or GED<sup>R</sup> is required. Phlebotomists can be trained on the job or through programs at community colleges or vocational schools. The program should be accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

<u>Licensure/Certification:</u> Some states require licensing or registration; however, the state of Illinois does not require a license or certification.

Source: <u>The Everything Guide to Careers in Health Care</u>, Quan, 2007, F&W Publications. ECC College catalog.

### **Video Clips**

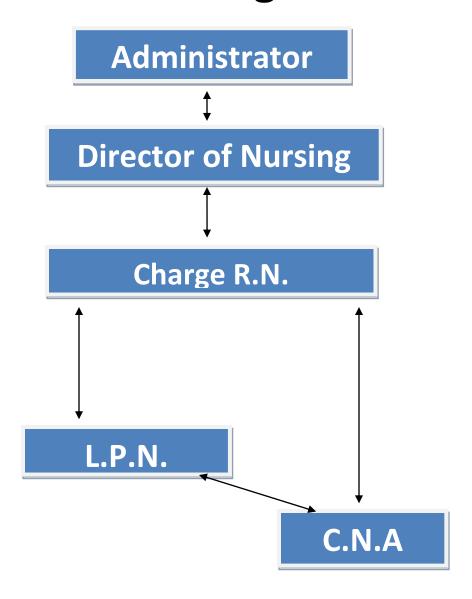
CNA for hospice: http://www.youtube.com/watch?v=JebsUIHSftc

CNA for cardiologist: http://www.youtube.com/watch?v=i2JFzKUdBn0

Assistant to RN: http://www.youtube.com/watch?v=QSRUr6ZRXUc

Dental hygienist: http://www.youtube.com/watch?v=CX0eTN8-bG0

### Chain of Command for Nursing in a Nursing Home



## Activities/ Resources for Outcome #4

### **Practical Nurse**

<u>Definition of Role:</u> Licensed Practical Nurses (LPNs) or Licensed Vocational Nurses (LVNs) care for sick, injured, disabled or convalescent patients. They work under the direction of physicians and registered nurses.

Depending on the nature of their job, they might:

- Take vital signs
- Gather patient information
- Assist patients in personal hygiene tasks
- Collect lab samples and perform routine lab tests
- Help care for and feed infants
- Teach patients and family members about good health habits
- Supervise nursing assistants and aides

<u>Employment Opportunities:</u> As of 2006, LPNs held 749,000 jobs. According to the Bureau of Labor Statistics, this number will grow to 854,000 by 2016, indicating a 14% increase in employment over the 10 year span. The LPN can expect to find the greatest number of new nursing jobs in the home health care services and nursing care facilities.

The higher demand for this occupation results from the aging baby boomer population and a general increase in demand for health care services. In addition, advanced medical technology has made it possible for patients to go to their doctor's office or an outpatient care facility for procedures that were typically performed only in hospitals in the past. LPNs play a vital role in caring for patients who undergo such procedures and may offer assistance at the health care office as well as the patient's home.

<u>Salary:</u> Licensed Practical Nurses earn an average salary between \$31,080 and \$46,640 (\$15-\$22/hr; avg. \$20/hr). Wages vary based on industry. Nursing care facilities and home health care services offer average salaries between \$18.21-\$18.42/hr; in hospitals \$16.83/hr (usually have a better benefit package); and in physicians' offices about \$15.73/hr.

Requirements: LPN nursing schools and educational programs typically involve one year of study and training at a hospital, community college or technical vocational school. The program chosen must be approved by that state's Board of Nursing in order for individuals to qualify for nursing licensure. To enter any school and do clinical work at a hospital or other health care facility, a criminal background check and drug screen will need to be completed. Depending on the school, tuition costs for LPN nursing degree programs start at the \$2,000 range. Many schools offer financial aid, grants and other funding for education.

If later on, an individual decides to become a registered nurse (RN), credit can be received for work completed during LPN training.

<u>Licensure:</u> After completing an approved LPN program, graduates must pass the National Council Licensure Examination (NCLEX-PN). Individual states administer this exam to qualifying candidates.

Source: <u>The Everything Guide to Careers in Health Care.</u> Quan, 2007, F&W Publications. EEC College Catalog

Activity: Listen to heart/lung sounds with stethoscope

### Registered Nurse

<u>Definition of Role:</u> Registered Nurses (RNs) work to promote good health and prevent illness. They educate patients and the public about various medical conditions; treat patients and help in their rehabilitation; and provide advice and emotional support to patients' families. RNs use considerable judgment in providing a wide variety of services.

Many Registered Nurses are general-duty nurses who focus on the overall care of patients. They administer medications under the supervision of doctors and keep records of symptoms and progress. General-duty nurses also supervise licensed practical nurses (LPNs), nursing aides, and orderlies.

RNs can specialize: (1) by work setting or type of treatment—critical-care nurses work in intensive care units, and psychiatric nurses treat patients with mental health disorders; (2) by disease, ailment, or condition—HIV/AIDS nurses treat patients with HIV infection and AIDS, and addictions nurses care for patients with substance abuse problems; (3) by organ or body system—nephrology nurses care for patients with kidney disease, and respiratory nurses treat patients with disorders such as asthma; and (4) by population—school nurses provide care for children and adolescents in school, while geriatric nurses provide care for the elderly. RNs may also work in combined specialties, such as pediatric oncology (the care of children and adolescents with cancer) or cardiac emergency (care of patients with heart problems in emergency rooms).

Some RNs choose to become advanced-practice nurses and get special training beyond their RN education. They are often considered primary health care practitioners and work independently or in collaboration with physicians. There are four categories of advanced-practice nurse: Nurse Practitioners, Clinical Nurse Specialists, Certified Nurse-Midwives, and Certified Registered Nurse Anesthetists.

**Nurse Practitioners:** Duties include conducting physical exams, diagnosing and treating common illnesses and injuries, providing immunizations, managing high blood pressure, diabetes and other chronic problems, ordering and interpreting X-rays and other lab tests, counseling patients on healthy lifestyles. They practice in hospitals and clinics and often work in rural or inner-city locations not well served by physicians. Some have private practices. Nurse Practitioners can prescribe medications in all states, and in many states they can practice without the supervision of physicians.

**Clinical Nurse Specialists:** Duties include providing care in specialty areas, such as cardiology, oncology (cancer), pediatrics, and psychiatric/mental health. They work in hospitals and clinics, providing medical care and mental health services, developing quality assurance procedures and serving as educators and consultants.

**Certified Nurse-Midwives:** Duties include providing routine health care for women, but their practices are focused on pregnancy and delivery of babies. They lead classes in childbirth, sibling preparation, and care of newborns. If pregnancies continue without complications, Nurse-Midwives provide all prenatal care, assist mothers during labor, and deliver the babies. Following the births, they make sure that mothers and newborns are well and provide follow-up care. If emergencies occur, Nurse-Midwives are trained to provide assistance until doctors arrive.

**Certified Registered Nurse Anesthetists** receive special training in the use of anesthetics, which produce a state of painlessness or unconsciousness. They work under the supervision of anesthesiologists (physicians who specialize in anesthesia) or other physicians. Most work in operating rooms during surgery, but others administer anesthetics in delivery rooms, emergency rooms, and dental offices. Sometimes Nurse Anesthetists help to care for patients during recovery from anesthesia.

Some experienced hospital nurses continue their education and become nurse managers or directors or vice-presidents of patient care services. They may also become forensic nurses, combining their nursing knowledge with law enforcement. They can become educators or researchers as well.

Employment Opportunities: According to the U.S. Department of Labor's Bureau of Labor Statistics, "Registered nurses are projected to create the second largest number of new jobs among all occupations; job opportunities in most specialties and employment settings are expected to be excellent, with some employers reporting difficulty in attracting and retaining enough RNs." Employment for registered nurses is expected to grow much faster than average for all occupations through 2014. The increases in demand are due to:

- Advances in technology
- Rapidly aging population
- Increase in need for RNs in nursing homes
- Increase in home health care due to shorter stays in hospitals

<u>Salary:</u> Salary for Registered Nurses varies with education, experience, and area of specialization. In 2004, the median annual salary of registered nurses was \$52,330 per year. (http://careers.stateuniversity.com)

Requirements: To become a registered nurse, high school graduates or students with a GED<sup>R</sup> can earn associate's degrees in two-year nursing programs at community colleges; earn a diploma in three-year programs offered by hospitals or independent schools of nursing; or earn a Bachelor of Science degree (BSN). BSN programs usually take four or five years to complete and combine liberal arts with scientific and technical training. All programs include practical (clinical) experience.

While graduates can begin practice as RNs with associate's degrees or hospital diplomas, the BSN is essential for nurses seeking to perform at the case-manager or supervisory level. Students desiring to become advanced-practice nurses must obtain

Master of Science in Nursing degrees (MSN). Some nurses go on to earn doctorates (PhD).

<u>Licensure:</u> Those who have completed an approved program are eligible to take the national written licensing exam (NCLEX-RN), which is administered by each state. All states require licensing.

Source: <u>The Everything Guide to Careers in Health Care,</u> Quan,2007, F&W Publications. EEC College Catalog

### Video Clip:

ER nurse:

http://www.youtube.com/watch?v=3GzBKoCK3lk&playnext=1&list=PLE4577C0CBBB047C4

### Surgical Technologists

<u>Definition of Role</u>: Surgical Technologists are known as Scrub Techs, OR (operating room) Techs, and OR Specialists. They assist in surgery under the supervision of the surgical nurses, surgeons, or other surgical professionals. Surgical Techs are not nurses.

Some of their duties include:

- Prepping patients by washing and shaving the incision site
- Transporting the patient to the OR
- Assisting in transferring patients to the OR table and draping them appropriately for surgery
- Laying out sterile trays of instruments for the surgeons
- Setting up and checking out equipment, tools and solutions that will be used in surgery
- Passing instruments to the surgeon, holding retractors, and counting sponges, needles and instruments
- Cutting sutures and applying dressings
- Transferring patients to the PACU (recovery room)

<u>Employment Opportunities:</u> The number of surgical procedures is expected to rise as the population ages and grows; therefore, the potential for employment is expected to grow faster than average for all occupations through 2014. Hospitals will continue to be the primary employer. Surgical Techs can specialize in certain areas:

- Cardiovascular
- Neurological
- Transplantation
- Orthopedics

<u>Salary:</u> Most Surgical Techs work 40 hours per week and have some on-call responsibility. Their routine shifts include evening and weekend hours. Surgical Techs stand for long periods of time and must stay alert at all times during surgery. The median salary for 2004 according to the U.S. Department of Labor was \$34,010. Salaries typically ranged from \$24,940 to \$45,990.

<u>Requirements:</u> Surgical Tech programs last from nine months to two years and are offered by vocational schools, military, hospitals, community colleges and universities. The programs are accredited by CAAHEP (the Commission on Accreditation of Allied Health Education Programs).

