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2016

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**1**

**RECOGNITION AND REPORTING OF ABUSE**

**REPORTING DOMESTIC VIOLENCE**

PURPOSE:

1. To aid the nurse in recognizing signs and symptoms of abuse, whether sexual,

emotional, physical, or neglect in the adult and child.

2. To refer suspected abuse to the proper agency for assistance in accordance with

Georgia Code Section 19-7-5.

PROCEDURE:

Each patient admitted to CRMC is evaluated for signs of abuse during the admission

assessment. In the Med/Surg admission assessment and in the OB admission assessment

any positive response to the question "signs of physical or emotional abuse”, or in the pediatric

admission assessment, any positive response to any one of the four questions relative to abuse

results in a referral to the Department of Family and Children Services followed by a referral

to Social Services Department via Order Entry for follow up.

RESPONSIBLE PARTY:

The nurse completing the admission assessment is responsible by law for making the referral

to the Department of Family and Children Services. The nurse should also send a referral via

Order Entry to the Social Services Department. If Department of Family and Children Services

is not on duty, then the nurse should refer to the Director or Clinical Supervisor and the two

will confer and a call placed to the “on-call” Department of Family and Children Services

personnel. A list of the "on-call" personnel for Department of Family and Children Services

is located at every nursing station and the Emergency Room.

REPORTING DEMESTIC VIOLENCE:

Social Services staff will assist the health care worker, who identifies the abuse, in educating

the victim of crisis resources and assistance. Health care worker gives crisis resource infor-

mation to suspected victim. Referral is made to Social Services Department if victim needs

further assistance (has questions, needs placement).

**ADVANCE DIRECTIVES UPDATE**

It is the policy of this institution to honor in accordance with the law, an adult patient’s

right to make decisions regarding treatment, including and adult patient’s right to consent

to, refuse or alter treatment plans and the right to formulate advance directives which will

govern if the patient should become incapacitated. In the absence of a written directive,

usual facility and service policies and procedures will be followed.

**2**

An Advance Directive is a document in which a person either states choices for medical

treatment or designates who should make treatment choices if the person should lose

decision-making capacity. I.e.: Living Will or Durable Power of Attorney.

During the admitting process (if not accomplished during the pre-admission process), the

patient should be asked if he/she has an advance directive. A packet of information is

provided to the patient that includes a glossary, informational brochure, checklist sheet,

Rights, Options, Law, Non-Discrimination Clause, Facility’s Policy Statement, How to

Execute Advance Directive After Admission, How to Change or Revoke an Advance Directive. If the patient desires further information or wishes to execute an advance directive, a referral

is made immediately to the Nursing Clinical Director. If the patient desires not to discuss the issue further, the fact that the patient has no advance directive is documented on the checklist sheet.

If the patient is unable to communicate and unaccompanied, the information packet is placed with the medical record, to be given the patient at the point (if ever) the patient becomes capacitated. If the patient is unable to communicate and is accompanied, the person in attendance is questioned regarding the existence of an advance directive.

If the patient has an advance directive, a copy should be requested, dated, authenticated (signed or initialed) by the patient or their designee and placed in the medical record. A sticker that says "Advance Directive" is placed on the outside of the chart. The advance directive copy should always remain in the record, not to be "thinned out" if the record becomes voluminous.

A copy of the advance directive should be sent with the patient in the event of a transfer to another facility or health care institution.

If the patient desires to change an existing advance directive during an admission, contact the **clinical director.**

Patients may change or revoke their advance directives at any time in one of the following ways:

1. Defacing, destroying, obliterating or tearing the document

2. A written revocation, signed and dated by the patient and/or the patient's agent

3. Verbal or nonverbal expression of the wish to revoke in the presence of an adult witness

who verifies the expression of intent in writing. Refer to the policy for more information on

executing a Durable Power of Attorney and/or Living Will.

