Activities/ Resources for Unit I Outcomes

Activities/ Resources for Outcome #1

Employability Skills Inventory

http://www.coe.uga.edu/cgi-bin/cgiwrap/~rhill/new_owei/esa.pl

http://cscfamily.cscbroward.org/surveys/BESassessment.asp

http://www.sst6.org/attachments/article/343/employability%20skills%20checklist.pdf

Employability Skills for Adults:

- ❖ Self-awareness (essential for career building; building academic and career path)

- ❖ Self-assessment and self-monitoring

- ❖ Communication
    - ✓ interpersonal
    - ✓ conflict resolution
    - ✓ collaboration; teamwork
    - ✓ making requests
    - ✓ effective listening

- ❖ Career: **what are the differences among the three?**
    - ✓ awareness
    - ✓ exploration
    - ✓ development

Worker Role Map

Effective workers adapt to change and actively participate in meeting the demands of a changing workplace in a changing world.

Broad Areas of Responsibility

Do the Work
Workers use personal and organizational resources to perform their work and adapt to changing work demands

Work With Others
Workers interact one-on-one and participate as members of a team to meet job requirements

Work Within the Big Picture
Workers recognize that formal and informal expectations shape options in their work lives and often influence their level of success

Plan and Direct Personal and Professional Growth
Workers prepare themselves for the changing demands of the economy through personal renewal and growth

Key Activities

• Organize, plan, and prioritize work • Use technology, resources, and other work tools to put ideas and work directions into action • Respond to and meet new work challenges • Take responsibility for assuring work quality, safety, and results	• Communicate with others inside and outside the organization • Give assistance, motivation, and direction • Seek and receive assistance, motivation, and direction • Value people different from yourself	• Work within organizational norms • Respect organizational goals, performance, and structure to guide work activities • Balance individual roles and needs with those of the organization • Guide individual and organizational priorities based on industry trends, labor laws/contracts, and competitive practices	• Balance and support work, career, and personal needs • Pursue work activities that provide personal satisfaction and meaning • Plan, renew, and pursue personal and career goals • Learn new skills

http://eff.cls.utk.edu/fundamentals/role_map_worker.htm
Worker Readiness Profile

http://www.workreadiness.com/images/WRCprofile.pdf

THE WORK READINESS PROFILE

What New Workers in Entry Level Jobs Need to Be Able to Do

...well enough to successfully carry out these critical entry-level tasks:

New workers need to be able to use these EFF skills:

Communication Skills
1. Speak so others can understand
2. Listen actively
3. Read with understanding
4. Observe critically

Interpersonal Skills
▲ Cooperate with others
▲ Resolve conflict and negotiate

Decisionmaking Skills
◆ Use math to solve problems and communicate
2 Solve problems and make decisions

Lifelong Learning Skills
◆ Take responsibility for learning
2 Use information and communications technology*

* Skill not currently tested in WRC.

Acquire and Use Information
· Acquire, use, and share information accurately and in a timely manner in order to:
  » Get work done
  » Identify appropriate procedures
  » Respond to requests from internal and external customers 1 2 3 4 ▲ 1 ◆ 2
· Read and understand information presented in written form well enough to get the job done 2 3
· Communicate in spoken English well enough to get the job done 1 2 3
· Ask for clarification or help from supervisor or appropriate others when needed 1 2 4 ▲ 1 ◆

Use Technology
· Learn how to use appropriate computer-based technology to get the job done most efficiently 3 4 ▲ 1 ◆
· Be able to use a telephone, paper, radio, or other device to handle and process communication 1 2 ◆ 2
· Make sure that all equipment is in safe working order 4 1 ◆ 2
· Use equipment properly to minimize damage to equipment or injury to oneself or others 3 4 ◆ ◆

