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Program Overview

The Purpose of the Mobile Integrated Healthcare Program – Community Paramedicine component (MIH-CP) is to identify chronically ill patients within a community and intervene from the point of discharge. The primary goal is to prevent the need for further intervention from both the 911 system and the local hospital network. The program is a non-traditional approach to pre-hospital care where a specially trained Paramedic responds to a specific patient that was referred by a third party and treats the patient in the home. The treatment plan for the patient is dictated by the program in which they are enrolled. Programs may include but will not be limited to chronic illnesses such as diabetes, chronic obstructive pulmonary disease, congestive heart failure et al.

Referral sources may include the local 911 system, regional hospital systems, health and human services, government programs, and other sources where applicable. A referral will result in a home visit within 24 hours of the referral, the time frame will be dictated by the need of the patient and the patient's initial acuity.

Once in the system and enrolled into a program, the patient will follow program specific guidelines and protocols as set forth by the program medical director, director of clinical services, and program director.

The patient will navigate the program from week to week and complete certain milestones based on the program in which they are enrolled. Once the patient successfully completes all milestones in that program, they will be reviewed for program graduation and subsequently discharged from the program.

A. Each MIHP must have a MIHP medical director.
B. MIHP – Program Manager
    1. Each participating service will have a designated MIHP – Program Manager.
    2. The Program Manager will be responsible for the coordination and oversight of the program and will report to the MIHP Medical Director and Executive Management Team.
C. MIHP – Clinical Coordinator
    1. The MIHP Clinical Coordinator provides initial training. Training may also be accomplished through flexible online learning programs.
    2. Licensed paramedic instructor-coordinator or qualifications as approved by the MIHP Medical Director and MIHP Program Manager.
    3. Approved by the MIHP Medical Director and MIHP Program Manager.
D. MIHP – Paramedic
    1. Paramedic currently licensed in the state where the program is based.
    2. Successfully completed an approved MIHP training curriculum.
    3. Must seek and successfully obtain advanced licensure within 12 months of entering the program. (FP-C, CCP-C, CP-C)
E. MIHP – Registered Nurse
    1. Registered Nurse currently licensed in the state where the program is based.
    2. Successfully completed an approved MIHP training curriculum.
    3. Must seek and successfully obtain advanced licensure within 12 months of entering the program. (CEN, CFRN, CCRN, PHRN)

Program Objectives

The objectives for this specific program are multifactorial. The overarching goal of the program is to prevent patients from having the need to call 911 and return to the hospital unnecessarily. There is a current gap in healthcare that afflicts a significant portion of our patient population. Traditionally, in EMS, the patient will call for an ambulance for immediate transport to a local Emergency Department for evaluation and care. The issue that this type of response has created is a no questions asked system that delineates from traditional primary care and creates an unrealistic strain on several components of the healthcare system. Some of those things are local emergency department overload, increase in return to acute care status, health insurance costs, operational costs for 911 systems, and most importantly, diminishment of patient care secondary to overworked staff in hospitals and not enough space to accommodate the patient load. As a result, a non-traditional method of care is taking shape through community paramedicine, which is an integral piece of the Mobile Integrated Healthcare spectrum.

Primary Objectives

1. Reduction of return to acute status patients;
2. Reduction of local ED overloading;
3. Reduction of 911 systems utilization;
4. Reduction of government program utilization (i.e. Medicare & Medicaid);
5. Increase in pathophysiology focused patient education;
6. Increase in preventative medicine in an in-home setting for disabled or at-risk patients;
7. Increase in available clinicians and hospital beds;
8. Increase in staff productivity for all healthcare components.

Mobile Integrated Healthcare Program – Community Paramedicine Component

Job Descriptions

GENERAL STATEMENT OF DUTIES: Community Paramedic

Provides primary care and/or advanced life support, including medical evaluation, treatment and stabilization of the critically ill and injured with the goal of reducing morbidity. Supports existing health services; provides integrated health services in partnership with other health professionals; extends access to health services delivery in underserved and general populations, including primary care, public health, disease management, prevention and wellness, mental health, and dental health; and performs other duties as required.