The curriculum includes both classroom and clinical experience. The classroom courses include anatomy and physiology, microbiology, pharmacology, and medical terminology. Students learn to sterilize instruments; prepare and utilize specialized equipment; and how to handle solutions, supplies, and special drugs in surgery. They learn about infection control measures, standard precautions, and how to maintain a sterile environment.

A criminal background check and drug screen are required to enter the program and to work in any hospital.

<u>Certification:</u> Students earning a Surgical Technology Certificate are eligible to sit for a certification exam given by the Association of Surgical Technologists which, if successfully completed, provides a nationally recognized measure of competency in the field.

Source: <u>The Everything Guide to Careers in Health Care,</u> Quan,2007, F&W Publications EEC College Catalog

## Activities/ Resources for Outcome #5

### Radiography

<u>Definition of Role:</u> Radiographers use x-ray, nonradioactive materials and other special equipment to create images of the body that aid the diagnosis and treatment of illness and injury. These members of the healthcare team:

- explain procedures
- produce images for physicians to interpret
- maintain patient records

Because every patient is different and no two cases are exactly alike, the work offers a large amount of variety.

<u>Employment Opportunities:</u> This profession is expected to grow faster than average for all occupations for the next decade. Those who have multiple skills in x-ray, CT, and/or MRI technologies will have the best opportunities for employment as hospitals try to contain costs by using fewer individuals with more skills rather than more individuals with fewer skills. Radiographers (RAD Techs) are employed in hospitals, clinics, diagnostic imaging laboratories, dentists' and physicians' offices (usually orthopedic surgeons).

<u>Salary:</u> The median salary for 2004 as reported by the U.S. Department of Labor was \$43,350. Salaries range from \$30,020 to \$60,210.

Requirements: Training for these positions is available from hospitals, colleges and universities, and vocational/technical schools. The training can range from one to four years, and the student receives a diploma, associate's degree, or bachelor's degree. The associate's degree is most common. Most programs are accredited by the Joint Review Committee on Education in Radiologic Technology.

Candidates must have a high school diploma or equivalent, take a PSB Health Occupations Aptitude pre-admission test, meet school reading requirement, and submit to a criminal background check and drug screening.

<u>Licensure:</u> Upon completion of their program, students will receive an Associate of Applied Science (AAS) degree and are eligible to sit for their state licensure exam. Registration is voluntary and available from the American Registry of Radiologic Technologists. Most employers prefer to hire registered RAD techs. Every two years they must complete 24 units of continuing education in order to renew their registration.

Source: <u>The Everything Guide to Careers in Health Care</u>, Quan, 2007, F&W Publications. EEC College Catalog

### Physical Therapist Assistant

<u>Definition of role:</u> Physical Therapist Assistants (PTAs) are educated health care providers who assist the Physical Therapist (PT) in providing physical therapy services. They work closely with patients of all ages, as directed by the supervising PT, helping them manage movement difficulties caused by injury or disease, improve mobility, relieve pain, and prevent or limit permanent physical disability.

Patients may include accident victims and individuals with short- and long-term disabling conditions, such as low back pain, fractures, head injuries, arthritis, heart disease and cerebral palsy. Some responsibilities of a PTA are:

- Massage
- Exercises
- Electrical stimulation
- Ultrasound therapy
- Paraffin baths
- Hot and cold packs
- Traction
- Documentation of patients' progress
- Keeping therapy sites clean
- Scheduling of appointments

<u>Employment Opportunities:</u> PTAs are generally employed in hospital or skilled-nursing facilities or outpatient clinics or offices. Inpatient facilities generally provide services during the day shift, not including weekends or holidays. Outpatient facilities offer evening and weekend hours in addition to a normal day shift schedule.

<u>Salary:</u> The median salary for PTAs in 2004 was \$37,890, and salaries ranged from \$24,110 to \$52,110 according to figures from the U.S. Department of Labor.

Requirements: To become a PTA requires an associate's degree from a community college. These are two-year programs with emphasis on math, biomedical sciences and general education courses the first year. The second year focuses on theoretical and clinical therapy courses. Students must have a high school diploma or equivalent; meet a reading, writing and math requirement; and have a criminal background check and drug screen.

<u>Licensure:</u> Upon successful completion of an accredited PTA program, the student will receive an Associate of Applied Science (AAS) degree and be eligible to sit for the PTA licensure examination.

Source: <u>The Everything Guide to Careers in Health Care.</u> Quan, 2007, F&W Publications. ECC College catalog.

### Video Clips:

Radiography technician: http://www.youtube.com/watch?v=2b0OZOvGFXM

Physical therapist: http://www.youtube.com/watch?v=YqZGswvhRZw

Physical therapist assistant: http://www.youtube.com/watch?v=EwkChSSVDnI

http://www.youtube.com/watch?v=OvskYltW20k&feature=related

## Activities/ Resources for Outcome #7

#### Histotechnology

<u>Definition of Role:</u> Illnesses such as cancer or serious infections can often be detected by the arrangement of cells in a tissue sample. The Histotechnician (HT) is responsible for processing surgical biopsies and autopsy specimens for microscopic review by pathologists. The HT cuts tissue samples into very thin slices, mounts them on slides and stains them with special dyes to make details of abnormal cells more visible. By examining the section of tissue, the pathologist and surgeon can determine if disease is present, or has spread, and then decide on the best course of treatment for the patient.

<u>Employment Opportunities:</u> Rapid job growth and excellent job opportunities can be found. Most jobs continue to be in hospitals, but employment will grow faster in other settings like free standing clinics or independent diagnostic laboratories.

Technology advances will continue to have an effect on employment. Increasingly powerful diagnostic tests will encourage additional testing and increase employment opportunities.

<u>Salary:</u> The median hourly salary for a Histotechnician is \$18.50 (hospital), \$20.86 (private clinic) and \$18.27 (physician's office laboratory). A Histotechnologist can expect a median salary of \$21.50 (hospital), \$21.63 (private clinic), and \$23.29 (physician's office laboratory) as reported by the American Society for Clinical Pathology.

<u>Requirements</u>: To become a Histotechnician requires a certificate from an approved program which can be completed in two semesters or after four semesters with an Associate of Applied Science in Histotechnology.

To become a Histotechnologist requires a bachelor's degree and certification. Each level of education will bring a higher salary, with the two-semester Histotechnician being the lowest.

<u>Certification:</u> Upon successful completion of a Histology program, the student will be eligible to sit for the certification exam administered by the American Society of Clinical Pathology (ASCP).

Source: <u>The Everything Guide to Careers in Health Care</u>, Quan, 2007, F&W Publications. ECC College catalog.

# Clinical Laboratory Technicians and Technologists

<u>Definition of Role:</u> This group of professionals can be known by a variety of different terms including Clinical Laboratory Scientists, Medical Technologists, Medical Laboratory Technicians and Technologists, and Medical Scientists. They perform the laboratory tests that are crucial to the identification, diagnosis, and treatment of diseases.

Technicians have lesser degrees and therefore perform at a lower level of responsibility and diagnostics than the technologists. The primary function of Laboratory Technicians is to:

- Analyze blood and other bodily fluids
- Prepare tissue samples
- Prepare cultures
- Test for drug levels
- Count cells
- Match blood samples for transfusions

Technologists have become more specialized and spend more time analyzing data than in the precise process of such things as hand-counting components of cells.

<u>Employment Opportunities:</u> The U.S. Department of Labor reports that Clinical Laboratory Technologists and Technicians held more than 30,000 jobs in 2004; more than half these jobs were in hospitals. Other places of employment included physicians' offices, medical and diagnostic laboratories, ambulatory health care centers and some educational services.

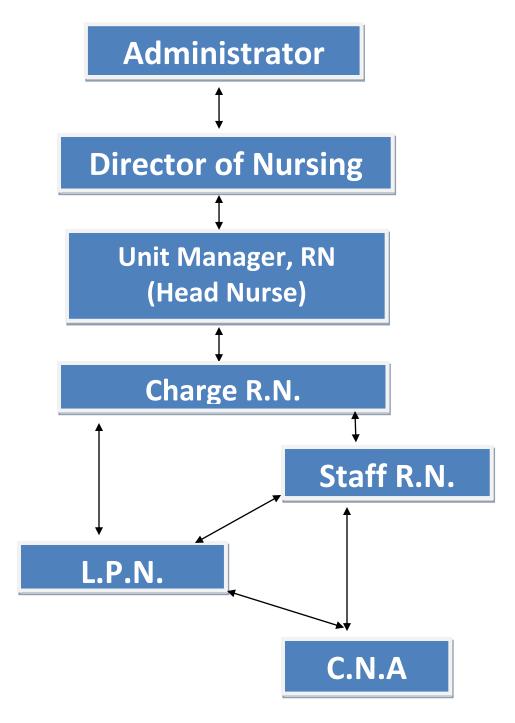
<u>Salary:</u> The median salary for Technologists in 2004 was \$45,730 with salaries ranging from \$32,240 to \$63,000. Technicians earned a median salary of \$30,840 in 2004. Their salaries ranged from \$20,410 to over \$45,000.

Requirements: Technicians typically have completed an associate's degree and Technologists at least a bachelor's degree, in clinical or medical laboratory science. The programs include an internship in supervised clinical practice. The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) oversees accreditation.

<u>Licensure/Certification:</u> Many states require licensing. This information is available from the State Department of Health. Certification is available from several agencies: the Board of Registry of the American Society for Clinical Pathology (ASCP), the National Credentialing Agency for Laboratory Personnel and the American Medical Technologists.

Source: <u>The Everything Guide to Careers in Health Care,</u> Quan, 2007, F&W Publications ECC College catalog.

# Chain of Command for Nursing In a Hospital



# Activities/ Resources for Outcome #9

### Paramedics and Emergency Medical Technicians

<u>Definition of Role:</u> Emergency Medical Technicians (EMTs) and paramedics are dispatched to emergency calls to assist with accidents, injuries, and sudden illnesses. These calls are typically placed to the 911 system. The Paramedic is an EMT with advanced training in advanced life procedures support. Some of the responsibilities of Paramedics and EMTs include:

- Assessing scenes to ensure the safety of the victim, others and themselves
- Assessing the patient's vital signs
- Determining the extent of the patient's condition, illness, or injury
- Obtaining a history or eyewitness account of the events
- Taking a medical history
- Providing basic first aid and contacting their base for instructions
- Transporting to hospital for further care
- Reporting patient's status to hospital personnel upon arrival to the E.D.

<u>Employment Opportunities</u>: EMTs and Paramedics work for fire or police departments, hospitals, private and public ambulance companies. Emergency response workers are available 24 hours a day, so they work shifts to cover all hours. They can also be on call for extended hours.

<u>Salary:</u> According to the U.S. Department of Labor, the median salary in 2004 was \$25,310. Salaries range from \$16,090 to \$43,240.

<u>Requirements:</u> To become an EMT, you must be 18 years old, have a high school diploma or GED<sup>®</sup> and have a valid driver's license. There are four levels of emergency responders:

- First Responders
- EMT-1 (Basic)
- EMT-2 or -3 (Intermediate)
- E.MT-4 (Paramedic)

The First Responders level is the most basic level. These individuals are usually police or firefighters or other emergency workers who have been trained in CPR and basic first aid.