Use Systems
UNDERSTAND SYSTEMS
· Understand how one's own performance can impact the success of the organization 1 2 4 ▲ 1 ◆
· Comply with organizational policies and procedures in a consistent manner 2 3 4 ▲ 1 ◆
· Pay attention to company guidelines regarding:
  » Personal and professional interactions
  » Appropriate dress
  » Health and safety 1 2 3 4 ▲ 1 ◆
· Follow established procedures for handling urgent situations or emergencies 1 2 3 4 2
· Keep informed about quality and health standards set by external sources, including unions, OSHA, and other national and international organizations 2 3 4 ▲ ◆

MONITOR AND CORRECT PERFORMANCE
· Monitor quality of own work 4 1 ◆ 2
· Accept and use constructive criticism for continuous improvement of own job performance 2 4 ▲ 2 ◆
· Keep track of changes within the organization and adapt to them 1 2 4 ▲ 1 ◆

Work with Others
DIVERSITY
· Work as part of a team to develop and achieve mutual goals and objectives 1 2 4 ▲ ◆
· Develop and maintain good working relationships with coworkers, supervisors, and others throughout the organization, regardless of background or position:
  » Be respectful and open to the thoughts, opinions, and contributions of others
  » Avoid use of language or comments that stereotype others 1 2 4 ▲ 2 2

NEGOTIATE
· Work through conflict constructively 1 2 4 ▲ 2 2

SERVE CLIENTS
· Address customer comments, questions, concerns, and objections with direct, accurate, and timely responses 1 2 3 4 ▲ 2 ◆
· Verify customer or client information to validate forms, provide services, or carry out procedures 1 2 3 4 2 ◆

Integrity
· Demonstrate integrity 1 2 4 ▲ 1
· Maintain confidentiality, as appropriate, about matters encountered in the work setting 2 4 ▲

Know How to Learn
· Accept help from supervisors and coworkers 1 2 4 ▲ ◆
· Learn new/additional skills related to your job 2 3 4 ▲ 2
· Learn about the products/services of the organization 2 3 4 ◆ 2

Responsibility
· Demonstrate willingness to work 1 2 ▲ 1
· Take responsibility for completing one's own work assignments
  » Accurately
  » On time
  » To a high standard of quality
  » Even when the work is physically or mentally challenging
  » As efficiently as possible, to minimize costs, rework, and production time 2 3 4 ▲ 1 ◆
· Show initiative in carrying out work assignments 1 2 ▲ 1

Allocate Resources
· Use basic math well enough to get the job done 3 1 ◆ 2
· Manage time effectively to:
  » Get the work done on schedule
  » Prioritize tasks
  » Make sure that urgent tasks are completed on time 2 3 4 ▲ 1 2
  » Make sure that materials, tools, and equipment are available to do the job effectively 4 1 ◆ 2

Solve Problems
· Cope with a work situation or tasks that change frequently:
  » Demonstrate flexibility
  » Accept new or changed work responsibilities with a positive attitude
  » Adjust to unexpected problems and situations by seeking advice from a supervisor or appropriate others 1 2 4 ▲ ◆ 2
· Identify actual or potential problems related to one's own work:
  » Report them in a timely manner, according to company policy
  » Help to fix them 1 2 4 ▲ ◆ 2

Self-management
· Display responsible behaviours at work:
  » Avoid absenteeism
  » Demonstrate promptness
  » Maintain appropriate grooming and hygiene
  » Do not attend to personal business when on the job, except in emergencies
  » Manage stressful situations effectively 1 2 3 4 ▲ ◆ 2 ▲ 1

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Equipped for the Future (EFF) Skills:

http://eff.cls.utk.edu/fundamentals/16_standards.htm

The EFF Skills Wheel: The 16 EFF Content Standards

http://eff.cls.utk.edu/fundamentals/eff_standards.htm

The EFF Content Standards and How They Work

The 16 EFF Content Standards define the knowledge and skills adults need in order to successfully carry out their roles as parents and family members, citizens and community members, and workers. Keeping a focus clearly on what adults need literacy for, EFF identified 16 core skills that supported effective performance in the home, community, and workplace. Then, through two years of iterative field and expert review, we defined Content Standards that describe what adults need to know and be able to do to use these 16 skills in everyday life.

