

Functional Job Analysis

Paramedic Characteristics

The Paramedic must be a confident leader who can accept the challenge and high degree of responsibility entailed in the position. The Paramedic must have excellent judgement and be able to prioritize decisions and act quickly in the best interest of the patient, must be self disciplined, able to develop patient rapport, interview hostile patients, maintain safe distance, and recognize and utilize communication unique to diverse multicultural groups and ages within those groups. Must be able to function independently at optimum level in a non-structured environment that is constantly changing.

Even though the Paramedic is generally part of a two- person team generally working with a lower skill and knowledge level Basic EMT, it is the Paramedic who is held responsible for safe and therapeutic administration of drugs including narcotics. Therefore, the Paramedic must not only be knowledgeable about medications but must be able to apply this knowledge in a practical sense. Knowledge and practical application of medications include thoroughly knowing and understanding the general properties of all types of drugs including analgesics, anesthetics, anti-anxiety drugs, sedatives and hypnotics, anti-convulsants, central nervous stimulants, psychotherapeutics which include antidepressants, and other anti-psychotics, anticholinergics, cholinergics, muscle relaxants, anti-dysrhythmics, anti-hypertensives, anticoagulants, diuretics, bronchodilators, ophthalmics, pituitary drugs, gastro-intestinal drugs, hormones, antibiotics, antifungals, antiinflammatories, serums, vaccines, anti-parasitics, and others.

The Paramedic is personally responsible, legally, ethically, and morally for each drug administered, for using correct precautions and techniques, observing and documenting the effects of the drugs administered, keeping one's own pharmacological knowledge-base current as to changes and trends in administration and use, keeping abreast of all contraindications to administration of specific drugs to patients based on their constitutional make-up, and using drug reference literature.

The responsibility of the Paramedic includes obtaining a comprehensive drug history from the patient that includes names of drugs, strength, daily usage and dosage. The Paramedic must take into consideration that many factors, in relation to the history given, can affect the type medication to be given. For example, some patients may be taking several medications prescribed by several different doctors and some may lose track of what they have or have not taken. Some may be using non-prescription/over the counter drugs. Awareness of drug reactions and the synergistic effects of drugs combined with other medicines and in some instances, food, is imperative. The Paramedic must also take into consideration the possible risks of medication administered to a pregnant mother and the fetus, keeping in mind that drugs may cross the placenta.

of medications on pediatric patients based on size and weight, special concerns related to newborns, geriatric patients and the physiological effects of aging such as the way skin can tear in the geriatric population with relatively little to no pressure. There must be an awareness of the high abuse potential of controlled substances and the potential

life and death for the patient.

Job Analysis Schedule

1. Establish Job Title: Emergency Medical Technician/Paramedic
2. D. O. T. Title, Industry Designation and Code 079.374.010
3. WTA Group: Occupations in medicine and health,
4. SIC Code
5. SOC Code 3690 Emergency medical technicians
6. GOE 10.03.02 (medical services)

7. Job Summary: In emergency situations, administers all facets of basic and advanced life support medical services to injured and sick persons in pre-hospital settings as directed by physician.

8. Work Performed Estimates:

Worker Functions	Data	People	Things
	3	7	4

3. Compiling
7. Serving
4. Manipulating

Work Field: 294 Health, Caring, and Medical
 M.P.S.M.S. 920 (Materials, Products, Subject Matter, and Services) Medical and other health services.

9. Worker Traits Ratings:

(GED) encompasses three broad areas which are rated independently in relation to the occupation being assessed:

General Educational Development (GED) embraces those aspects of education (both formal and informal) which contribute to the worker's reasoning development, the ability to follow instructions, and to the acquisition of tool knowledge such as language and mathematical skills.

This is education of a general nature which does not have a recognized, fairly specific occupational objective. Ordinarily, such education is obtained in elementary school, high school, or college. However, it may be obtained from experience and self study.

Description of rating on the GED Scale: Level 1= lowest level; Level 6 = highest level.