ESSENTIAL FUNCTIONS OF THE JOB:

- Performs all Primary Job Responsibilities listed for Paramedic;
- Examines, screens, treats and coordinates health services for patients;
- Conducts post-hospital release follow-up care including, but not limited to, monitoring medication, dressing changes, and checking vital signs;
- Observes, records, and reports to physician, patient's conditions and reactions to drugs, treatments, and significant incidents;
- Conducts patient education, including diabetes prevention/treatment, hypertension, Congestive Heart Failure (CHF), Chronic Obstructive Pulmonary Disease (COPD), falls assessment, injury evaluation, geriatric frailty visits, and nutrition;
- Administers patient care consistent with department protocols and physician orders;
- Coordinates appointments and follow-up with physicians and hospitals;
- Develops and completes appropriate reports and templates for the Community Paramedic Program; and
- Attends meetings as requested and available.

ADDITIONAL EXAMPLES OF WORK PERFORMED:

- Cleans and maintains (minor maintenance) vehicles;
- Cleans and maintains living quarters;
- Maintains records of vehicles, supplies, training and daily work; and,
- Performs other related duties as assigned

GENERAL INFORMATION:

The supervisor makes assignments in terms of shifts to be worked and the general scope of the work assignment. The incumbent performs the work in accordance with the procedures, policies and medical orders provided. The incumbent must exercise judgment in applying the proper guideline to the proper situation. The work is spot checked and evaluated on the basis of feedback from the patient, medical staff and others.

MINIMUM QUALIFICATIONS:

- Must possess and maintain:
    - National Registry of EMT's Paramedic certification
    - State Paramedic license for state in which they reside
    - CPR for the Health Care Provider
    - Advanced Cardiac Life Support
    - Pediatric Advanced Life Support
    - Pre-hospital Trauma Life Support or Tactical Combat Casualty Care
    - Within a 12-month period of placement on team must obtain their Community Paramedic Certification and either Flight Paramedic Certification or Critical Care Paramedic Certification
    - Minimum of 5 years of field paramedic experience
    - Ability to work on a sustained deployment in potentially austere conditions
- **Good ability to:**
    - perform technical medical skills with a high degree of accuracy;
    - understand and effectively deal with emotional and medical needs of victims of injuries, acute illnesses, or psychological emergencies;
    - maintain a professional and objective approach to the care of ill or injured persons;
    - learn new concepts in rescue and medical skills and techniques and in pre-hospital care;
    - perform a variety of limited mechanical work involved in the use, testing and maintenance of rescue and medical equipment;
    - direct the work of, and teach other personnel;
    - understand and follow oral and written instructions and orders;
    - maintain a profession al attitude when representing the Company;
    - establish and maintain effective working relationships with other employees, assisting agencies, hospital personnel, and the general public;

- drive and operate emergency ambulance units; and,
- author reports with narrative and numeric information.
- Additionally, incumbents must maintain a high degree of academic and practical knowledge in emergency medicine, and must attend sufficient continuing education classes, courses, and seminars both on and off duty to maintain annual certification, as required by the state in which you will be working.

OTHER REQUIREMENTS:

The work requires the incumbent to operate emergency medical vehicles, move medical equipment and extract injured persons from a wide variety of situations. Situation can involve vehicular, industrial and residential accidents, injuries or illness and occur anywhere in our coverage area. At times the work requires movement over various types of terrain, (hilly, steep, rocky, rough, and/or wet/slippery surfaces). The incumbent at all times must be able to carry or help carry someone from the site of the injury to the mode of transportation (vehicle/helicopter) and attend the injured party to the hospital. In order to perform a physical assessment of the injured party, the incumbent must see, hear, and communicate with the injured party.

Incumbents will be issued and must wear Company issued uniforms while on duty; additionally, incumbents will be responsible for the maintenance and cleaning of uniforms, as well as all issued equipment.

Incumbents are required to carry a Company issued pager/radio at all times in order to receive immediate notification of an assignment.

****PLEASE NOTE:**

Pafford Emergency Medical Services reserves the right, at the discretion of the appropriate appointing authority, to waive any of the minimum qualifications for those applicants whose general or specific qualifications would otherwise qualify the applicant for the position or lead the appointing authority to believe that the applicant can perform the assigned duties and fulfilling the assigned responsibilities.