Four Categories of EFF Skills

Communication Skills	Decision-Making Skills
- Read With Understanding - Convey Ideas in Writing - Speak So Others Can Understand - Listen Actively - Observe Critically	- Solve Problems and Make Decisions - Plan - Use Math to Solve Problems and Communicate
Interpersonal Skills	**Lifelong Learning Skills**
- Cooperate With Others - Guide Others - Advocate and Influence - Resolve Conflict and Negotiate	- Take Responsibility for Learning - Learn Through Research - Reflect and Evaluate - Use Information and Communications Technology

By identifying four categories of generative skills, EFF broadened the range of skills adult literacy and basic skills programs are typically expected to cover. These skills include strong reading, writing, and math skills; they include the skills we need to communicate and work well with others; to solve problems and to keep up with change. These categories of skills (see above chart) include those we traditionally think of as interpersonal skills, and those decision-making and learning skills we traditionally talk about as "higher order" or critical thinking. Our goal in proposing this range of standards and in framing them as we did was to shift the focus of adult literacy and basic skills

instruction and assessment away from a decontextualized skills-based curriculum toward a contextualized, practice-based curriculum that was better matched to and firmly grounded in learners' own purposes for returning to schools.

Grouping the 16 generative skills into these four categories is intended to underline the interchangeability of skills within a category. For example, some activities that require adults to *Work Together* can be carried out most effectively by relying on oral and visual communication skills. In such situations, reading and writing may not be the most important means of communicating with others about what needs to get done. Similarly, the specific interpersonal skills one needs to draw on will vary from situation to situation depending on the task and context. The categories reflect this variability of skills, encouraging adult learners to think about all the skills in a given category as tools they may want to draw on selectively to achieve their purpose more effectively.

From Skills to Standards

Every standards development effort is guided by a set of criteria that reflect shared assumptions about the purpose of adult learning and the role of standards. The following "standards for standards" identify the key criteria that the EFF development team used to develop standards based on the EFF skills:

- **EFF Standards must accurately reflect what adults need to know and be able to do.** EFF's definition of necessary skills and knowledge is based on analysis of what adults do in their roles as workers, citizens, and family members. By starting with an accurate picture of adult roles and role performance, there is real confidence that the Standards truly represent the knowledge and skills critical to real-world success—for now. The world will continue to change, however, and EFF Standards must also be dynamic and capable of change.
- **EFF Standards must be reflective of broad consensus.** Every component of the Framework on which the EFF Standards are based, including the four Purposes, the Role Maps, the Common Activities and the Standards, has been refined through an iterative process of feedback, comment, and testing. As a result, the Framework and these Standards reflect a broad and inclusive

consensus on what is important for adults to know and do to be maximally effective in their daily lives.

- **EFF Standards must be specific enough to guide instruction and assessment.** Once the content covered in the EFF Standards was defined, the Standards were refined through two rounds of field and expert review to assure that teachers working with adults at every level of skill development could use them to guide instruction and assessment. The goal of the EFF development team was to make sure that the Standards were specific enough to communicate what is most important for students to learn, without dictating how the ideas or information should be taught.

- **EFF Standards must be measurable.** In specifying the content of each Standard, EFF turned to researchers and evaluators, as well as field reviewers, to help ensure that EFF Standards focus on performance that is observable and measurable. The goal of these efforts was to define standards that enable instructors not only to document performance but also to place it on a continuum and let students know if they are performing well enough to accomplish a desired goal.

- **EFF Standards must define multiple levels of performance for students to strive for.** EFF has begun the work of defining performance levels for EFF Standards. These levels will be descriptive, focusing on what adults can do with the knowledge and skills at each level, including what external benchmarks are linked to each level. This approach to setting levels is based on the assumptions that adults differ in the goals they want to achieve at different points in their lives and that different goals require different levels of performance. Once EFF performance levels are set, adults will be able to use them to make informed choices about the level of proficiency they need to develop to achieve goals they set for themselves.