The EMT-1 (Basic EMT) is trained to assist patients at the site of an accident and provide first aid. They can assess patients and manage respiratory, cardiac and trauma emergencies. The EMT training is 110 hours of training in emergency medical care. It includes CPR, handling emergencies involving ingestion of toxic chemicals and substances, cardiac arrest, bleeding, fracture, soft-tissue injuries and trauma, shock, internal injuries, and childbirth.

The EMT-2 or-3 (Intermediate EMT) has more advanced training of about 35-55 hours and can start and administer IVs and oral and IV drugs, interpret EKGs, insert endotracheal tubes (breathing tubes that are inserted through the mouth into the lungs), use the defibrillator, and manage shock.

The EMT-4, (Paramedic) has had EMT basic or intermediate training and has 700-1,000 hours of continuous employment, hospital experience, and a supervised field internship. This program typically lasts approximately two years, and the graduate earns an associate's degree in applied science.

<u>Licensure:</u> After completing EMT basic training, the applicant can take a written and practical exam from NREMT or state agencies and become registered. Registration is required to advance to any other EMT level.

Source: <u>The Everything Guide to Careers in Health Care</u>, Quan, 2007, F&W Publications. ECC College catalog.

#### Medical Assistant

<u>Definition of Role:</u> Medical Assistants are generally the first people you encounter in physicians' offices and other ambulatory or intermediate care settings such as clinics or urgent care. They are multi-skilled and perform many duties, both clerical and clinical. Medical Assistants perform a variety of functions:

- Answering phones
- Scheduling appointments
- Receiving patients and copayments
- Ordering supplies
- Stocking cabinets
- Taking medical histories
- Taking height and weights of patients
- Taking vital signs
- Preparing patients for examinations
- Drawing blood samples
- Taking EKG's

<u>Employment Opportunities:</u> Medical Assistants work primarily in physicians' offices, either for physician groups or those in private practice. They may also work in clinics, urgent-care facilities, and other intermediate care facilities.

<u>Salary:</u> Salaries vary depending on education, experience, duties, the volume of the physician's practice, as well as geographic area. The median salary for 2004 as reported by the U.S. Department of Labor was \$24,610. The salary range was between \$18,010 and \$34,650.

Requirements: A high school diploma or GED<sup>R</sup> is required. The majority of Medical Assistants are trained in formal programs offered by community colleges and vocational schools. Programs are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Community college programs offer an associate's degree and take two years to complete. Vocational schools and other programs offer certificates or diplomas and are about one year in length.

Programs also cover written and oral communication, medical law and ethics, business correspondence, insurance procedures and billing. Supervised clinical practice and externship are also part of the curriculum.

<u>Licensure/Certification</u>: Certification or registration is completely voluntary but does improve the hiring capabilities and often increases the salary for Medical Assistants. Medical Assistants can be certified by the American Association of Medical Assistants (AAMA) or the American Medical Technologists (AMT). The AAMA requires the candidate to have graduated from an accredited program and pass a written

competency exam. Those who successfully complete this process become certified and can use the title CMA.

The AMT offers registration to Medical Assistants who have completed an accredited program and pass a certification examination.

Source: The Everything Guide to Careers in Health Care, Quan, 2007, F&W Publications

#### **Video Clips:**

Paramedic: a heart attack:

http://www.youtube.com/watch?v=rvuWXo4xzU&feature=related

Medical assistant: http://www.youtube.com/watch?v=6jbS5bLzQoU

# Activities/ Resources for Outcome #12

#### **Getting Hired in Healthcare:**

http://career-advice.monster.com/job-search/getting-started/healthcare-career-advice/article.aspx

Career Exploration: http://www.careerpath.com/ath

http://www.illinoisworknet.com/vos\_portal/residents/en/Jobs/

#### **Career Development Process:**

http://www.eileensharaga.com/process.htm

Links to letters, resumes, interviewing, networking http://www.career.sunysb.edu/content/students/view-career-development-cycle:

#### Completing job applications:

http://jobsearch.about.com/od/jobapplications/qt/employmentapp.htm

http://www.ext.colostate.edu/pubs/consumer/job\_app.pdf

#### Sample online job application:

http://spreadsheets.google.com/viewform?formkey=cjZsZUJVS1RXWkRHVGptdFhSMzdmS2c6MA

#### **Government websites:**

Illinois Department of Labor: www.state.il.us/Agency/idol

Workforce information: http://www.ilworkinfo.com/

#### Thank you letter formats:

http://www.business-plans-guide.com/business-thank-you-letter.html

http://ualr.edu/careerservices/uploads/2010/04/Guide%20to%20Writting%20a%20Than k%20You%20Letter.pdf

http://www.csufresno.edu/scholarships/fag/thankyouletter.shtml

# Field Trip Reflection Forms

Field Trip Reflection: Nursing Home Facility

## Field Trip Check List

<ul><li>□ Arrived at site on time (instructor initial)</li><li>□ Identify job roles seen</li></ul>		
□ Safety terms heard (3)		
□ Did this trip frighten <b>or</b> excite you? (circle one)		
☐ Did you find this field trip to be valuable to you? Yes No (circle one)		
Field Trip Reflections		
List five vocabulary words that you heard and describe the situation where you heard		
them.		
Identify one thing that impressed you (good or bad) on this field trip.		
What job role interested you the most on this field trip?		
What qualities do you have that would make you good in that job role?		

What would be a challenge for you in this job role?

Field Trip Reflection: Community College

## Field Trip Check List

☐ Arrived at site on time (instructor initial)		
<ul><li>□ Identify job roles seen</li><li>□ Safety terms heard (3)</li></ul>		
□ Did this trip frighten <b>or</b> excite you? (circle one)		
□ Did you find this field trip to be valuable to you? Yes No (circle one)		
Field Trip Reflections		
List five vocabulary words that you heard and describe the situation where you heard		
them.		
Identify one thing that impressed you (good or bad) on this field trip.		
What job role interested you the most on this field trip?		
What job fole interested you the most on this held thp:		
What qualities do you have that would make you good in that job role?		

What would be a challenge for you in this job role?

Field Trip Reflection: Hospital

## Field Trip Check List

<ul> <li>□ Arrived at site on time (instructor initial)</li> <li>□ Identify job roles seen</li> <li>□ Safety terms heard (3)</li> </ul>
<ul> <li>□ Did this trip frighten <b>or</b> excite you? (circle one)</li> <li>□ Did you find this field trip to be valuable to you? Yes No (circle one)</li> </ul>
Field Trip Reflections
List five vocabulary words that you heard and describe the situation where you heard
them.
Identify one thing that impressed you (good or bad)on this field trip.
What job role interested you the most on this field trip?
What qualities do you have that would make you good in that job role?
What would be a challenge for you in this job role?

#### Field Trip Reflection: Emergency Care Facility or EMT Training Facility

### Field Trip Check List

<ul> <li>□ Arrived at site on time (instructor initial)</li> <li>□ Identify job roles seen</li> <li>□ Safety terms heard (3)</li> <li>□ Did this trip frighten or excite you? (circle one)</li> <li>□ Did you find this field trip to be valuable to you? Yes No (circle one)</li> </ul>		
Field Trip Reflections		
List five vocabulary words that you heard and describe the situation where you heard		
them.		
Identify one thing that impressed you (good or bad) on this field trip.		
What job role interested you the most on this field trip?		

What qualities do you have that would make you good in that job role?

# Vocabulary Lists and Activities

#### Vocabulary List #1 Healthcare Terms

#### **HIPAA** ("Hip Pa")

Health Insurance Portability and Accountability Act

- Protects patients with the right to privacy and confidentiality of their medical history and present diagnosis (illness)
- They have the right not to be exposed when being examined

#### Health

The absence of disease; the feeling of well-being of the body, mind, and spirit allowing us to achieve purpose, pleasure, and dignity.

#### **Physician**

"Doctor" is a medically trained professional who is licensed to care for the health of his patients. Most doctors are experts in a particular field of study and are called "specialists" in that field of study. Cardiologist = a specialist with the heart; Orthopedic (Or-tho-peed-ic) Surgeon (Sir jun) = a specialist in surgery on bones.

#### Hospital

#### Acute Care Facility

- For sudden illness or injuries
- Average stay is about 10 days unless very critically ill needing intensive care

#### Long-term Rehabilitative Care

- Mental illness
- Respiratory illness (difficulty breathing)
- Drug addictions
- Exercising after surgery, stroke, or injuries

#### **Skilled Nursing Facility** (SNF = "sniff")

Skilled care from a nurse or therapist. The patient is stable but still needs more time and help to recover before going home.

#### Long-term Care Facility Nursing Home

Residents who require 24-hour care and who are not expected to improve live in this facility permanently until they die.

Patient, Resident, Client These are all terms that refer to someone needing medical care

**Pediatrics** 

The care of children from birth to 18 years old. A physician who cares for children is called a "Pediatrician", sometimes referred to as a children's doctor.

**Obstetrics** 

The care of women who are pregnant (going to have a baby); the delivery of the baby and her care for about six weeks after delivery. An "Obstetrician" is sometimes referred to as a "baby doctor."

**Intensive Care Unit** 

A patient care unit in a hospital that cares for critically ill (very sick or unstable) patients requiring close observation (watching) and treatment. This unit is frequently called the "ICU".

Medical-Surgical Unit

An adult unit for patients 18 years old and older who have a medical problem or who have had or are going to have surgery. This unit is referred to as a "med-surg" unit.

**Telemetry Unit** 

This is a unit that has the capability of wirelessly monitoring a patient's heart rhythm to see how the heart works while the patient is moving and walking around. This unit is often called a "tele" (tell-e) unit or a "step-down" unit. Patients are frequently transferred to this unit after getting better in an ICU.

Rehabilitation

The process of getting back to better health through exercising of muscles, improving speech and the ability to talk, and relearning skills to care for oneself at home or to go back to work. Rehabilitation units may be housed in hospitals, or they may be "free-standing" in a separate building.

Oncology

The science dealing with the study of tumors—cause, type and treatment. Usually the tumors are cancerous (cancer).

Hospice

An institution that provides supportive care to dying patients and their families in the form of physical, psychological, social, and spiritual care. Services are provided by a team of healthcare professionals and volunteers who are available to provide assistance at home and in specialized inpatient (hospital) settings.