**Refer to the policy for more information on executing a Durable Power of Attorney and for a Living Will.**

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**BLOOD AND BLOOD PRODUCTS ADMINISTRATION UPDATE**

**Note: Administration of blood and blood products is a responsible procedure and therefore only an RN may administer blood, and that RN must first be in-serviced and then be observed by another RN a recommended three times. Also, each unit of blood must be checked by two RN's for compatibility before administration.**

1. Consent for administration of blood/blood products must be obtained.

2. There should be an order to cross match and an order to transfuse.

3. **Once the blood has been released from the lab, the transfusion must be initiated within**

**30 minutes.**

4. Ascertain that there is a physician's order. Then two RN's, one looking at the cross match

slip/medical record and the other at the unit of blood, check:

a. blood type and RH factor on the bag, cross match slip and blood tag.

b. the patient's complete name, medical record number on the cross match

slip and blood tag

c. the blood tag number listed on the bag, the cross match slip and the

blood tag

d. the compatibility section on the cross match slip

e. the expiration date on the bag

The two RN's **document** this check by placing their names and titles on the cross match slip at the end of the line listing the particular bag number.

5. Utilize blood and body fluid precautions during setup and administration.

6. **0.9 Normal Saline** is the **only fluid type** compatible with blood.

7. After starting the infusion, stay with the patient during the first 15 minutes or 50cc's,

whichever comes first. This is the time in which a transfusion reaction is likely to occur.

Symptoms of reaction may include fullness in head, chills, fever, ringing in ears, chest pain,

shortness of breath, sudden headache, flushed face, rapid pulse, or itching. Take vital signs

at the end of this time and as indicated by the patient's reaction.

8. In the event of a suspected reaction:

1. stop the blood and take vital signs

2. notify physician

3. call the blood bank

4. send to the laboratory: the blood container including the

administration set; and a **blood transfusion reaction form** with the

nursing portion completed.

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9. One unit of blood, unless specified by the physician, should infuse in 1 1/2 to 4 hours.

10. Vital signs should be taken at any time indicated during the remainder of the transfusion

and once the transfusion is completed.

11. Chart the procedure, documenting the two RN checks, blood type and RH, type of blood

component, bag #, site infusing, method of infusing and rate. Upon completion, document

time of completion, vital signs, amount infused of blood and N.S. results, condition of the

patient and person discontinuing.

12. The blood tag should be completed with the date and time ended, how much infused, ending

vital signs and patient tolerance to the infusion. White copy of the tag is placed in the

patient's chart; the other copies go to the lab.

13. The physician will order blood for children and infants in a set number of cc's to be

administered.

**COLQUITT REGIONAL MEDICAL CENTER**

**NURSING PROCEDURES**

Subject: CARDIO-PULMONARY RESUSCITATION EFFECTIVE: 1/90

REVISED: 7/97 & 9/98

APPROVED:

I. PURPOSE:

To establish and maintain circulation and ventilation in order to maintain perfusion to vital centers to prevent irreversible damage to the brain and kidneys.

II. EQUIPMENT:

A. Crash Cart (Includes):

1. Cardiac arrest board

2. Medications

3. IV equipment

4. Suction and equipment

B. Respiration Box (Includes):

1. Ambu bag with airways

2. Laryngoscope, blades, guide and endotracheal tubes, etc.

3. ABG kits

C. Defibrillator (on crash cart)

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D. EKG Machine

E. Portable Suction (attached to side of Crash Cart)

III. ESSENTIAL STEPS IN PROCEDURE (See Code Management):

IV. 1st Responder:

Initiates Code Blue

Starts CPR

2nd Responder:

Brings Crash Cart

Places Backboard

Connects Ambu bag to O2

Begins ventilations

3rd Responder:

Applies EKG leads

Turns on defibrillator

Runs EKG strip

Opens Crash Cart

Starts IV

Sets up suction

V. WHO RESPONDS WHEN CODE IS INITIATED:

1. Clinical Director

2. ICU RN (if feasible)

3. Respiratory Therapy

4. Physician in house

5. EMTs

6. One ER RN (if feasible)

7. One person from each nursing unit

8. One laboratory person

9. Central Sterile brings 2 IV pumps

VI. Code Blue Pediatric for Inpatients:

Size appropriate emergency pediatric equipment (chest tubes, feeding tubes, IV catheters and intraosseous needles, urinary catheters, B/P cuffs) are assembled in color coded bags according to the Broselowe tape system. All size appropriate RESPIRATORY equipment (ET tubes, laryngoscopes and blades, suction catheters, ambu bags and masks) are in the respiratory box or on the crash cart. The respiratory box has a Broselowe chart indicating what specific size

equipment is required for each color category.

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The location of the Broselowe bags for each unit is as follows:

For 4th floor: Broselowe bags are located above the Pyxis.

For 5th floor: Broselowe bags are ordered from Central Sterile on admission and kept on the

crash cart. The unopened bag is returned to Central Sterile at patient discharge.