- **EFF Standards must be written clearly enough for all stakeholders to understand.** One of the strongest imperatives guiding the EFF Standards development process has been always to keep in mind the multiple audiences that need to understand the Standards. Our goal has been to write Standards that are compelling enough to inspire adult learners, teachers, and tutors, and clear enough to send a coherent message to policymakers and other stakeholders about what students know and are able to do if they meet EFF Standards.

Focusing EFF Standards on Application of Knowledge and Skills

Since the starting place in defining the EFF Standards is what people do that requires the knowledge and skills that make up each Standard, every effort has been made to assure that the Standards sharply focus on application of skills.

Naming the Standards. The name of each EFF Standard focuses on how adults need to use the skill to carry out the core of activities common to the three roles. The EFF Reading Standard is called *Read With Understanding* to express the focus on purpose and use: adults need sufficient mastery of decoding and comprehension strategies to accomplish a task requiring them to *Gather, Analyze, and Use Information* or *Manage Resources*, for instance. The level of mastery required will vary, depending on task and context. Similarly, the EFF Math Standard is called *Using Math to Solve Problems and Communicate* to make clear the role that number sense and mathematical operations play in helping adults carry out key activities in their daily lives.

Focusing the content of the Standards. This focus on purposeful application of knowledge and skills is continued in the description of the content (knowledge and skills) of the Standard.

Here is the description of the Standard *Read With Understanding*:

- *Determine the reading purpose;*
- *Select reading strategies appropriate to the purpose;*
- *Monitor comprehension and adjust reading strategies;*
- *Analyze the information and reflect on its underlying meaning;*
- *Integrate it with prior knowledge to address reading purpose.*

The Standard has been framed to include the key elements of the reading process as defined in the Reading Excellence Act (REA). In the REA, reading is defined as "a complex system of deriving meaning from print that requires all of the following: a) the skills and knowledge to understand how phonemes, or speech sounds, are connected to print; b) the ability to decode unfamiliar words; c) the ability to read fluently; d) sufficient background information and vocabulary to foster reading comprehension; e) the development of appropriate active strategies to construct meaning from print; f) the development and maintenance of a motivation to read" (Sec. 2252(4)). These necessary components of reading are reflected in all of the components (bullets 1-5) of

the EFF Standard. In the EFF Standard, these specific skills and abilities are explicitly wedded to the reader's "purpose."

Using the Standards to teach skills in the context of purpose. EFF research with adult learners has convinced us that purpose is the key to motivation for adults—motivation to learn and motivation to achieve.

The EFF Standards have been designed to encourage adult learners and their teachers

- to think about strategies for learning and for using skills in the context of the learner's purpose,
- to identify barriers along the way to achieving that purpose, and
- to identify and try out new strategies that might enable the learner to get past those barriers.

A shorthand way of saying this is that EFF Standards encourage a problem-solving approach to skill development. While the focus of teaching and assessment is what students need to learn in a particular situation to achieve their purpose, the goal is longer-term: to build, over time, the cognitive and metacognitive strategies that facilitate learning with understanding and transfer of learning from one context to another.

The EFF development team adopted this approach to the Standards for two primary reasons.

- First, it makes sense in terms of how adults need to use skills in the world. A problem-solving approach to developing knowledge and skills fits with a world in which adults' everyday life responsibilities demand that they be able to identify and respond to change and challenge at work and at home.
- Second, it is congruent with the growing body of cognitive science research on how people learn. Teaching skills in the context of purpose and application facilitates retention of knowledge in a usable form—so students can draw on it as necessary, in a range of contexts and situations.

Practitioners in the field development process supported this approach to defining standards for similar reasons. They told us that standards focused on "purposes" speak directly to the goals and needs of their students. Adult students are highly goal-directed. They come to formal learning situations actively seeking knowledge and skills in order

to build competence in their lives and accomplish things that have an impact on those around them. Making sure that the description of each Standard explicitly defines what the teachers came to call "components of competent performance" enabled teachers to identify with greater specificity what their students can and cannot do so they can better align teaching and assessment with learner needs and goals.