#### Vocabulary List #1 Worksheet

Which term is not a synonym for the others?  a. patient b. customer c. resident d. client			
Which condition would not be appropriately cared for in a long-term rehabilitative care facility?			
a. mental illness b. stroke recovery c. drug addiction d. blindness			
Which term is not a synonym for the others? a. doctor b. physician c. surgeon d. an M.D.			
<ul> <li>Which patient would not be found in a Med-Surg unit in the hospital?</li> <li>a. A child recovering from surgery</li> <li>b. A 20-year-old male recovering from a concussion</li> <li>c. A 40-year-old woman recovering from gall bladder surgery</li> <li>d. A 55-year old woman recovering from knee surgery</li> </ul>			
What is the difference between health and wellness?			
HIPAA is an acronym for			
HIPAA protects patients and their right toand			
Health is the absence of; the feeling of well-being of the body, and spirit allowing us to achieve purpose, pleasure, and			
What is the average stay for a person in an Acute Care Facility?			
What are the two classifications for hospitals?  1. 2. List three types of regidents you would find living in a Long Torm Core Facility.			
List three types of residents you would find living in a Long-Term Care Facility.  1. 2. 3.			

match the physician/surgeon with th	le specially.
cardiologist	a. care of children
orthopedic surgeon	b. treatment of cancer
obstetrician	c. care of the heart
pediatrician	d. care of pregnant women
oncologist	e. bones and joints
dermatologist	f. the nervous system
neurologist	g. conditions of the skin
Why would a patient be transferred fror	m ICU to a "tele" unit?
Who would seek care from Hospice se	rvices?
Describe a patient who would benefit fr	rom care in a Skilled Nursing Facility (SNF).
Why would a patient be admitted to the	e ICU?
A man continuing his recovery from a s facility for rehabilitation. What services	serious motorcycle accident is admitted to a sand treatments will he receive there?

# Vocabulary List #2 Abbreviations charting: slang & Idioms

**Vital Signs** This includes blood pressure (b/p), pulse, respirations (breathing)

and temperature (temp). Temperatures are always reported in degrees Fahrenheit, <u>not</u> Centigrade or Celsius. "Get a set of vitals"

"What's his b/p?" "Check the temp, please."

**Cardiac Arrest** Condition where the heart stops beating and the patient stops

breathing. "Call a Code Blue!" "The patient is arresting!" "The

patient is crashing!"

**Cardiac Arrest** 

Cart

Cart with supplies to resuscitate a patient who has stopped breathing or whose heart has stopped. "A crash cart"; "Get the

crash cart!"

**Dietary** A department that is responsible for preparing and serving meals to

patients. They also determine what would be the best diet for

patients based on their illness.

**Phlebotomy** "to draw" (take) blood from a patient. There are also Phlebotomy

Departments in some hospitals. "Call phlebotomy to draw these

labs."

**Phlebotomist** a trained professional who is responsible for drawing (taking) blood

from patients for testing or blood donation.

**Transportation** a department that is responsible for taking the patient to various

areas of the hospital for testing in a wheelchair, on a cart or in a

bed.

Respiratory Therapist A healthcare professional trained to administer breathing treatments, set-up supplemental oxygen for patients, manage

ventilators (breathing machines also called "vents"), intubate (put a breathing tube in a patient who is not breathing) and "bag" the non-breathing patient (breathe for the patient using a handheld bagging

device attached to a mask or the breathing tube).

**Rapid Response** 

Team

This team is often referred to as "RRT". It is a team of healthcare professionals (nurses, doctor, pharmacist, respiratory therapist) who respond to a call for a patient in serious physical distress.

"RRT to room 356!"

"R/O" (written) "rule out" (spoken) – to eliminate the possibility; "I'm going to rule

out that you have had a heart attack."

"Bowels" This term refers to the small intestines and the large intestines;

"guts" "I'm just sick to my guts!" "My bowels are loose!"(diarrhea)

**Diarrhea** This term is also known as "the runs"; "loose bowels"; "the shits";

frequent watery bowel movements; "I'm so sick, I've got the runs!

And I can't get them to stop!"

**Urinate** To "pee"; "take a leak"; "piss"; "to go"; to empty one's bladder of

urine; "I need to go to the bathroom and urinate." "I need to go real

bad!" "I need to take a leak"; "I need to go!"; "I need to piss!"

# VOCABULARY LIST #2 Abbreviations charting: slang & idioms

Match each healthcare term in the word bank with the word or phrases associated in meaning. Mark the corresponding letter next to the healthcare term.

vital signs	cardiac arrest
cardiac arrest cart	dietary
phlebotomy	phlebotomist
transportation	respiratory therapist
Rapid Response Team	R/O
bowels	diarrhea
urinate	

- A. Small and large intestines
- B. Meal preparation
- C. Crash cart
- D. To draw
- E. "I've got to go real bad."
- F. Quick heart rate
- G. Urgent call for patient in serious physical distress
- H. Breathing treatments
- I. Trained professional for drawing blood
- J. b/p, temp, pulse, respiration
- K. Code Blue
- L. Wheelchair, wheeling bed
- M. Rule out
- N. Loose bowels

# VOCABULARY LIST #2 Abbreviations charting: slang & idioms

#### Write True or False after each statement. Be prepared to explain your choice.

- 1. Temperatures are always reported in Celsius.
- 2. Cardiac arrest is another word for a heart attack.
- 3. Resuscitation restores breathing and heart rate.
- 4. Different diets are prescribed according to illnesses.
- 5. A phlebotomist is responsible for determining a patient's blood type.
- 6. A phlebotomist may "draw labs."
- 7. Transportation refers to the paramedic's ambulance unit or "bus."
- 8. A respiratory therapist sets up supplemental oxygen for patients.
- 9. Breathing machines are also called "vents."
- 10. The terms "intubate" and "bag" refer to the same procedure.
- 11. The BNA would not be allowed to "rule out" a diagnosis for a patient.
- 12. Diarrhea is a form of distress in the bowels.
- 13. Urinating involves the bladder.
- 14. A BNA will be expected to clean up after a patient with diarrhea.
- 15. Intubation will often be performed by the RRT.
- 16. The crash cart will often be required by the RRT.
- 17. A patient's vitals are often the first indicators of a change in a patient's condition.
- 18. An RRT would not be called in a nursing home facility.
- 19. "Code Blue" is the cry for assistance for a patient in cardiac arrest.
- 20. The taking of "vitals" is not required in an SNF.

# VOCABULARY LIST #2 Abbreviations charting: slang & idioms

#### Choose the appropriate word from the word bank to fill in each blank.

vital signscardiac arrestcardiac arrest cartdietaryphlebotomyphlebotomisttransportationrespiratory therapistRapid Response Team"R/O"bowelsdiarrheaurinate

Mrs. Mary Ann Jeeves is a patient in St. Anne's Hospital. Carole is her BNA
and checks herevery two hours. Carole also helps her to the
bathroom when Mrs. Jeeves has to Josephine, the
, just drew some more blood from Mary Ann this
morning so her doctor may be certain Mary Ann is not developing an
infection. Yesterday, Mary Ann complained of pain in her and
was suffering from Her physician "ruled out" gastric
disease, and markedon her chart for this condition, but sent an order to
that Mrs. Jeeves was to have no dairy foods
for five days. Each morninghelps Mary Ann into
her wheelchair and takes her to the sun room where Dorothy, the
, helps Mary Ann with her breathing
exercises as she must re-strengthen her lungs following surgery.

# Vocabulary List #3 Geriatrics/ The Nursing Home

**Geriatrics** the care of elderly (old) people.

**Ambulate** to walk around "I must ambulate the patient now." "Please ambulate

Mr. Jones in the hallway after lunch."

Walker a lightweight portable metal frame used to support and assist a

person in walking.

**C.V.A.** cerebral vascular accident—a "stroke."

**M.I.** myocardial infarction—a "heart attack" " The lady has had an M.I."

"The old man has had a heart attack."

**Foley catheter** a small tube placed in the bladder to drain urine. "foley"; "catheter"

"Please be careful of the patient's foley." "The patient has a

catheter."

**Paralyzed** (Paralysis) unable to move. Patients that have had a stroke (CVA)

often cannot move one side of their body. "He is paralyzed on his

left side." "She has a left leg paralysis."

**Crutches** assistive devices placed under the arms to help with walking when

a patient's full weight cannot be put on a leg or foot.

**Cane** an assistive device used in one hand to support the patient's weight

off a weak leg.

**Commode** a portable toilet seat with a removable bucket attached to it that

allows patients who cannot walk to the bathroom but who can sit

up, to use it next to their bed.

**Urinal** a hand-held container for men to urinate into when they cannot get

out of bed or walk to the bathroom.

Gait Belt a heavy-duty strap placed around the patient's waist that gives the

caregiver something to grab to help the patient stand, sit or

maintain balance while walking.

**Administrator** The person who runs the day-to-day operations of a nursing home.

**ADLs** "Activities of Daily Living" – those activities we do for ourselves

every day such as: getting dressed, bathing, brushing our teeth

and hair, going to the bathroom (toileting), eating, walking or sitting in a chair. "Has Mr. Jones finished his ADLs?"

L.P.N.

"Licensed Practical Nurse" - the level of nurse most frequently seen in a nursing home. This nurse would report to a Registered Nurse, who is usually the Director of Nursing in a nursing Home.

# Vocabulary List # 3 Geriatrics/The Nursing Home

Match each healthcare term in the word bank with the word or phrases associated in meaning. Mark the corresponding letter next to the healthcare term.

geriatrics	ambulate	walker
C.V.A.	M.I.	Foley catheter
paralyzed	crutches	cane
commode	urinal	gait belt
administrator	ADL's	L.P.N.

- a. A hand-held container for men to use to urinate
- b. A small tube placed in the bladder to drain urine
- c. A lightweight portable metal frame to assist and support a person's walking
- d. The care of elderly people
- e. A portable toilet seat with a removable bucket
- f. Person who runs the operations of a nursing home
- g. Myocardial infarction
- h. Licensed Practical Nurse
- A motorized wheel chair
- i. Unable to move
- k. An assistive device used in one hand to support the patient's weight
- I. To walk around
- m. Activities of daily living
- n. Breathing tube
- o. Assistive devices placed under the arms to help with walking
- p. Cerebral vascular accident
- q. A heavy-duty strap placed around the patient's waist to help the caregiver assist the patient in standing, sitting, balancing

# Vocabulary List # 3 Geriatrics/The Nursing Home

Choose the best object(s) to assist a patient with each condition and need described below.

walker	Foley catheter	crutches	cane
urinal	commode	gait belt	wheel chair

- 1. I fractured my leg in two places. With this severe break, I have a cast from ankle to hip. I will need this to move anywhere.
- 2. My strength and balance are not very reliable right now. Leaning on this helps me move from room to room in my house.
- 3. My adult patient is relearning how to sit and stand after her stroke. This helps me assist her.
- 4. My name is Bernard. I cannot get out of bed yet. I use this when I have to "take a leak"
- 5. I don't want to use a bed pan, but I can't walk to the bathroom. I use this close to my bed.
- 6. I must lie very still and am in much pain after my surgery. This was placed in my bladder.
- 7. I broke my foot. I am not allowed to put any weight on it. These things help me get around, but they are killing my armpits!
- 8. I'm suffering from multiple sclerosis. I use this to assist me in my balance and when my left leg becomes numb and burns.

Write one sentence for each word below. The sentence should be in the words of a patient as in the examples above.

- a. paralyzed
- b. ambulate
- c. administrator

# Vocabulary List #4 Laboratory and Dental Terms

**Laboratory** a place equipped with instruments that can measure and evaluate

the contents of a specimen. Frequently just called "the lab"; "get this

down to the lab."