Preface to Program Guidelines

Welcome to the program guidelines established for the Community Paramedicine Program. Each program has an individual guideline that will guide you down a path meant to achieve an individually tailored plan of care or plan of action that will provide the patient with the most appropriate healthcare with the end achievement being to keep that patient from returning to the hospital for the same disease process while in our care.

In this part of the manual you can find treatment modalities on all CP Programs as follows:

- Exam Guidelines and Techniques – Comprehensive and Focused
- Diabetes
- Chronic Obstructive Pulmonary Disease
- Congestive Heart Failure
- Cardiovascular Care – Post Myocardial Infarct and Unstable Angina
- Cerebrovascular Incidents
- End-Stage Renal Disease & Renal Insufficiency
- Gastrointestinal Disease Processes
- Long-term home antibiotic therapy
- Integumentary Compromise, Cellulitis, Wound-Care
- Psychiatric Care
- Seizures
- Depressed Socioeconomic Status

It is important to note that while using guidelines for patient care in the field; one must make their approach with caution, care, and understanding. Your plan of care hinges on your ability as a clinician to successfully complete, document, and understand thoroughly your initial patient assessment. The patient's disease process(es) and your clinical reasoning and critical thinking skills must be used to formulate a plan that will improve the patient's overall picture of health.

General Patient Visit Guideline

This guideline should serve as a basic standard of care for a routine patient home visit. Any deviation from this guideline should be clearly and completely documented in the patient visit record.

Patient History Taking Measures:

Perhaps the most important piece of data collection when formulating a plan of care for your patient is knowing where the patient has come from. Familial, social, or personal and childhood history are pertinent for successful care. Generally, for a routine visit you will need to conduct a focused physical assessment pertaining to the patient's diagnosis and CP program admission criteria.

You will refer to the admission program for which the patient is being seen for.

Routine Patient Visit Planning & Coordination:

1. Prior to initiation of patient contact obtain dispatch and visit information to include: patient complaint/illness/reason for visit. Review any available previous pertinent patient care records.
2. Attempt to contact patient residence to give them additional notice of your visit, however if you are unable to contact via phone, it is still necessary to attempt to make physical contact by visiting the residence.
3. Upon arrival, ensure scene safety at the residence. Note that this is a general or routine visit guideline and prior patient contact in the home will have been made. However, do not be negligent in assuring your own safety when entering the home.
4. Assure privacy for the patient assessment in the home
5. Based on a routine visit, the exam should be a focused physical assessment based on the admission criterion.
6. Record all pertinent diagnostic studies that are indicated for the patient (blood pressure, pulse oximetry, respiratory rate, heart rate, ECG 4-lead, ECG 12-Lead, I-STAT, EtCO2, radiology et al.).
7. If the on-scene clinician finds the patient to be unstable or finds other indications that the patient may need or benefit from transport to the local ED, then the clinician will contact OLMC for further direction. Exceptions are for life threatening illness and or injury, in which case the on-scene clinician should exercise his right to request a 911 response unit immediately for transport to the hospital ED.
8. Follow the appropriate guidelines for care based on admission criteria.

If the need arises to deviate from original plan of care based on admission criteria, contact medical control and follow the guidelines listed below.

1. Establish contact with medical direction via radio, telephone or video telehealth connection where available.
2. Have a report prepared that summarizes your findings and clinical reasoning for the changes you wish to make to the patient's plan of care.
3. Begin treatment modality while monitoring the patient's vital signs.
4. Record the patient's responses in your documentation
5. Remain with the patient throughout the course of treatment and until the patient feels comfortable with your departure or the decision to transport the patient has been made.

General Exam Techniques: Focused Assessment

1. Identify the body system review that is indicated
2. Proceed with initial assessment
3. Based on assessment findings, make your decision to carry through with regularly schedule treatment and care plans or transition the patient to a 911 response and call for transport to the patient's home facility
4. The focused physical exam is ideal for established patients that have routine visits with a provider in a setting that allows the provider to stay aware of the patient's condition on a regular basis.
5. In a focused examination or assessment, the idea is to address symptoms pertaining to an isolated area of the body or bodily system, i.e. a patient recovering from a myocardial infarct should be subject to a cardiovascular assessment or examination.
6. For further guidance on focused physical assessment, please refer to the SOG for the program to which the patient is admitted or the complaint that the patient has.