The 16 EFF Content Standards

Standards-Based Education and Reform

Like other education improvement initiatives focused on accountability issues, Equipped for the Future is a standards-based reform initiative. Standards-based reform is based on content standards that represent a consensus of what it is important for students to know and be able to do. Research indicates that standards are a powerful tool to improve the results of education because they make explicit what the goals of instruction should be and therefore provide a way to align curriculum, instruction, assessment and accountability.

In standards-based improvement initiatives, we use the term aligned to describe how instruction, assessment, and accountability all focus on the same thing; what we teach is what we assess is what we are held accountable for. The standards become the definition of quality and every component of a program contributes to achieving them. This effort to use standards to align all parts of a program in order to maximize achievement of desired results is the hallmark of standards-based education and reform.

Since the framework we used to develop EFF Standards includes a focus on both adult learner purposes and policy maker goals, these standards enable us to pay attention to both these critical customers of adult literacy programs. Aligning our program practices toward achieving the EFF Standards helps us sharpen our focus on learner goals, while at the same time aiming to achieve results that are important to policymakers. If we meet EFF Standards, we are being accountable to both our learners and to our funders.

Standards-based Instruction Information:

http://eff.cls.utk.edu/toolkit/default.htm

Standards-based instruction is an approach to teaching and learning focused on broadly accepted expectations of what students should know and be able to do.

On-Going Practices
- Work with learners to continually revisit and revise their goals.
- Engage learners, throughout, in identifying and applying their prior experience and knowledge to their learning.
- Build in opportunities throughout the activity for learners to reflect on and monitor their own developing knowledge, skills, and learning strategies.
- Make sure throughout that learners clearly understand what they are learning and why.
- Adjust the learning activity to reflect emerging goals and learning needs.

Activities/ Resources for Outcome #2

Personal Traits, Habits and Behaviors

Hygiene
Cleanliness
Hair products, hair spray
Fragrance

Attire
Uniform
Closed-toe shoes
Minimal jewelry

Appearance
Hair
Modest makeup
Short, neat manicure

Behaviors
Gum chewing and popping
Eating and drinking
Texting, cell phone use
Personal phone calls

Habits
Punctuality and attendance
Socializing and gossiping
Manners and common courtesy

Respect
Understand and work within the chain of command
Appropriateness of speech, tone, gestures
Please and thank you

Activities/ Resources for Outcome #3

Basic requirements for healthcare workers

- o Criminal background check

- o Legal status

- o Language proficiency
    - Ability to communicate: understand and be understood
    - Fluency level: beyond translation needed for critical thinking and ability to multi-task

- o Drug testing

- o Appropriate credentials and education acquired; documentation on file

- o Excellent personal health: physically and emotionally

- o Transportation

- o Flexibility and willingness to meet employer's needs as new employee

- o Understand and respect the chain of command

- o Collaboration and teamwork

- o Professionalism in healthcare
    - Define demeanor
    - Define professionalism

- o Respect for diversity, tolerance

Activities/
Resources
for
Outcome #4

Healthcare industry guidelines for patient and worker safety

- ✓ Hand washing procedures

- ✓ Personal illness

- ✓ Fragrance

- ✓ Punctuality and attendance: impact on patient safety

- ✓ Following protocols

- ✓ Knowledge of safety equipment and standard emergency procedures

- ✓ CPR/portable automated defibrillator certification

- ✓ Security personnel and procedures for personal and patient safety

- ✓ Capabilities for handling an emergency

- ✓ HIPAA   (See handouts)

    - ▪ Review

    - ▪ Privacy rights

    - ▪ Obligations

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): 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.