**Specimen** a small part or sample of any substance or material obtained for

testing; "labs"; "Let's draw some labs on this patient."

**Test tube** a round-bottomed container made of plastic or glass in which blood

is collected for testing in a laboratory.

**Phlebotomy** incision into a vein for the purpose of drawing (taking) blood,

usually done with a needle attached to a test tube.

**Plasma** the fluid part of blood that is clear, light yellow in color and has no

red blood cells.

"Results" the final outcome from a test; "Call down to the lab for the results of

his blood work!"; "Let's review the results of your pathology report."

**STAT** to do something immediately!; "Get him to surgery STAT!" "Call the

doctor STAT!"

**Slide** clear glass plate on which a specimen is placed to be examined

under a microscope.

**Culture** the growing of microorganisms on a medium for further testing

under a microscope.

**Centrifuge** a piece of laboratory equipment that spins specimens in test tubes

to separate the particles in the fluid for further testing. "Take this

blood specimen and spin it down!"

**Blood Type** the classification of the proteins found in blood into one of four

types—Type O, A, B, or AB.

**Glucose** this is a form of sugar found in some foods and in our blood.

White Blood Cells cells found in blood that can show infection in the body - "WBCs"

**Red Blood Cells** red cells found in blood that carry oxygen - "RBCs"

**Organism** Any living thing: an individual, plant or animal

**Operatory** dental treatment area

**Hand Piece** the drill held by the dentist

**Explorer** a probe used to look at teeth, gums and mouth area

**Gums** the tissue around teeth

Caries tooth cavities

**Amalgam** silver fillings used to fill teeth after caries has been removed

**Composite** white-colored tooth filling used after caries has been removed

**Anesthetic** a shot given to numb the nerve by a tooth being worked on by the

dentist

**Dental Assistant** a trained professional who assists the dentist

**Dental Hygienist** a trained professional who cleans teeth and usually works in a

dentist's office

**X-ray** a radiograph; a film showing the calcified parts of the body being

studied

**Dentist** a legally qualified practitioner of dentistry; called "Doctor"; written as

"Dr. "

Oral Surgeon a dentist who specializes in the surgical removal of teeth and

surrounding tissue in the mouth.

#### Vocabulary List #4

#### **Part A: Laboratory Terms**

Match each healthcare term in the word bank with the word or phrases associated in meaning. Mark the corresponding letter next to the healthcare term.

laboratory	specimen	test tube
phlebotomy	plasma	results
STAT	slide	culture
culture	centrifuge	blood type
glucose	white blood cells	red blood cells

- A. Blood cells that carry oxygen
- B. Growing of micro-organisms for further study under a microscope
- C. Small sample of a substance obtained for lab testing
- D. Form of sugar found in blood
- E. Final outcome from a lab test
- F. A place equipped with instruments that can measure and evaluate contents of a specimen
- G. Clear glass plate on which a specimen is placed for use under a microscope
- H. A round-bottomed container made of plastic or glass for blood collection
- I. Do it immediately!
- J. A small tube placed in the bladder to drain urine
- K. Incision into a vein for purpose of drawing blood
- L. Device used to determine blood type
- M. Type O; A; B; AB
- N. Fluid part of blood that is clear, light yellow
- O. Cells found in blood that can show infection in the body
- P. A piece of lab equipment that spins specimens in test tubes to separate the particles in the fluid for further testing

#### Vocabulary List #4

#### **Part B: Dental Terms**

Match each healthcare term in the word bank with the word or phrases associated in meaning. Mark the corresponding letter next to the healthcare term.

organism	operatory	hand piece
explorer	gums	caries
amalgam	composite	anesthetic
dental assistant	dental hygienist	X-ray
dentist	oral surgeon	·

- A. A legally qualified practitioner of dentistry
- B. Tissue around the teeth
- C. Silver fillings used to fill teeth
- D. Any living thing—an individual, plant, or animal
- E. A radiograph; film showing calcified parts of the body being studied
- F. A trained professional who helps the dentist
- G. A probe used to look at teeth, gums, and mouth area
- H. A trained professional who cleans teeth and usually works in a dentist's office
- I. White-colored tooth filling used after caries has been removed
- J. Dentist who specializes in the surgical removal of teeth and surrounding tissue in the mouth
- K. Dental treatment area
- L. The drill held by the dentist
- M. Tooth cavities
- N. A shot given to numb the nerve by a tooth being worked on by the dentist

#### Vocabulary List #4: Working with terms

1. List five terms that have to do with blood.

2.	How are a specimen and a culture similar?
3.	When may a physician need "results" STAT?
4.	The R.N. ordered: "Take this specimen and spin it down!" What piece of equipment will the Lab Tech use?
5.	How are a test tube and a slide similar?
6.	What is your blood type?
7.	The R.N. orders, "Get this down to the lab." What may he be handing to the BNA? What will happen next?
8.	What instrument does a dentist use to examine a patient's mouth?
9.	What does a dentist use to repair caries?
10	.Why would an oral surgeon require X-rays before treatment?
11	. What are some differences between a dental hygienist and a dental assistant?
12	.Good dental health is crucial to overall health. Why may this statement be true?

# Vocabulary List #5 Nursing/Surgical Technician

Patient Care Tech also known as a C.N.A.; assists physicians, RNs, and LPNs in

caring for patients

**Nurse Manager** "Head Nurse"; responsible for the overall function of her unit

**Operating Room** "O.R."- the sterile area where operations are performed on patients;

The O.R. is restricted to hospital personnel assigned to this area

only!

**PACU** ("pack-u") "Recovery Room"; this is a restricted area where patients are

brought directly from the O.R. to wake up from their anesthesia

(sleeping medicine).

**Dressings** "bandages"; material put on wounds for protection or to absorb

drainage (leakage) from the wound

**Incision** a cut; a surgical wound

**Sutures** material (silk thread, wire, catgut) with which two surfaces are held

together; "Let's take a look at the sutures and if the incision looks

good, we'll take them out."

**Transport** to move a patient from one area to another; "Transport the patient

back to his room."

**Pre-Op** the holding area for patients about to have surgery; family/friends

are allowed to be with the patient in this area until they are taken

into the O.R.

**Pain Scale** a scale from 1 to 10 to rate the level of pain a patient is having; 1 is

minimal pain and 10 is the most pain the patient has ever had. This

scale is used in all areas of health care where pain is being evaluated. "On a scale of 1 to 10, how bad is your pain?"

**Terminal** not going to live; "Your condition is terminal."

Malignant (ma-lig-nant)

cancerous; "Your tumor is malignant." (Your tumor is cancer.)

**Benign** (be-nine) not cancer; "Your tumor was benign" (Your tumor was not cancer.)

**Symptom** any sensation felt by the patient that is not normal and might

(sim-tom) suggest disease

a licensed physician who treats disease, injury and deformity by operation Surgeon (Sur-jon)

## Vocabulary List #5 Nursing/Surgical Technician

Match each healthcare term in the word bank with the word or phrases associated in meaning. Mark the corresponding letter next to the healthcare term.

	patient care techoperating roomsutures	nurse managerdressingstransport	PACUincisionpre-op
	pain scale benign	terminal symptom	malignant surgeon
A.	The holding area for patients	about to have surgery	
B.	Clinical lab results		
C.	Material with which two surfac	es are held together	
D.	Bandages		
E.	Not going to live		
F.	Head Nurse		
G.	Any sensation felt by the patie	ent that is not normal and r	night suggest disease
Н.	To move a patient from one a	rea to another	
l.	Cancerous		
J.	A licensed physician who trea	ts disease, injury, and def	ormity by operation
K.	Not cancerous		
L.	A scale from 1 to 10 to rate the	e level of discomfort a pati	ent is having
M.	Recovery Room		
N.	Sterile area where surgeries a	are performed on patients	

O. C.N.A. who assists physicians, RNs and LPNs

## Vocabulary List #5 Nursing/Surgical Technician

#### Write True or False after each statement. Be prepared to explain your choice.

- 1. All wounds require sutures.
- 2. All surgical incisions require sutures.
- 3. A Patient Care Tech is the same as a B.N.A. and a C.N.A.
- 4. A Patient Care Tech assists lab techs, physicians, RNs, and LPNs.
- 5. The Nurse Manager is the boss of her unit.
- 6. Only surgical personnel are allowed in the O.R.
- 7. Family members are allowed to be with their loved ones once the patient is brought to PACU.
- 8. Transport moves the patient from her hospital room to Pre-Op.
- 9. A terminal patient may die.
- 10. According to the Pain Scale, 1 is minimal pain, and 10 is the most pain the patient has ever had.
- 11. If a tumor is malignant, the patient is terminal.
- 12. If a tumor is benign, no surgery is required.
- 13. Sneezing, runny nose, and coughing are symptoms of a cold.
- 14. All surgeons are physicians.
- 15. All physicians are surgeons.

## Vocabulary List #5 Nursing/Surgical Technician

Read each sentence below. Choose the word from the list below that best completes the sentence and write it in the appropriate blank.

laboratory	specimen	test tube	phlebotomy	plasma
results	STAT	slide	centrifuge	culture
blood type	glucose	white blood cells	red blood cells	X-ray
organism	operatory	hand piece	explorer	gums
caries	amalgam	composite	anesthetic	dentist
dental hygienist	oral surgeon	dental assistant		

1.	The mother donated blood to her son because they shared the same	
2.	"He's crashing! Call the doctor	_!"
3.	Maribel called the doctor's office for the _	of her lab
	tests.	
4.	The physician ordered	testing for his patient whom he
	suspected as having diabetes.	
5.	Charlie placed the tiny insect on a	to examine it under his
	microscope.	
6.	The	cleaned Patrick's teeth and
	took X-rays before the dentist came in to	do her oral exam.
7.	The dentist gave Marcus a shot of	before he filled
	his tooth.	
8.	When I was a child, dentists filled cavities	using
	but now they use composite.	

9.	The sound of the dentist's drill, or	, makes me very
	uncomfortable.	
10	The blood test showed that her	
		count was elevated, indicating
	her body was fighting an infection.	
11.	Vitamin C deficiency can cause a person's	to bleed.
12	Anperforms too	oth extractions.
13	The recovering drug addict was required to give	a urineat his
	doctor's office every week.	
14	carry oxy	gen around the body.
15.	Every human being is an	

## Vocabulary List #6 Terms in the Emergency Department

**Emergency Department** Patients requiring immediate medical care come to this area

of the hospital. A doctor is always on duty and testing can be done quickly. This area is frequently called an "ER"

(emergency room) and is also known as the E.D.

Arrest Cardiac Arrest - a condition where the heart stops beating

and the patient stops breathing. "Call a Code Blue!" "The

patient is arresting!" "The patient is crashing!"

**Emesis** Vomiting; "throwing up"; slang—"tossing their cookies!"

**Med** Medication. "I'm gonna give him his meds now."

**I.V.** Intravenous infusion - fluids given through tubing directly into

the patient's vein. "I'm gonna hang an I.V. on the patient.";

hang a bag of fluids on her and push this med."