Initial Patient Visit Guideline

This guideline should serve as a basic standard of care for an initial patient home visit. Any deviation from this guideline should be clearly and completely documented in the patient visit record.

The initial visit will be substantially longer and more intrusive than the more common routine visits that you will be conducting. It is a good idea to make the patient aware of the visit requirements so that they are not caught off guard.

Perhaps the most important piece of data collection when formulating a plan of care for your patient is knowing where the patient has come from. Familial, social, or personal and childhood history are pertinent for successful care. Generally, for an initial visit you will need to conduct a comprehensive assessment of the patient to gain fundamental and personalized knowledge about the patient that will strengthen your relationship as a healthcare provider with that patient.

Initial Visit Planning & Coordination:

1. Prior to initiation of patient contact obtain dispatch and visit information to include: patient complaint/illness/reason for visit. Review any available previous pertinent patient care records.
2. Attempt to contact patient residence to give them additional notice of your visit, however if you are unable to contact via phone, it is still necessary to attempt to make physical contact by visiting the residence.
3. For an initial home visit, you will need to conduct a complete home safety assessment. You will find a home safety assessment for in appendix ???
4. Conduct a complete medication reconciliation making sure that you account for all medications found in the home.
5. Develop a medication administration plan that the patient can understand and follow daily.
6. Assure privacy for the patient assessment in the home
7. An Initial visit warrants a comprehensive examination for the patient.
8. Record all pertinent diagnostic studies that are indicated for the patient (blood pressure, pulse oximetry, respiratory rate, heart rate, ECG 4-lead, ECG 12-Lead, I-STAT, EtCO2, radiology et al.).
9. If the on-scene clinician finds the patient to be unstable or finds other indications that the patient may need or benefit from transport to the local ED, then the clinician will contact OLMC for further direction. Exceptions are for life threatening illness and or injury, in which case the on-scene clinician should exercise his right to request a 911 response unit immediately for transport to the hospital ED.
10. Follow the appropriate guidelines for care based on admission criteria.

Comprehensive Patient Assessment:

1. Identifying data and the source of the history; reliability
    a. Identify patient data or demographic information
    b. Identify the source of the history
    c. Document the reliability of the information being gathered
2. Chief Complaint
    a. The one or more symptoms or concerns causing the patient to seek care.
3. Present Illness
    a. Should amplify the chief complaint and describe how each symptom or complaint developed
    b. Include patient thought and feelings about the complaint
    c. Allows discovery of pertinent positives and negatives relevant to the review of systems.
    d. List current medications and known allergies (medicinal, environmental, dietary)
    e. List social habits, i.e. dietary routines, smoking, alcohol, drugs et. Al.
4. Past History
    a. Childhood illness or injury
    b. Adult Illness (dates for medical, surgical, OBGYN, and psychiatric)
    c. Adult Injury
    d. Include health maintenance practices such as immunizations, health screenings, lifestyle issues and home safety.
5. Family History
    a. Outline age and health or age and cause of death, of siblings, parents, and grandparents.
    b. Document presence or absence of specific illnesses in the family, such as hypertension, coronary artery disease, cerebrovascular disease, cancer, myocardial infarct et. Al.
6. Personal and social history
    a. Educational level, family of origin, current household, persona interests, and lifestyle.
7. Review of Systems
    a. Complete a physical assessment (you may intertwine the review of systems and physical examination)
    b. The physical assessment is a unique privilege as a clinician and should be respected and honored as such. Make the extra effort to assure your patient is comfortable and understand what you are doing. Be respectful and extend every effort to ensure the privacy of your patient.
    c. Refer to appendix ??? for a guide on necessary equipment for your physical assessment.
    d. Remain familiar with the cardinal techniques of the physical examination; Inspection, Palpation, Percussion and Auscultation.
    e. Always take the appropriate precautions whether it be standard or universal
    f. Consider appropriate positioning and lighting when preparing to conduct a physical examination.