Low

Hig
h

1	2	3	—	— —	6
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total number of patients involved, and remains calm and confident while demonstrating leadership and responsibility. Reports verbally to the responding EMS unit or communications center as to the nature and extent of injuries and the number of patients. Recognizes hazards. Conducts triage, sorting out and classifying priorities for most immediate need for treatment. Uses excellent judgement to identify priorities based on the most critical needs for patient survival. Directs Basic EMT to assist.

Determines nature and extent of illness or injury in patient, takes pulse, blood pressure, and temperature, visually observes patient, recognizes the mechanisms of injury and takes comprehensive medical history of patient, including patient's current usage of prescribed and non-prescribed medications/drugs.

Accepts primary responsibility for all aspects of advanced life support given to the patient, including use of advanced life support equipment and administration of medication that includes narcotics; responsible for thorough written documentation of all activity related to patient care and medication dispensation. Uses good judgement to draw conclusions with often, limited information; verbally communicates effectively to provide quality treatment to diverse age and cultural groups. Provides family support, manages the difficult patient, conducts fundamental mental status assessment, restrains patient, and intervenes pharmacologically.

Uses advanced life support equipment and administers medication through the patient's most appropriate body route, including intravenous. Provides pre-hospital emergency care of simple and multiple system trauma such as controlling hemorrhage, bandaging wounds, manually stabilizing painful, swollen joints and injured extremities, and immobilizing spine. Uses automatic defibrillator apparatus in application of electric shock to heart, manages amputation, uses anti-shock garment, conducts peripheral venous access, intra-osseous infusion, manual defibrillation, interprets EKGs, manually stabilizes neck and body of child and adult, immobilizes extremities, straightens selected

name and a brand name may not always appear on a prescription label, thus the need for cross/referencing through written reference materials. The Paramedic needs to know what type of drug(s) the patient is taking, how long ago it was taken, how long the effects are expected to remain in the body based on the patient's constitutional make-up, what condition for which it was prescribed, general information, cautions and warnings, possible side effects, possible adverse side effects, drug and food interactions, the usual dosage and duration of dosage for adult and child, antidotes for overdoses, and other special information.

The Paramedic also takes a comprehensive medical history of patient, including patient's current usage of prescribed and non-prescribed medications/drugs.

At times, the patient does not know when or if he/she took a certain medication. Often, many individuals are taking multiple medications simultaneously and it will be up to the Paramedic to read from the medication bottles or containers the exact names of the medications and the dosages. It is absolutely essential that the Paramedic read correctly and expediently. For example, the drug AMilontin® must not be construed as AMelatonin®. Milontin, a drug used for control of petit mal seizures may be associated with severe reduction in white blood cell platelet counts and when used alone for both grand mal and petit mal seizures may increase the number of grand mal seizures and necessitate more medicine to control the seizures. It can also cause a person's urine to turn pink or brown. Although the discoloration is harmless, it could cause alarm in the patient. In addition, sudden stoppage of this medication may bring on more seizures. While it is a good idea for patients using this drug to wear identification, they may or may not be. On the other hand, Melatonin, a currently popular over the counter remedy purported to improve sleep and general well being has none of the ramifications as Miltonin. The preceding is but one example. There are numerous examples of names of medications which if not read correctly, could mean the difference in the treatment administered, and ultimately, whether or not the patient lives or dies.

keeping abreast of all contraindications to administration of specific drugs to patients based on their constitutional make-up, and using up to date drug reference literature.

Write novels, plays, editorials, journals, speeches, manuals, critiques, poetry, and songs.

Example from text: L5-4

Write service manuals and related technical publications concerned with installation, operation, and maintenance of electrical, electronic mechanical and other equipment. Interviews workers to acquire or verify technical knowledge of a subject. Rewrites articles, bulletins, manuals or similar publications.

Writes detailed comprehensive narrative report on patient care given. Writes professional journal articles for Emergency Medical Technician literature. Writes and prepares lesson plans, manuals and curriculum for instructional purposes.

- Conversant in the theory, principles, and methods of effective and persuasive speaking, voice and diction, phonetics, and discussion and debate.

Answers verbally to telephone or radio emergency calls from dispatcher to provide advanced efficient and immediate emergency medical care to critically ill and injured persons.