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

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

Medical Information Release Form

(HIPAA Release Form)

Name: _____ **Date of Birth:** _____/_____/_____

Release of Information

[ ] I authorize the release of information including the diagnosis, records,

examination rendered to me and claims information. This information may be released

to:

[ ] Spouse_____

[ ] Child(ren)_____

[ ] Other_____

[ ] Information is not to be released to anyone.

This **Release of Information** will remain in effect until terminated by me in writing.

Messages

Please call [ ] my home [ ] my work [ ] my cell number:_____

If unable to reach me:

[ ] you may leave a detailed message

[ ] please leave a message asking me to return your call

[ ] _____

The best time to reach me is (*day*)_____ between (*time*)_____

Signed: _____ Date: _____/_____/_____

Witness:_____ Date: ___/_____/_____

Activities/
Resources
for
Outcome #5

Basic Nurse Assistant

Definition of role: 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

Employment Opportunities: projections for Nurse Assistants are excellent, according to the U.S. Department of Labor, due to an expanding population of older people and advances in medical technologies which extend life.
- Hospitals
- Long term care facilities
- Urgent care facilities
- Doctors' offices
- Home care

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

Requirements: criminal background check, drug screen, must be at least 16 years old, have a minimum 8th 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.

Certification: 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: The Everything Guide to Careers in Health Care, Quan, 2007, F&W Publication ECC college catalog

Clinical Laboratory Technicians and Technologists

Definition of Role: 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.

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

Salary: 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.

Licensure/Certification: 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.

Dental Assistants

Definition of role: 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 equipment
- Taking and developing x-rays
- Handing instruments to the dentist
- Suctioning the patient's mouth
- Preparing materials
- Taking impressions of teeth and restorations

Employment Opportunities: 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.

Salaries: 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 the 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®, criminal background check and drug screen.

Certification: 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, the student receives 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.

Histotechnology

Definition of Role: 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.

Employment Opportunities: Rapid job growth and excellent job opportunities exist. 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.

Salary: 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.

Requirements: 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.

Certification: 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: The Everything Guide to Careers in Health Care, Quan, 2007, F&W Publication ECC college catalog

Medical Assistant

Definition of Role: These healthcare workers 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 heights and weights of patients
- Taking vital signs
- Preparing patients for examinations
- Drawing blood samples
- Taking EKGs

Employment Opportunities: 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.

Salary: 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® 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.

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

Paramedics and
Emergency Medical Technicians

Definition of Role: 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.

Employment Opportunities: 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.

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

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

- First Responders
- EMT-1 (Basic)
- EMT-2 or -3 (Intermediate)
- EMT-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) 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.

Licensure: 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: The Everything Guide to Careers in Health Care, Quan, 2007, F&W Publications. ECC College catalog.

Phlebotomy

<u>Definition of Role:</u> Phlebotomists are employed by clinical laboratories—either free-standing 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, and this requires 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$^{®}$ 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.

Physical Therapist Assistant

Definition of role: 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-term 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 patient's progress
- Keeping therapy sites clean
- Scheduling of appointments

Employment Opportunities: 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.

Salary: 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.

Licensure: 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: The Everything Guide to Careers in Health Care, Quan, 2007, F&W Publications. ECC College catalog.

Practical Nurse

Definition of Role: 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

Employment Opportunities: 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 ten-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.

Salary: 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 by individuals must be approved by their state's Board of Nursing in order for them 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, one 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 Publication ECC college catalog

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 are multiskilled 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 than more individuals with fewer skills. Radiographers (RAD Techs) are employed in hospitals, clinics, diagnostic imaging laboratories, dentists' offices 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.

<u>Requirements:</u> 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

Registered Nurse

Definition of Role: 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 nurses: 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: They 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 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
- Increased need for RNs in nursing homes
- Increase in home health care due to shorter stays in hospitals

Salary: 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® can earn associate 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).

Licensure: 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: The Everything Guide to Careers in Health Care, Quan, 2007, F&W Publication ECC college catalog

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 transfer 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 9 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.

Certification: 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: The Everything Guide to Careers in Health Care, Quan, 2007, F&W Publications ECC college catalog