g. Overview of the Complete Physical Examination
    i. General Observation of patient physical presence and development.
        1. Obtain an accurate weight and height to calculate the BMI. Note posture, gross motor activity and gate. Patient grooming techniques and dress as well as personal hygiene should be noted as well. Pay attention to the reaction or facial expressions of the patient including manner, affect and reactions to you as well as the other surroundings. Determine the patients state of awareness and level of consciousness by listening to the patient's communications and manner of speaking.
    ii. Vital Signs
        1. Identify and record the blood pressure, heart rate, respiratory rate and temperature.
    iii. Head, Eyes, Ears, Nose, Throat (HEENT)
        1. Head
            a. Examine the hair, scalp, skull and face.
        2. Eyes
            a. Check Visual acuity and screen visual fields noting the position and alignment of the eyes.
            b. Observe the eyelids, sclera and conjunctiva of each eye.
            c. With oblique lighting; inspect the cornea, iris and lens of each eye.
            d. Compare each pupil and test their reaction to the presence of light (PERRLA – Pupils equal, round, reactive to light, and accommodation)
            e. Assess the extraocular movement.
            f. With an ophthalmoscope (if equipped) inspect the ocular fundi.
        3. Ears
            a. Inspect the auricles, canals and drums.
        4. Nose (and sinuses)
            a. Examine the external nose
            b. Inspect each nare, septum, turbinates and nasal mucosa with a light.
            c. Palpate for tenderness on the frontal and maxillary sinuses.
        5. Throat (mouth and pharynx)
            a. Inspect the lips, gums, teeth, tongue, oral mucosa, palate, tonsils and pharynx
            b. Consider a review of cranial nerves at your discretion during this portion of the examination.
    iv. Neck
        1. Inspect and palpate the cervical lymph nodes, notating any masses or unusual pulsations in the neck.
    v. Back
        1. Inspect and palpate the spine and muscles of the back.

vi. Anterior/Posterior Thorax
    1. Anterior – Inspect, palpate, and percuss the chest. Listen to the breath sounds and note and adventitious sounds heard.
    2. Posterior – Inspect, palpate, and percuss the chest. Listen to the breath sounds and note any adventitious sounds heard. Palpate the spine and muscles of the upper back.

vii. Superficial lymphatic system
    1. Palpate the central and lateral axillary nodes.
    2. Palpate the epitrochlear nodes.

viii. Cardiovascular System
    1. Observe the jugular venous pulsations and measure the jugular venous pressure in relation to the sternal angle. Inspect and palpate the carotid pulsations. Listen for carotid bruits.
    2. Inspect and palpate the precordium.
    3. Listen at each auscultatory area with the diaphragm of the stethoscope. Listen at the apex and the lower sternal border with the bell. Listen for the first (S_1) and second (S_2) heart sounds and detect any physiologic splitting of the second heart sounds. Listen for any abnormal heart sounds or murmurs.

ix. Abdomen
    1. inspect, auscultation, and percuss the abdomen. Palpate lightly then deeply.
    2. Assess the liver and spleen by percussion and then palpation.

x. Lower extremities
    1. Examine the legs, assessing three systems while the patient is still supine. Each of these three systems can be further assessment patient stands.
        a. Peripheral vascular system
            i. Palpate the following pulses and, if indicated, the popliteal pulses. Palpate the inguinal lymph nodes. Inspect for lower extremity edema, discoloration, or ulcers. Palpate for pitting edema. Inspect for varicose veins.
        b. Musculoskeletal system
            i. Note any deformities or large joints. Check range of motion in hips, knees, and ankles. Examine the alignment of the spine and its range of motion, the alignment of the legs, and the feet.
        c. Nervous system
            i. Assess lower extremity muscle bulk, tone, and strength; also assess sensation and reflexes. Observe any abnormal movements. Observe the patient's gait and inability to walk heel-to-toe, walk on the toes, walk on the heels, hop in place, and do shallow knee bends. Do a Romberg test and check for pronator drift.