Interviews patient and or significant others to gain comprehensive understanding of patient-s condition for development of workable patient diagnosis. Adjusts/alters verbal communication with patient and family/significant others to reflect and ensure adequate and appropriate care and treatment with respect to the age of the patient, i.e. child,

whereas Level 5 indicates a lower degree of an aptitude pertinent to a job. If an aptitude is rated as a Level 5, it means that for the job under study, the amount of aptitude required is negligible or not required at all. The ratings for aptitudes for the

point of application of forces and the area affected (as in traction); and to place treatment devices or administer manual treatment in relationship to the affected body part.

On the job :

Mobilizes spine, sets select fractures and dislocations. Sets up and administers intravenous medications and narcotics. Applies manual and advanced life support techniques to resuscitate patient. Carefully transports patient as to avoid further injury.

P - Form Perception (Ability to make visual comparisons and discriminations and see slight differences in shapes and shadings of figures and widths and lengths of lines)

Level 2 High degree of aptitude required

Example from text:

P - 2:6 Form perception is required to perceive pertinent details of size, shape, and form in skeletal structure, organs, tissue, and specimens of various animals.

On the job:

Conducts patient assessment through visually observing any changes in size of pupils, swelling, shrinking, or dislocations/protrusions of all body parts. Checks for most appropriate vein to administer medication.

Q - Clerical Perception (Ability to perceive pertinent detail in verbal or tabular material-proof

Level 2 High degree of aptitude required

No illustrations in medical field.

On the job:

Recommended due to necessity of positioning needle for injection, opening and maintaining airway, ventilating patient, controlling hemorrhage, bandaging wounds, administer medications, manually stabilizing painful swollen and deformed extremities, and performing other basic and advanced life support functions.

M - Manual Dexterity (Ability to move the hands easily and skillfully)

Level 2 High degree of aptitude required

On the job:

No illustrations given. Recommended due to nature of work which involves moving the hands skillfully and quickly to perform essential functions of advanced/ skilled emergency patient care.

E - Eye-Hand-Foot Coordination (Ability to coordinate these)

Level 2 High degree of aptitude required

No text illustrations given.

On the job:

Recommended as job may require balancing on ladders, stairs, or walking on uneven terrain while assisting in carrying patients. In the interest of time and safety, may be required to move quickly.

C - Color Discrimination (Ability to perceive difference in colors, shades, or harmonious combinations, or to match colors)

Level 1 Highest degree of aptitude and ability required.

Example from text: C-1:4 Uses color discrimination and color memory in making diagnosis of patients' affliction or condition, by recognizing any deviations in color of diseased tissue from healthy tissue; evaluating color characteristics such as hue and saturation of affected body parts; and making determination as to extent or origin of condition.

Temperament

D	R	<u>I</u>	<u>V</u>	E	A	<u>S</u>	<u>I</u>	<u>U</u>	<u>P</u>	<u>J</u>	M
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Explanation of terms:

Terms bolded and underlined above are those deemed most pertinent to temperament of the Paramedic when performing the job a Paramedic is expected to perform. Temperaments are the adaptability requirements made on the worker by specific types of jobs. Below is a list of various temperament factor definitions. The shaded areas are those deemed applicable to the role of the

Paramedic.

D	Directing , controlling, or planning the activities of others
R	Performing repetitive or short cycle work
I	Influencing people in their opinions, attitudes or judgments
V	Performing a variety of duties
E	Expressing personal feelings
A	Working alone or in part in physical isolation from others
S	Performing effectively under stress
T	Attaining precise set limits, tolerances , and standards
U	Working under specific instructions
P	Dealing with people
J	Adaptability to making judgments and decisions based on sensory or judgmental criteria
M	Adaptability to making judgements based on measurable or verifiable criteria

Interests

Interests	1a	1b	2a	<u>2b</u>	3a	3b	<u>4a</u>	4b	5a	5b
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The Paramedic is seen as having interests that relate to:

4a - A preference for working for the presumed good of the people.