O<sub>2</sub> (Pronounced O- two) Oxygen; "let's put some O<sub>2</sub> on the patient"; "Set the patient up

with  $O_2!$ "

**EKG** Electrocardiogram—a test done at the bedside or in the

doctor's office that shows the rhythm(beat) of the heart from 12 different angles. "Get a 12-lead on the patient."; or "Get an EKG on the patient." "Let's do a cardiogram on the

patient."

**Blood Work** Testing done on blood drawn from the patient and sent to

the laboratory. "Let's draw some labs!"

**Trauma** An injury physical or mental; usually meant as a severe

injury when used in the E.D.; "We've got a trauma coming in

by ambulance in 10 minutes!"

**Paramedic** A certified healthcare provider who usually works with the

Fire Department in their ambulance. They also work in some

EDs.

**Isolation** To keep separated from; patients with diseases that can be

spread through direct contact are put "in isolation"; "This patient might have the swine flu, let's put him in isolation."

**Abuse** Harmful or offensive physical or emotional actions against

another person; elder abuse—abuse against older people; child abuse—abuse against children; sexual abuse—abuse

sexual in nature against anyone.

**NPO** "Nothing by mouth"; "Keep the patient NPO!"

Mask A shield designed to cover the mouth and nose to protect the

wearer or to provide anesthetics, oxygen, or other gases.

Alcohol Swab A small piece of material soaked in alcohol and used to

clean a small area of skin.

"Gloves" Plastic or vinyl disposable hand coverings used frequently by

health professionals when providing patient care.

Band-Aid® A common brand of self-stick dressings used to cover small

wounds. While many companies manufacture these

dressings using different names, they are all frequently just

referred to as "Band-Aids."

"**Tape**" This originally referred to "adhesive tape", a removable band

of sticky cloth-like fabric on a continuous roll used to secure dressings over a wound. Today "tape" can mean a "silk

tape", "paper tape" or "adhesive tape".

**Bedsore** A wound created on the skin when continuous pressure has

been placed on a boney area, causing the blood supply to that area to be lessened. These wounds also called "decubes" (for decubitus ulcers) and are usually found on bedridden patients' heels, their tailbone, or their hips.

Medical screening of patients to determine their priority for

treatment; sorting.

**Triage** 

## Vocabulary List #6 Terms in the Emergency Department

Match each healthcare term in the word bank with the word or phrases associated in meaning. Mark the corresponding letter next to the healthcare term.

arrest	emesis	Med
I.V.	$\_\_\_O_2$	EKG
blood work	trauma	paramedic
isolation	abuse	NPO
mask	alcohol swab	"gloves"
Band-Aid	"tape"	bedsore
triage	Emergency Depa	artment

- A. A certified healthcare provider who usually works with the Fire Department in their ambulance
- B. Oxygen
- C. Emergency Room
- D. Electrocardiogram
- E. Clinical laboratory area
- F. A condition where the heart stops beating and the patient stops breathing
- G. A wound created on the skin due to continuous pressure on boney area
- H. To be released from a health care facility
- I. To keep separated from
- J. A common brand of self-stick dressings used to cover small wounds
- K. A shield designed to cover the mouth and nose
- L. Medical screening of patients to determine their priority for treatment
- M. Vinyl or disposable hand coverings
- N. A removable band of sticky cloth-like fabric on a continuous roll
- O. Nothing by mouth
- P. Testing done on blood drawn from the patient and sent to the lab
- Q. Vomiting
- R. A injury physical or mental
- S. Medication
- T. Harmful or offensive physical or emotional actions
- U. A small piece of material soaked in alcohol used to clean a small area of skin
- V. Intravenous infusion

## Vocabulary List #6 Terms in the Emergency Department

"Translate" each expression below. Then choose 10-12 expressions and, with a partner, incorporate them into a dialogue one would hear in the E.D. Write your dialogue on the back of this paper.

EXAMPLE: Get him to the O.R. STAT!

Translation: Move him to the Operating Room right now!

Call a code blue!

Set the patient up with  $O_2$ !

Get him to isolation; we don't know what this is yet.

The patient is crashing!

Let's draw some labs.

Get a 12-lead on the patient.

We've got a trauma coming in by ambulance in 10 minutes!

Hang a bag of fluids on him and push this med.

Take this to the lab STAT!

Let's get a Foley in him.

Get a crash cart in here!

Intubate him.

Bag him, STAT!

Let's get another set of vitals on her.

Sir, what meds are you on?

I'm gonna hang an IV.

Get an EKG on this patient.

You'll be fine. You just need a few sutures.

Call transport. We're ready to admit him upstairs.

He's throwing up again.

What's his b/p?

Check his temp.

This woman had an M.I. in March.

#### **DIALOGUE CREATION:**

#### Vocabulary List #7 Workplace Terms

**Chart** Patient medical record where all of the testing results, physician's

orders, progress notes telling how the patient is doing, and consent

forms are kept.

**Consent** Legal documents signed by the patient allowing the hospital and

physician to treat the patient. "Has the patient signed his consent?"

**Admission** To be officially registered into a hospital, clinic, rehabilitation center,

nursing home or other free-standing health care center.

**Discharge** To be released from a health care facility or service of care.

**Transfer**To be moved from one place to another to receive the appropriate

level of care; "Transfer her from the E.D. to the ICU!" "Let's transfer this patient to a nursing home." "This patient needs to be

transferred to a med-surg unit."

**Social Worker** A trained professional who provides support and assistance for

clients to help with resolving social issues (finances, health

insurance, lodging, and employment.)

Admissions Clerk An employee who is responsible for collecting information of

individuals seeking treatment or care from a healthcare facility (hospital, nursing home, home health care, surgical center, hospice

care).

Patient Advocate A person who speaks on behalf of a patient—family member, clergy,

nurse, doctor, lawyer.

**Break Room** An area where staff can take some time away from working to rest

or have a meal.

**Waiting Room** An area where family and friends can wait while the patient is

having surgery or some testing done. Physicians will come to this area after they have finished caring for the patient to tell family how the surgery or procedure was tolerated by the patient and any

results known at that time.

**Administration** Persons responsible for managing a facility. These include a Chief

Executive Officer (CEO) or President, Chief Financial Officer (CFO),

Vice-Presidents, Directors and managers.

**Liability** In health care, this means "to be legally responsible for."

**Protocol** A precise and detailed plan for the study of a problem or a course

of therapy, especially cancer chemotherapy.

**Chain of** the order in which authority is passed down from superior (highest)

**Command** to a subordinate (lowest) level.

#### Vocabulary List #7 Workplace Terms

Match each healthcare term in the word bank with the word or phrases associated in meaning. Mark the corresponding letter next to the healthcare term.

chart	consent	admission
discharge	transfer	social worker
break room	waiting room	patient advocate
administration	liability	chain of command
protocol	admissions clerk	

- A. Persons responsible for managing facility
- B. A precise and detailed plan for the study of a problem or a course of therapy
- C. An employee who is responsible for collecting information of individuals seeking treatment
- D. To be moved from one place to another to receive the appropriate level of care
- E. To be legally responsible for
- F. Legal documents signed by the patient allowing the hospital and physician to treat the patient
- G. An area where staff can take some time away from working to rest or have a meal
- H. A trained professional who provides support and assistance for clients
- I. A person who speaks on behalf of a patient
- J. The order in which authority is passed down from superior to subordinate
- K. An area where family or friends can wait while patient receives treatment or undergoes surgery
- L. To be released from a healthcare facility
- M. To be officially registered into a healthcare facility
- N. Patient medical record for all of the results, orders, consents, physicians' notes

#### Vocabulary List #7 Workplace Terms Writing Sentences

Change each noun to a verb. Then use the verb in a creative sentence.		
1) Chart		
2) Consent		
3) Admission		
There are three healthcare roles and an explanation of support staff jobs in an Emergency Department. Write a sentence or two of dialogue for each one which demonstrates a duty the person must perform. Look at the example to help you. PARAMEDIC: "Your neighbor called 911 for you, ma'am, when she saw you fall. My partner's going to take your vitals, while you tell me about your pain. How's your head "  4)		
5)		
6)		
7) (Choose 1 role of administration)		

Use each of the following nouns in a sentence. Your sentence may or may not be related to healthcare.

8) liability 9) protocol 10) advocate

#### Vocabulary List #7 Workplace Terms Talking about Chain of Command

- 1) Why is an understanding of and respect for the Chain of Command in a hospital essential for the safety of its patients?
- 2) How can the Chain of Command be frustrating or confusing for a patient or a patient advocate/family member?
- 3) Is there a Chain of Command in your present or former workplace? Was it *official*, or was it *understood and accepted* by employees? Explain.
- 4) Is there a chain of command in your family or household? Who's at the top? Who's at the bottom? Explain.
- 5) Without using your chart, sort, label, and diagram the roles listed below according to the Chain of Command in the E.D.

patient	paramedic	physician	clergyman
social worker	nurse manager	admissions clerk	police officer
radiologist	lab technician	orderly	BNA
patient advocate	LPN	phlebotomist	volunteer
Hospital Administrator	transportation	hospital	RN
patient care tech			

# Healthcare Terms: Slang, Abbreviations, Acronyms, Idioms REVIEW

**Step 1:** Test yourself. DON'T LOOK AT YOUR NOTES! Write the complete term or definition for each entry in the list.

ADLs	
B/P	
Bag	
Code Blue	
Crash Cart	
CVA	
E.D.	
EKG	
Foley	
HIPAA	
I.V.	
ICU	
LPN	
Med	
Med-Surg	
MI	
NPO	
O.R.	
$O_2$	
ОВ	

PACU
Pre-Op
R/O
RBCs
Rehab
RN
RRT
SNF
STAT
Tele unit
Vent
Vitals
WBCs
Step 2: Compare your answers with a partner.
Step 3: Check your answers by consulting your notes and resources.
Step 4: If you haven't done so previously, print each term on an index card.
Step 5: Sort these vocabulary cards into the following groups. Many cards ma
belong to several categories. Be ready to defend your sorting choices.
<ul> <li>Treatments and procedures</li> </ul>
<ul> <li>Terms associated with the Emergency Department</li> </ul>
<ul> <li>Departments/ units in a hospital/healthcare facility</li> </ul>

Healthcare personnel

Think of your own ways to sort

#### Healthcare Vocabulary Analogies

for discussion, critical thinking, discussion, review, and assessment

1.	Pediatrics: pediatrician—obstetrics: obstetrician		
2.	oncology: oncologist—neurology:		
3.	Cardiology: cardiologist—therapy:		
4.	Radiology: radiologist—technology:		
5.	Hygiene: hygienist—assistance: assistant		
6.	Phlebotomy: phlebotomist—dentistry:		
7.	Assist: assistant—participate:		
8.	Celebrate: celebrant—depend:		
9.	Surgery: surgeon—administration:		
10	.Care giving : caregiver—nursing:		
11	. Facilitate: facilitator—administer:		
12	. Practice: practitioner—translate:		
13	.Health: healthy—well:		
14	. Administer: administration—calculate:		
15	15. Visit: visitor:—counsel:		
16	16. Hospital: patient—: student		
17	17. Bleeding: circulatory—breathing:		
18	.Hearing: auditory—urinating:		
19	.Infection: antibiotic—depression:		
20	.Pain: anesthetic—: antihistamine		
21	describe: description—prescribe:		