xi. Nervous system
    1. Mental Status
        a. This may have been completed earlier in your exam. If still indicated, assess the patient's orientation, mood, thought process, thought content, abnormal insights, and judgements. Also, memory and attention, information and vocabulary, calculating abilities, abstract thinking, and constructional ability.
    2. Cranial Nerves
        a. If not already examined, check sense of smell, strength of the temporal and masseter muscles, corneal reflexes, facial movements, gag reflex, and strength of the trapezia and sternomastoid muscles.
    3. Motor System
        a. Muscle bulk, tone, and strength of major muscle groups.
        b. Cerebellar functionality – Rapid alternating movements, point-to-point movements such as finger-to-nose and heel-to-shin.
    4. Sensory system
        a. Pain, temperature, light touch, vibration, and discrimination.
        b. Compare right with left and distal with proximal on limbs.
    5. Reflexes
        a. While you may consider doing a full reflex assessment, for our healthcare goals, it will be acceptable to perform a biceps and patellar reflex assessment.

h. Comprehensive review of all major bodily systems;
    i. General
        1. Usual weight, recent weight changes (gauge by changes in clothing fit and comfort) fever, weakness or fatigue.
    ii. Skin
        1. Rashes, lumps, bruising, sores, itching, dryness, change in color in; hair or nails; changes in size and appearance of skin tags, moles, or other blemishes.
    iii. Head, Ears, Eyes, Nose & Throat (HEENT)
        1. Head
            a. Headache, head injury, dizziness, lightheadedness
        2. Eyes
            a. Vision, corrective lenses, last eye exam, pain, redness, excessive tearing, double or blurred vision, spots, specks, flashing lights, glaucoma or cataracts.
        3. Ears
            a. Hearing, tinnitus, vertigo, earaches, infections, discharge and use of hearing aids
        4. Nose and Sinuses
            a. Frequent colds, nasal stuffiness, discharge or itching, hay fever, epistaxis or sinus trouble
        5. Throat (mouth and pharynx)
            a. Condition of teeth and gums, bleeding gums, if dentures (if dentures, do they fit appropriately?) last dental examination, sore tongue, dry mouth, frequent sore throat, hoarseness

iv. Neck
    1. Swollen glands, stiffness, goiters or pain
v. Breasts
    1. Lumps, pain or discomfort, nipple discharge, self-examination practices
vi. Respiratory
    1. Cough, sputum (color & quantity), hemoptysis, dyspnea, wheezing, pleurisy, last chest x-ray, asthma, bronchitis, pneumonia, and tuberculosis
vii. Cardiovascular
    1. Heart Problems (good base question for patients that have no formal medical training) high blood pressure, rheumatic fever, heart murmurs, chest pain or discomfort, palpitations, dyspnea, orthopnea, paroxysmal nocturnal dyspnea, edema, results of past ECG's or other cardiovascular health tests such as echocardiograms, stress tests, lab values et al.
viii. Gastrointestinal
    1. Trouble swallowing, heartburn, changes in appetite, nausea, bowel movement patterns, stool color and size, pain with defection, rectal bleeding or black and tarry stools, hemorrhoids, constipation, diarrhea. Food intolerance, abdominal pain, excessive belching, or passing of gas. Jaundice, liver or gallbladder troubles or hepatitis.
ix. Peripheral Vasculature
    1. Intermittent claudication or leg cramps; varicose veins, past clots in veins, swelling in the calves, legs or feet. Color change in fingertips or toes during cold weather; swelling with redness or tenderness.
x. Genitourinary
    1. Frequency of urination, polyuria, nocturia, urgency, burning or painful urination, hematuria, history of common infection, flank pain or kidney pain, renal calculi, ureteral colic, suprapubic pain or incontinence.
        a. Male specific;
            i. Reduction in the caliber or force of the urinary stream, hesitancy or dribbling.
            ii. Hernias, discharge from or sores on the penis, history of STI's and their treatments. Sexual habits. Interest, functionality, satisfaction, birth control methods and associated problems. Concerns about HIV infection.
        b. Female Specific:
            i. If menstruation still present – age at menarche, regularity, frequency, and duration of menstruation. Dysmenorrhea or premenstrual tension.
            ii. If menstruation no longer present – age at menopause, menopausal symptoms, postmenopausal bleeding.
            iii. Vaginal discharge, itching, sores, lumps, STI's and their treatments. Gravid history – number of pregnancies, live births, abortions (spontaneous and induced), complications of pregnancy, birth control methods. Sexual preference, interest, function, satisfaction, any sexually related problems such as post-coital bleeding or dyspareunia. Concerns about HIV infection.