2b - A preference for activities of a scientific and technical nature

Physical Demands

Physical Demands

S

L

M

H

V



2. Climbing and/or balancing
3. Stooping, kneeling, crouching and crawling
4. Reaching, handling, fingering and/or feeling
5. Talking and hearing
6. Seeing

Working Conditions	Location
1 Exposure to weather (outside . atmospheric conditions)	Indoors, Outdoors, Both
2 Extreme cold with or without . temperature changes (Exposure to non- weather related cold temperatures)	Indoors, Outdoors, Both
3 Extreme heat with or without . temperature changes (Exposure to non- weather related hot temperatures)	Indoors, Outdoors, Both
4 Wet and humid (Contact with water or . other liquids or exposure to non- weather related humid conditions)	Indoors, Outdoors, Both
5 Noise intensity levels (Can range from . very quiet, quiet, moderate, loud to	Indoors, Outdoors, Both

. from falling)	Outdoors, Both
1 Other environmental conditions: mines, 1 slopes, fumes, smoke, dust, high crime . neighborhoods, darkness, law violators	Indoors, Outdoors, Both

In the analyst's opinion, the general environmental conditions in which the Paramedic works cannot be adequately assessed in an indoor evaluative environment. The Paramedic in an actual work situation can be exposed to any working condition listed above. Because of the variance in climate, environmental conditions and locations in the United States and the infinite possibilities in which a Paramedic is expected to provide advanced life support, working conditions, at best, may be less than optimal. The Paramedic must be able to focus on providing the best care possible in often adverse and dangerous situations. This can include servicing neighborhoods known to have high crime rates and performing optimally in situations where multiple incidents and trauma exist, i.e. a major highway accident that involves numerous persons and vehicles. The Paramedic may be required frequently to walk, climb, crawl, bend, pull, push, or lift and balance over less than ideal terrain, such as an icy highway, muddy ground, dilapidated stairs/flooring and any other scenario or combination of scenarios. There may be exposure to a variety of noise levels, which at times can be quite high, particularly when multiple sirens are sounding, and crowds/bystanders/families are upset and may be screaming, crying hysterically, and making demands that may or may not be reasonable.

Cathy Cain, Ph. D.