- 22. aggravate: aggravation—irritate:\_\_\_\_\_
- 23. sore: soreness: —ill: \_\_\_\_\_
- 24. hospital: hospitalize—institution:
- 25. anesthesia: anesthetize—trauma: \_\_\_\_\_
- 26. Intense: intensity—\_\_\_\_: severity
- 27. Bruise: bruised—scratch:\_\_\_\_\_
- 28. Abuse: abused—injury:\_\_\_\_\_
- 29. Beautiful: beauty—grateful:\_\_\_\_\_
- 30. Intubate: intubation—resuscitate: \_\_\_\_\_
- 31. Isolate: isolation—medicate: \_\_\_\_\_
- 32. Code Blue: RRT -911: paramedics
- 33. STAT: Right now!—911: Emergency!
- 34. Bag him!: respiratory arrest—Crash cart! : cardiac arrest
- 35. Dietary: nutrition—pharmacy: medication
- 36. Dying: hospice—recovery: skilled nursing facility (SNF)
- 37. Patient: client—customer: consumer
- 38. Baby doctor: pediatrician—heart doctor: cardiologist
- 39. Bone doctor: orthopedist—family doctor: general physician
- 40. L.P.N.: Licensed Practical Nurse—R.N.: Registered Nurse
- 41. D.D.S.: Dentist –M.D.: physician
- 42. G.P.: family doctor—C.N.A.: Patient Care Tech
- 43. E.D.: Emergency Department –O.R.: Operating Room
- 44. E.K.G.: electrocardiogram—I.V.: intravenous infusion

45. EMT: paramedic—BNA: registered nurse

46. NPO: nothing by mouth—R/O: ruled out

47. B/P: blood pressure—temp: temperature

48. Band-Aid: self-stick dressing—Kleenex: facial tissue

49. EMT: emergency medical technician—PTA: physical therapist assistant

50. HIPAA: privacy—Consent Form: disclosure

51. C.V.A: stroke—M.I.: myocardial infarction

52. Pre-op: PACU—ICU: Step-down unit

53. Pediatrics: geriatrics—children: elderly

54. Walker: ambulate—urinal: urinate

55. slide: microscope—test tube: centrifuge

56. explorer: dentist—microscope: histotechnologist

57. operatory: dentist—examining room: physician

58. benign: malignant—discharge: admission

59. incision: sutures—wound: dressings

60. liability: responsibility—HIPAA: privacy

# Instructor's Course Outline

#### **Career Awareness Module**

#### Instructor's Course Outline

#### **UNIT ONE: SELF-AWARENESS**

Who am I? Where have I been? What do I want? What do I need? Where am I going?

#### **Lesson One: Introduction to the Course**

- I. Introduction to Instructor and Classmates
  - A. Students and instructor introduce themselves to each other
  - B. Reflection upon past and present Career Path Portfolio (CPP) CPP #2
    - 1. When I was little, I wanted to be \_\_\_\_\_ because\_\_\_\_.
    - 2. I am in this course now because I want and need \_\_\_\_\_.
- II. Course and Description and Goals
  - A. Explanation of syllabus, units of study, rationale of sequence
    - 1. Self-awareness: self-assessment and career path
      - a. inventory process
      - b. thinking, talking, writing, drawing, reflecting
    - 2. Beginning your career path
      - a. what's out there
      - b. taking the first steps
    - 3. Introduction to the healthcare professions
      - a. the healthcare industry
      - b. exploration of types of healthcare professions
  - B. Expectations for students
    - 1. Attendance and punctuality
    - 2. Cooperation, respect, courtesy
    - 3. Willingness to explore and reflect: what it means to "dig"
    - 4. Prepare and present *Career Path Portfolio (CPP)*
    - 5. Writing and presenting
    - 6. Complete all assignments
- III. Terminology in course: class discussions and assignments
  - A. Job, occupation, profession, career, career path
  - B. Self-awareness, self-assessment, self-advocacy
  - C. Inventory, reflection, making connections
  - D. Critical thinking, collaboration, investigation, reporting

- IV. Completion of personal information forms
  - A. Complete Student Information Sheet
  - B. Complete Personal Inventory of Introduction: CPP #1
- V. Closing
  - A. Review of goals of self-awareness
  - B. Creating Career Path Portfolio: tool for growth and learning
  - C. Exit ticket

#### **Lesson Two: Assessment of Interests and Values**

- I. Introduction
  - A. Complete selections for values auction
  - B. Review of previous lesson
    - 1. Requirement, terms for discussion
    - 2. Reference to *CPP #1, #2*
  - C. Introduction to values assessment/auction
- II. Inventory of Values
  - A. Introduction to and directions for Important to Me presentation CPP #3
  - B. Values Auction
  - C. Written reflection: My Values As I Understand Them CPP #4
- III. Inventory of Interests
  - A. Career Interest Survey CPP #5
  - B. Reflection upon past jobs/tasks CPP #6
    - 1. A job/task I hated
    - 2. A job/task I enjoyed
  - C. Readings and media: dream jobs
    - 1. Selected Readings and Film
      - a. "The Greatest Job in the World," "Becoming Yourself," "Tender to the Bone" from *Beyond True Stories*.
      - b. *The Last Lecture*, by Randy Pausch, Section *II*, "Really Achieving Your Childhood Dreams"
    - 2. Reflective writing: childhood dreams and passions CPP #8
  - D. Create or describe dream job: personal passion CPP #9
    - 1. Brainstorming: personal required elements
    - 2. Written reflection or drawing
    - 3. Share with classmates
  - E. Closure
    - 1. Review of values, interests, passion in connection with Career Path
    - 2. Preview of lesson 3

#### Lesson Three: Creating a Learner Profile: Learning styles and intelligences

- I. Introduction to learning
  - A. Review of interests, values, dream job
  - B. Learning today: lesson's objectives
    - 1. Learning styles
    - 2. Multiple Intelligences
    - 3. Types of thinking
  - C. Discussion of lifelong learning
  - D. Discussion of terms
    - 1. Learning, teaching, schooling, training, education
    - 2. Independent, informal, formal, accidental, social
- II. Reflection on past learning CPP #9
  - A. Positive learning experience
  - B. Negative learning experience
  - C. Discussion of factors contributing to outcomes
- III. Learning Styles
  - A. Introduction
  - B. Completion of Learning Styles Inventory CPP #10
  - C. Analysis of personal learning style results
  - D. Explanation and application of learning styles
    - 1. Visual
    - 2. Bodily kinesthetic
    - 3. Auditory
    - 4. Influence of age and life demands on learning style
  - E. Personal response to learning styles results *CPP #11*
- IV. Multiple Intelligences
  - A. How smart are you? vs. How are you smart?
  - B. Introduction to Gardner's Theory of Multiple Intelligences
  - C. Multiple Intelligences Inventory CPP #12
  - D. Reflection upon MI results CPP #13

## <u>Lesson Four: Creating a Learner Profile (cont.): Thinking, Attitudes, Personality</u> <u>Types</u>

- I. Thinking about Thinking
  - A. Demonstration of divergent and convergent thinking

- B. Influences on thinking, views of learning, expectations and value of education
  - 1. Gender
  - 2. Age
  - 3. Culture
  - 4. Family
  - 5. Media
  - 6. Technology
- C. Discussion of learning disabilities and special needs of students and learners
- D. Complete Personality Profile CPP #14

#### **Lesson Five: Student Profile and Personality Profile**

- I. Review of Elements of Learner Profile
  - A. Learning style
  - B. Intelligences
  - C. Environment and nurturing
  - D. Personality
- II. Results and Analysis of Personality Profile
  - A. Explanation of types and tendencies
  - B. Correlation to occupation choice: CPP #7 and #8
- III. Discussion of Student-Related Terms
  - A. Student, learner, client, customer
  - B. Learning, schooling, training, education
- IV. Skills Inventory
  - A. Kinds of skills
  - B. How skills are acquired, lost, renewed, expanded
  - C. History of schooling
  - D. Employability Skills Inventory CPP #15
  - E. Presentation by Career Services Professional
    - 1. Introduction of services
    - 2. Matching Personality Profile to occupation
    - 3. Present job market and healthcare industry
    - 4. Need for post-secondary education
  - F. Small group discussion generating questions of interest and future investigation
  - G. Write thank you letter to guest speaker
    - 1. Importance in career search: courtesy and networking
    - 2. Review business letter format

#### Lesson Six: Setting Goals, Recognizing and Barriers

- I. Identifying Barriers to Career Path
  - A. Internal factors: getting in my own way
    - 1. Beliefs
    - 2. Habits
  - B. External factors
    - 1. Present adult obligations: family, work, financial
    - 2. Health, transportation, child care
- II. Guest Speaker: Workforce Transitions Professional/Bridge coordinator
  - A. What will be your *ultimate* goal?
  - B. Short-term: Get a job
  - C. Barriers to your educational plan
    - 1. Personal health
    - 2. Child care
    - 3. Financial means
    - 4. Training and level of education
    - 5. Personal or emotional problems
    - 6. Language level
    - 7. Legal status
    - 8. Transportation
  - D. Ownership of barriers and resources to help
  - E. Short-term goal
    - 1. Get certified as a BNA and work for money and experience, critical thinking
    - 2. Career building in increments
  - F. Long-term goal: Build a career
    - 1. Personal commitment to total immersion in the language
    - 2. Get incremental experiences: desirable for safety and economical for hiring institutions
  - G. Importance of support
    - 1. Family all the way through
    - 2. Community college resources
    - 3. Cohort—study group
- III. Write thank you notes to guest speaker
- IV. Explanation of exit interview and preparation

- V. Completion of preparation for exit interview CPP #16
  - A. Identification of personal barriers
  - B. Creation of short-term goals and 1-year plan
  - C. Creation of long-term goals and 5-year plan
  - D. Set appointment with advisor

#### **Lesson Seven: Individual exit interviews with advisors**

Students will meet with advisor from Workforce Transitions, Bridge Course Coordinator, ABE advisor or instructor, Career Services counselor, or other professional. During this time, students will discuss and receive guidance on goal plans.