xi. Musculoskeletal
    1. Muscle or joint pain, stiffness, arthritis, gout or back pain. If present, describe location of affected joints or muscles and any swelling, tenderness, pain, redness, stiffness, weakness or limitation of motion or activity; including timing of the symptoms (i.e. morning or evening) duration and any history of traumatic incidents. Neck or lower back pain. Joint pain with systemic features such as fever chills, rash, anorexia, weight loss or weakness.

xii. Psychiatric
    1. Nervousness or tension. Mood; including depression, suicidal or homicidal thoughts or ideas, suicide attempts if relevant.

xiii. Neurologic
    1. Changes in mood, attention or speech; changes in orientation, memory, insight or judgement. Headaches, vertigo, fainting or blackouts. Weakness, paralysis, numbness or loss of sensation, tingling, tremors or other involuntary muscle spasms or seizures.

xiv. Hematologic
    1. Anemia; easy bleeding or bruising; past transfusions and transfusion reactions.

xv. Endocrine
    1. Heat or cold intolerance, excessive sweating, excessive thirst and/or hunger, polyuria or changes in shoe or glove size.

It is important to note that often, you will be able to intertwine your physical examination with questions about health history. These skills will continue to be honed within your practice throughout your career and should be continually developed. It is important to note that as a clinician, you are entering a new realm of physical assessment, history taking, and relationship building with your patients that you may not be used to. Remember not to rush and to apply clinical reasoning while building a therapeutic rapport with your patients.

Diabetes Mellitus – Community Paramedicine Program Guideline

Diabetes Mellitus - A disorder of carbohydrate metabolism, characterized by hyperglycemia and glycosuria. This is the result of inadequate production or utilization of insulin. There are two types.

- Type I – Occurs abruptly with an absence of insulin due to a decline in the insulin producing cell. Because of the periodic administration of insulin, it is called insulin dependent diabetes.
- Type II – Most common type (90%), affects people who are over 40 years of age, and overweight. It is usually controlled by a diet, exercise, and oral antidiabetic drugs.

Primary Objective – The prevention of worsening conditions and to assess the diabetic patient and treat patients with extremes of blood glucose who do not require urgent ED evaluation. Patients who should be transported immediately include those who have significant vital sign abnormalities or signs of significant infection.

Care Directives:

1. General Directives
    - **a.** Follow Assessment Guidelines based on Initial or follow visit;
    - **b.** Obtain and review patient health history and primary care provider's orders prior to evaluation when available. If not already done, measure the blood glucose level.
    - **c.** Adhere to the patient's plan of care as written by the attending or primary care physician in conjunction with this guideline.
2. Hypoglycemia
    - **a.** If the CP is in attendance for the hypoglycemic patient or is dispatched to the residence for a 911 response, treat the patient as follows;
    - **b.** If the patient is alert but demonstrating signs of hypoglycemia and the blood glucose is less than 60mg/dl administer oral high caloric fluids.
    - **c.** If the patient is not alert or able to safely swallow oral fluids, or vital signs are unstable;
        - i. Evaluate and maintain airway, provide oxygenation and support ventilations as needed. Consider immediate transport.
        - ii. If no suspicion for spinal injury exists, roll patient into a lateral recumbent position.
    - **d.** If the patient is demonstrating signs of hypoglycemia and the blood sugar is less than 60mg/dl:
        - i. Administer dextrose 10% (Mix 25gm Dextrose in 250ml NS and Mix well). Administer via IV over 10 minutes (minimum).
        - ii. If patient will tolerate; administer 1 tube oral glucose
        - iii. Once patient becomes more aroused and will tolerate, prepare high caloric oral fluid and a small meal for the patient in order to maintain blood sugar.

iv. Recheck blood sugar at 10 and 30 minutes post medication administration.

3. Hyperglycemia

a. Asses the patient's medication and diet.

b. Obtain blood sugar for evaluation.

c. Assist the patient in the administration of their prescribed medication as indicated.

d. Contact medical direction when consideration of the following persists;

i. Crystalloid fluids

ii. Temporary fluctuation of insulin dosing

iii. Kayexalate (single dose with 24-hour follow up and labs

iv. Consider preemptive potassium administration if known hypokalemia is present.

e. Recheck blood glucose q 30 min during treatment phase.

f. Contact medical direction for any deviation or the patient's written discharge or home care plan from their physician. Discuss treatment and continuity planning.

g. Continue treatment and follow general guideline until a patient disposition is determined and continuity plan is completed with the assistance of your medical direction or patient's primary care physician.