Paramedic

079.010

100302 Medical services; SOC 3690

F = Frequently

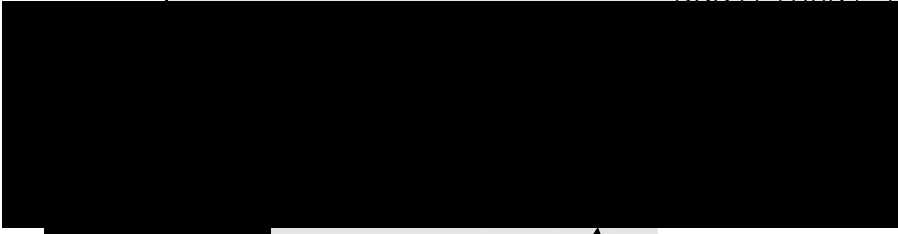
O = Occasionally

NP = Not Present

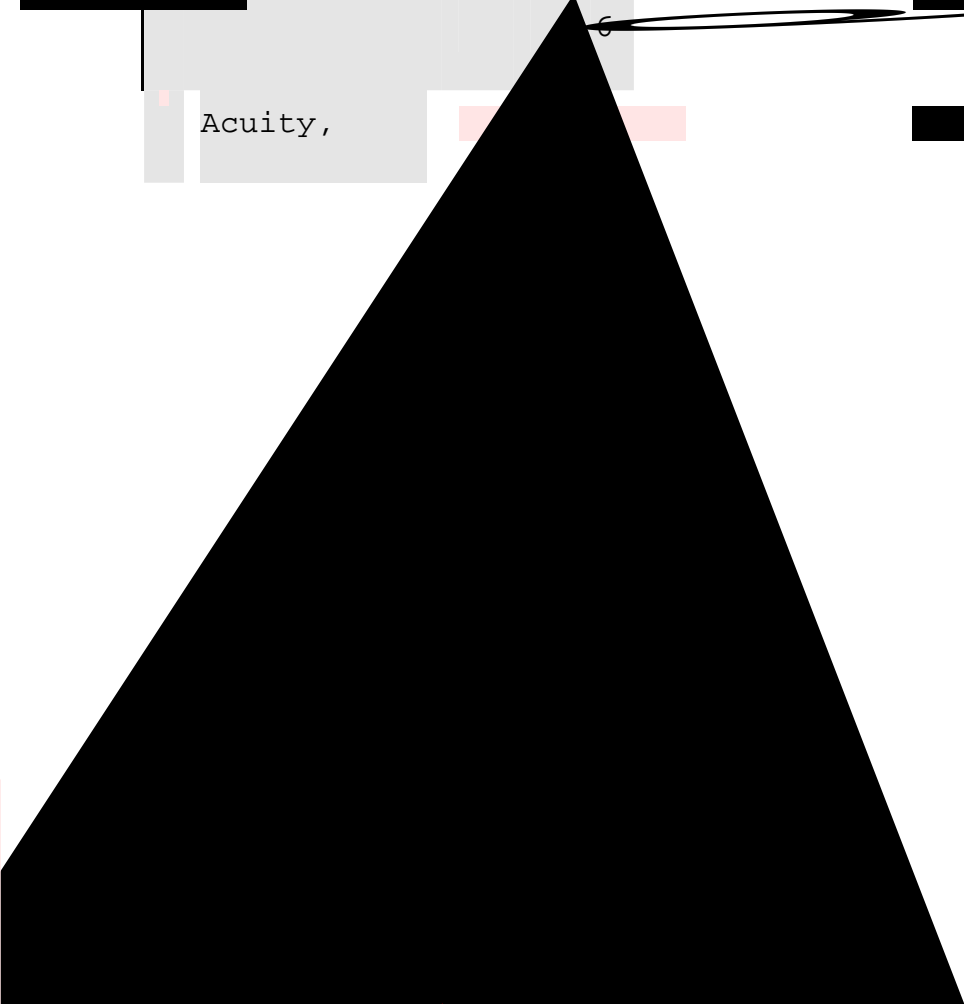
C = Constantly

: In emergency medical situations, takes leadership role and assumes responsibility for applying specific knowledge and skills related to basic and advanced life support to patients; provides advanced life support to patients under supervision of physician and directs lower level EMTs to assist based on their levels of competency 703 458.100003 52/98

		5	Responding to patients, physicians, and co-workers through hearing is necessary in transmitting patient information and following directions.
Ordinary		F	
Other		O	May be required to shout for help and additional assistance.
		5	Verbally responding to dispatcher's message on phone or radio is necessary for quick, efficient service that can be vital to life in emergency situations.
Ordinary conversation		F	
Other		F	Communication on scene is critical for interviewing patient and in some instances, significant others, and in relaying this information in most expedient manner. Sounds of vehicles may alert Paramedic that additional help is on the way.
			can alert the that other persons may be red, i.e., someone and a bush in a vehicle cannot be seen and may be barely audible.



Acuity, [redacted]



None

2. Vocational Education Courses: An additional 900-1200 hours of education beyond the 110 required for the Basic EMT.

None

None

5. On-the-Job-Training: During course of training, the Paramedic in training status will spend varying amounts of time in supervised clinical work in hospital and field settings.

6. Performance on Other Jobs: None required; however, training in the military as a medic is seen as beneficial.

9. Experience: None

10. Orientation:

Certification as Emergency Medical Technician: Paramedic, ACLS and CPR. Must maintain annual certification through continuing education.

12. Relation to Other Jobs and Workers:

In some locations, Paramedics may become instructors, dispatchers or administrators.

None

Physician

Some to lower level Basic EMTs.

Ambulance, radio/telephone/pager, blood pressure cuff, thermometer, extrication devices, esophageal airway obturator, ventilation mask, spinal boards, intravenous therapy equipment: needles and fluids, anti-shock garments, wheelchairs, and stretchers, EKG machines, defibrillator, visual airway intubation and other complex equipment, and sometimes, a computer for documentation.

14. Materials and Products: Broad range of medications including narcotics, disposable latex gloves, bandages, universal dressings such as gauze pads, tape, blankets, pillows and sheets, oxygen, drugs, and intravenous fluids.