#### **Lesson Eight: Closing and Looking Ahead**

- I. Complete unfinished business
- II. Small group discussion
  - A. What we know/what we think we know/what we want to find out
  - B. Division and assignment of questions and research for investigation of healthcare professions
- III. Sharing and Feedback for Career Path Portfolios

#### **UNIT TWO: INTRODUCTION TO THE HEALTHCARE PROFESSIONS**

#### **Lesson One: Introduction**

- Unit overview
  - A. Learning objectives
    - 1. Knowledge of US healthcare industry
    - 2. Introduction to healthcare professions
    - 3. Visits to healthcare facilities
    - 4. Working knowledge of healthcare programs of study
    - 5. Visits to healthcare learning facilities
  - B. Student expectations
    - 1. Attendance and punctuality
    - 2. Cooperation, respect, courtesy
    - 3. Inquiry, investigation, collaboration, critical thinking
    - 4. Complete all assignments
    - 5. Attend field trips
  - C. Field Trips
    - 1. Personal responsibility
      - a. transportation
      - b. attendance
      - c. class preparation
      - d. reflection and summary
    - 2. Facilities
      - a. division of teams
      - b. nursing home facility
      - c. healthcare programs of study learning facilities
      - d. local hospital
  - D. Learning logs
  - E. Collaboration for investigation: research project on profession or program of study
- II. Introduction to the U.S. Healthcare Industry:

Guest speaker: Healthcare educator recommended

- A. Foundations for ALL healthcare professions
  - 1. Patient first. Advocate for the patient first. Safety of the patient first.
  - 2. HIPAA
    - a. definition
    - b. implications for professionals
    - c. legal implications
    - d. scenarios for critical thinking and discussion

- 3. "Everyone checks on everyone else."
  - a. monitoring each other for safety
  - b. not a matter of trust or power: safety first
  - c. healthcare is teamwork
  - d. workplace example
- 4. Basic requirements for all healthcare workers
  - a. legal status
  - b. drug testing
  - c. criminal background check
  - d. immunizations
- Essential skills
  - a. ability to communicate with a great diversity of people
  - b. critical thinking ability
  - c. common sense
  - d. ability to effectively collaborate
- 6. Clinical work is inherent
  - a. analogy to driver's ed: book learning vs. behind-the-wheel
  - b. hands-on, critical thinking, multi-tasking ability
- 7. Realities of work in patient care
  - a. touching people
  - b. cleaning up messes, physical work
  - c. frightened people in pain
  - d. more than just patience and wanting to help people
- 8. Healthcare professions other than patient care
  - a. clinical laboratory
  - b. administrative, clerical
  - c. financial, security
- 9. Programs of study cost money
  - a. FAFSA; seek advice for other resources
  - b. financial consideration as part of long-term and short-term goals
  - c. become CNA; work as CNA to earn money toward LPNC
- III. Small group activity for processing and reviewing information
  - A. Sorting activity: the healthcare professions
  - B. Implications of HIPAA: role HIPAA plays
  - C. Brainstorming: pro's and con's of working in a patient care profession
- IV. Exit ticket: learning log

- V. Homework: Assigned readings
  - A. Certified Nurse's Assistant
  - B. Dental Assistant
  - C. Phlebotomist
  - D. Nursing Home chain of command; division of departments
  - E. HIPAA

#### Lesson Two: Geriatrics, Entry level patient care professions

- I. Entrance activity: review of lesson one presentation
- II. Roundtable discussion and brainstorming
  - A. Differences and commonalities of CNA, Dental Assistant, and Phlebotomist
  - B. Interests and further questions to consider
  - C. Challenges and rewards of each profession
- III. Personal stories and interviews from CNA, Dental Assistant, and Phlebotomist
- IV. Discussion of geriatric healthcare
  - A. Statistics related to US healthcare population
  - B. Impact on US healthcare, families, and potential healthcare workers
  - C. Medicaid and Medicare
  - D. In-home healthcare, hospice, assisted living
  - E. The Nursing Home
- V. Care of the elderly
  - A. The need for CNA's
  - B. Communicating with the elderly
  - C. Day-to-day care
- VI. Organizing field trip to nursing home
  - A. Location and transportation
  - B. What to see, listen for, and ask
  - C. Staff members, healthcare personnel
  - D. Behavior and etiquette in the facility
    - 1. Punctuality
    - 2. Appropriate attire
    - 3. Respect for residents' privacy
- VII. Purpose and instructions for field trip reflection log
- VIII. Reading assignment: LPN, RN, Surgical Technologist

#### **Lesson Three: Visit to Nursing Home Facility**

Students will meet during regularly scheduled class session at nursing home as prearranged field trip by coordinator.

#### **Lesson Four: The Nursing Profession**

- I. Discussion, questions, and responses to nursing home facility
- II. Guest speakers: nursing professionals, students in nursing program
  - A. Speakers may share career path, educational endeavors
  - B. On-the-job narratives
  - C. Discuss program of study including clinical work and license testing
  - D. Opportunity for student questions
- III. Thank you notes to guest speakers: reference to importance of networking
- IV. Learning log: Reflection upon previous self-assessments, new knowledge, and a profession in patient care
- V. Homework: Readings on Radiography Assistant, Physical Therapy Assistant.

#### Lesson Five: Radiography Assistant, Physical Therapy Assistant

- I. Discussion of Radiography Assistant
- II. Discussion of Physical Therapy Assistant
- III. Commonalities and differences between the two
  - A. References to knowledge of personality types, intelligence, and learning style
  - B. Requirements in these programs of study
- IV. The Community College Catalog as Resource
  - A. Organization of publication/website
  - B. Beginning section
    - 1. Overview of college
    - 2. Admission
    - 3. Requirements
    - 4. Tuition and fees
  - C. Departments and majors
  - D. Program of study
    - 1. Listed requirements

- 2. Blocks/or modules
- E. Partner experiential activity: find answers to given questions
- V. Introduction of research project
  - A. Requirements
  - B. Forming teams or partnerships
  - C. Selecting research questions
- VI. Organizing field trip to community college learning facilities for healthcare programs of study
  - A. Location and transportation
  - B. What to see, listen for, and ask
  - C. Faculty and staff guides
  - D. Behavior and etiquette in the facility
    - 1. Punctuality
    - 2. Appropriate attire
    - 3. Safety near equipment
    - 4. Respect for classes in session and students engaged in learning
  - E. Assignment: Field Trip Reflection
- VII. Homework: Readings for Histotechnologist, Clinical Lab Yechnician and Technologist, Hospital

#### Lesson Six: Visit to healthcare program of study learning facility

Students will meet during regularly scheduled class session at educational facility as pre-arranged field trip by coordinator

### <u>Lesson Seven: Histotechnology, Clinical Lab Technician and Technologist; the Hospital</u>

- I. Final reflection and discussion of field trip to learning facility
- II. Discussion of laboratory professions
  - A. Histotechnology
  - B. Clinical Lab Technician and technologies
  - C. Working in a lab: discussion of learning styles, personality, dominant intelligence most likely suited to these professions
  - D. Display of and review of lab facilities observed in field trip

#### III. The Hospital

- A. What we see and learn as patients and family members
- B. Hospital chain of command
- C. Teaching hospitals, medical centers, county hospitals, hospitals with religious affiliation
- D. Brainstorming good and bad about working in a hospital
- E. Visit from hospital employee for patient advocacy

#### IV. Organizing field trip to local hospital

- A. Location and transportation
- B. What to see, listen for, and ask
- C. Hospital staff member as guide
- D. Behavior and etiquette in the facility
  - 1. Punctuality
  - 2. Appropriate attire
  - 3. Safety near equipment
  - 4. Respect for privacy
  - 5. Review of HIPAA
- E. Field Trip Reflection
- V. Homework: Readings: Emergency, Hospital Administrator, Medical Assistant

#### **Lesson Eight: Field trip to Hospital**

Students will meet during regularly scheduled class session at hospital location as prearranged field trip by coordinator

#### <u>Lesson Nine: Emergency healthcare professionals; the E.D.</u>

- I. Reflection and Discussion of field trip to hospital
- II. Introduction of guest speaker: Paramedics or Paramedic Instructor
  - A. Personal background: motivation for choosing the profession
  - B. Training, education, career history
  - C. What happens on a typical call
  - D. Paramedic's role in the E.D.
  - E. Emergency healthcare professionals: what does it take?
  - F. Equipment demonstration

#### III. The Emergency Department

- A. Trauma team
- B. Other personnel in the E.D.

- C. Film clips, "Life in the E.R"
- IV. Questions for speaker and investigation
- V. Thank you note to guest speaker
- VI. Exit ticket: reflection on learning about emergency professionals

#### <u>Lesson Ten: Non-patient care - a few more healthcare occupations</u>

- I. Final discussion and reflection of emergency medical professions
- II. Introduction of limited, in-class research on healthcare profession
  - A. Instructions for assignment
  - B. Annotated review of internet research and search engines
  - C. Partnerships and selection of profession for research (NOTE: topics already chosen in Lesson 5 will not be part of this model research assignment)
- III. Guided practice to locate required information
- IV. Presentation of research by partnerships to classmates
  - A. Listening for certain information: audience will take notes by filling in grid handout
  - B. Asking informed follow-up questions of clarification and extension
- V. Exit ticket: Reflection of collaborative research process and new knowledge
- VI. Organizing final field trip
  - A. Location and transportation
  - B. What to see, listen for, and ask
  - C. Guide
  - D. Behavior and etiquette in the facility
    - 1. Punctuality
    - 2. Appropriate attire
    - 3. Safety near equipment
    - 4. Respect for privacy
    - 5. Review of HIPAA
  - E. Field Trip Reflection

## <u>Lesson Eleven: Final field trip - visit to Hospital or learning facility for EMT training as arranged or available</u>

Students will meet during regularly scheduled class session at field trip location as prearranged by coordinator

#### Lesson Twelve: Online research of the healthcare job market

- I. Introduction to the online job market
  - A. Search engines for seeking employment vacancies
  - B. Modeling filling out online job application
  - C. Organizing and tracking your job search process: creating files
  - D. Directions for personal job search and application exercise
- II. Personal online job search
  - A. Select profession for search
  - B. Locate vacancies; select job
  - C. Research healthcare agency posting vacancy
  - D. Complete online job application
  - E. Save in file; submit to instructor
  - F. Extend job search as class time will allow
  - G. Share with class three "Aha's!" from research
- III. Work time for research project

#### Lesson Thirteen: Project work time and exit interviews

- I. Discussion of research project
  - A. Sharing experiences and questions for lesson 12 allotted work time
  - B. Instructions and requirements for class presentation of research
  - C. Introduction for exit interviews with instructor
    - 1. Revisit short-term and long-term goals
    - 2. Inquiry or recommendation for enrollment in next module
- II. Work time on research project and presentations/exit interviews with instructor

## <u>Lesson Fourteen: Presentation of collaborative research on program of study;</u> <u>closure</u>

- I. Course evaluation
- II. Final instructions and preparation for presentations
- III. Presentations on healthcare research
- IV. Wrap-up and closing discussion

# **Course Evaluation**

#### **Course Evaluation for Career Awareness Module**

#### Please complete each statement honestly and thoughtfully.

1.	I took this course because
2.	I learned the most from:
3.	The most interesting parts of the course were:
4.	The most useful parts of the course were:
5.	I don't think I benefited much from:
6.	The instructor for the course was,
	and
	Explain your choice for the following.
7.	My favorite field trip was because
8.	My favorite guest speaker wasbecause
9.	I would/would not (choose one) recommend this course to another student because
10	If I were going to teach this course I would change because