4. Diabetic Ketoacidosis (DKA)

a.

Chronic Obstructive Pulmonary Disease - COPD

Chronic Obstructive Pulmonary Disease – Also known as COPD, is a progressive disease process that causes dyspnea. The term COPD focuses on two main disease processes, emphysema and chronic bronchitis.

1. Chronic Bronchitis –
2. Emphysema –

Primary Objectives – When battling COPD as a Community Paramedic, it is important to understand where your patient is in their development of the disease process. Likely, shortness of breath followed by triggers of exacerbation have already taken hold, so our purpose is not to prevent the disease process, but rather to slow further development. Managing COPD can be very difficult for many patients; therefore, education plays a vital role in the successful treatment of the patient. Understanding your patient's comorbidities is equally as important as they may have a direct impact on future exacerbations.

Care Directives:

1. General Directives

- **a.** Follow Assessment Guidelines based on Initial or follow visit;
- **b.** Obtain and review patient health history and primary care provider's orders prior to evaluation when available. If not already done, measure the blood glucose level.
- **c.** Adhere to the patient's plan of care as written by the attending or primary care physician in conjunction with this guideline.

2. COPD Care Guidelines

Congestive Heart Failure – CHF

Congestive Heart Failure – also known as CHF is the leading cause of hospital readmissions in the united states and is estimated to affect 1 in every 5 patients older than 65 by the year 2050 according to literature from the American Heart Association. CHF can occur secondary to either systolic or diastolic dysfunction or right-sided heart dysfunction. CHF is very complex and can affect multiple organ systems therefore, understanding your patient's comorbidities is essential to successful treatment.

Primary Objectives – Contributing factors or comorbidities are generally the root cause for congestive heart failure. The FDA has no currently approved treatments for diastolic heart failure, thus the treatment plans focus on the underlying cause of the heart failure. Your clinical assessment skills and history taking will prove to be the most useful part of your plan of care. Understanding your patient's needs based on their functional capacity class during your course of treatment and care. The patient's PCP may not be the primary manager of care, depending on the length of diagnosis or current stage, however, once the primary manager is identified, you should coordinate with that physician and your medical director to facilitate the plan of care in the home.

Care Directives –

1. General Directives
    - **a.** Follow Assessment Guidelines based on Initial or follow visit;
    - **b.** Obtain and review patient health history and primary care provider's orders prior to evaluation when available. If not already done, measure the blood glucose level.
    - **c.** Adhere to the patient's plan of care as written by the attending or primary care physician in conjunction with this guideline.
2. CHF Specific Guidelines
    - a. Obtain the plan of care from the primary manager. Note, this may be identical to directive 1.a. however, in CHF, there may be a different primary manager for the patient's case; if this patient is enrolled in the CHF program as primary, we need to be certain that we are following the appropriate care guidelines from the appropriate physician.
    - b. Identify the goal "dry" or optimal weight for this patient.
    - c. Identify any diuresis protocols set forth by the primary manager.
    - d. Identify dietary and fluid restrictions; this includes a dietary review of the home and additional help with meal planning. Many times, meal planning can be substituted with a dietary professional upon discharge. The CP should understand their responsibility in helping to educate the patient on those dietary restrictions and help to remove food high in sodium content from their diet.
    - e. Identify the physician's recommendation for the patient's "threshold of exacerbation" weight and be certain to monitor weight PRN based on the patient's acuity level.

3. CHF Treatment Guidelines
    a. Follow the primary manager's MAR and discharge plans for the patient.
    b. Establish a need to request a change to those orders based on the patient's presentation.
    c. If indicated, identify the need to transition from a CP visit to a 911 response and transport to the appropriate facility.

Hypertension

Hypertension – Medicare defines hypertension as a chronic systolic blood pressure greater than 140mmHg and a diastolic blood pressure greater than 90mmHg. Typically, we will not have a patient in a primary HTN program, as it is usually not the root cause of the patient's problems.