1. Answers verbally to telephone or radio emergency calls from dispatcher to provide advanced efficient and immediate emergency medical care to critically ill and injured persons using a full range of equipment.
2. Drives ambulance to scene of emergency, reads map, responds safely and quickly to the address or location as directed by radio dispatcher. observes traffic ordinances and regulations. Visually inspects and assesses or sizes up the scene upon arrival to determine if scene is safe, determines the mechanism of illness or injury, the total number of patients involved, and remains calm and confident while demonstrating leadership and responsibility.
3. Radios dispatcher for additional help or special rescue and /or utility services. Reports verbally to the responding EMS unit or communications center as to the nature and extent of injuries and the number of patients. Recognizes hazards. Conducts triage, sorting out and classifying priorities for most immediate need for treatment. Uses excellent judgement to identify priorities based on the most critical needs for patient survival.
4. searches for medical identification as clue in providing emergency care, i.e. identification bracelet for patient who is diabetic. Reassures patient and bystanders while working in a confident and efficient manner, avoids misunderstandings and undue haste while working expeditiously to accomplish the task. Extricates patient from entrapment, works with other EMS providers in rendering emergency care and protection to the entrapped patient. Performs emergency moves, assists other EMS providers in the use of prescribed techniques and appliances for safe removal of the patient.
5. Determines nature and extent of illness or injury in patient, takes pulse, blood pressure, and temperature, visually observes patient, recognizes the mechanisms of injury, takes comprehensive medical history of patient, including patient's current usage of prescribed and non-prescribed medications/drugs. Communicates with and provides verbal direction to Basic EMT to assist with tasks within the Basic's scope of practice. Obtains consent and

refusal. Uses good judgement to draw conclusions with often, limited information; verbally communicates effectively to provide quality treatment to diverse age and cultural groups. Provides family support, manages the difficult patient, conducts fundamental mental status assessment, restrains patient, and intervenes pharmacologically.

6. Positions unresponsive patient, protects the seizing patient, identifies and treats the hypoglycemic patient, provides heating/cooling interventions, manages burns and exposures, overdoses, conducts ingestion management. Manually stabilizes neck and body of child and adult, immobilizes extremities, straightens selected fractures and reduces selected dislocations. Delivers newborn. Provides pre-hospital emergency care of simple and multiple system

10. Checks, maintains vehicles, and provides mechanical report. Restocks and replaces used supplies, uses appropriate disinfecting procedures to clean equipment, checks all equipment to insure adequate working condition for next response. Takes inventory of and accounts for all medications (narcotics) given. Keeps log of all transactions. Prepares accurate and legible medical reports. Provides medical reports to staff.
11. Transports non-emergency patients to regularly scheduled appointments, for example, transport geriatric patients in nursing homes. Uses computer to enter data for EMS reports.
12. Supervises the activities and educational experiences of assigned observers and students. Complies with regulations in handling the deceased.
13. Functions as the primary direct care provider of emergency health care services to sick and injured patients in pre-hospital settings. Works primarily in advanced life support units affiliated with fire departments, police departments, rescue squads, hospitals, or private ambulance services under the off-site supervision of a physician, usually through radio communication, is usually the senior level member of a two person team, working in conjunction with a Basic EMT.
14. Accepts primary responsibility for all aspects of advanced life support given to the patient, including use of advanced life support equipment and administration of medication that includes narcotics; responsible for thorough written documentation of all activity related to patient care and medication dispensation. Successfully completes continuing education and refresher courses as required by employers, medical direction, and licensing or certifying agencies. Meets qualifications within the functional job analysis.

Must be at least 18 years of age and be a high school graduate or equivalent. Must have proof of valid driver=s license.

all legal, ethical, and moral obligations inherent within scope of practice.

Must have successful completion of approved curriculum with achievement of passing scores on written and practical certification examinations as defined by programmatic guidelines. Re-certification is dependent upon an individual's successful completion of inter-agency approved Paramedic continuing education fresher courses. At any given time, performs any or all tasks performed by a lower level EMT. May supervise activities of students or interns, and/or may engage in writing of journal articles or teach. Meets qualifications within the functional job analysis.