For ICU: The Broselowe Cart remains in the unit at all times. Each drawer is colored

coded.

On admission the patient is assigned a Broselowe color according to the patient's height. This color is documented in the admission assessment. A colored armband is placed on the patient and a color coded sheet which states the content of the Broselowe bag is placed at the head of the patient's bed.

Each crash cart is stocked for pediatric emergency medications. On admission after each patient is weighed and this weight is filed in the computer, 2 sets of critical drug sheets are

printed according to the kilogram weight. One sheet includes EMERGENCY MEDICATIONS

and the other includes RAPID SEQUENCE INTUBATION MEDICATIONS. One set of critical drug sheets is placed at the head of the patient's bed and the other in the chart under the medication tab.

The appropriate overhead page for a pediatric code blue is CODE BLUE PEDS. In the event of a CODE BLUE PEDS, the first responder to the code is responsible for calling out the appropriate Broswlowe color. The appropriate color Broselowe bag is then brought to the room with the crash cart.

VII. Code Management:

Any ACLS provider may be team leader of the Code Blue utilizing American Heart

Association ACLS guidelines until a member of the medical staff arrives who will assume the role of team leader.

VIII. Code Blue Sheets:

A Code Blue sheet will be filled out on all codes. A copy of the code sheet is to go to the Pharmacy with the doctor's signature to cover medications ordered during the code for replacement of medications to the crash cart.

**DIABETES MELLITUS UPDATE updated 7/2011**

-Diabetes is a disorder of metabolism with insufficient insulin activity in the blood.

-Normoglycemia is a fasting blood sugar below 100mg/dl or a 2hr post-glucose load (75g anhydrous glucose dissolved in water) less that 140mg/dl. Impaired fasting glucose is diagnosed as a blood sugar equal to or greater than 100 but less that 126mg/dl. Impaired

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glucose tolerance is a 2hr glucose load with a blood sugar equal to or greater than 140 but less than 200. Diabetes mellitus is diagnosed if the fasting glucose is equal to or greater than 126, the 2hr glucose load (75 GM) results in BG equal to or greater than 200, or random

glucose greater than or equal to 200 with symptoms of diabetes. Two blood tests are required on separate days to confirm diagnosis.

-Signs and symptoms of diabetes: polyuria, polydipsia, polyphagia, dehydration, weight loss, weakness, fatigue, blurred vision, itching, dry skin.

-With Type 1 diabetes (previously known as Juvenile Diabetes or IDDM), the pancreas makes little or no insulin. With Type 2 diabetes (previously called adult-onset diabetes or NIDDM), the pancreas produces inadequate insulin, the liver secretes extra glucose, &/or the cells are resistant to the insulin ("insulin resistance").

-Many things affect BG levels (food - portion sizes, pain, stress, inactivity and steroids). All foods contain carbohydrates, protein &/or fat. The total amount of carbohydrate (not just sugar) is what effects blood glucose levels the most. Carb foods include starches (bread, cereal, rice, pasta, crackers, oatmeal, cream of wheat, peas, corn, shelled beans, potato and sweet potato)

and sugar (milk-lactose, fruit-fructose, juice, soda and candy). Many patients "Carb Count". This is counting the amount of carbohydrates in the diet and giving rapid acting insulin according to this amount. Carbohydrate begins to raise BG levels within 15 minutes of eating. One serving of carbohydrate = 15 grams. Each food item in the fruit, starch and milk groups contains about 15 grams of carb. In order to dose insulin according to carb consumption, we must be able to identify and count carb (PLEASE REFERENCE YOUR "HEALTHY FOOD

CHOICES" SERVING GUIDE LOCATED AT THE NURSES STATION):

Breakfast Grams MD orders 1 unit insulin per 10

--------------------------------------- grams of carb (1:10):

1 large bagel (4 oz) 60

1 tsp. margarine 0 87/10 = 8.7 = 9 units insulin

1/2 cup orange juice 15

1 cup skim milk 12

TOTAL - - - - - - - - - - - -87

Dinner Grams MD orders 1 unit insulin per 15

-------------------------------------- grams of carb (1:15):

1 and 1/2 cup

spaghetti noodles 60 90/15 = 6 units insulin

1 C. spaghetti sauce 0

tossed salad w/tomato 0

garlic bread (2 slices) 30

diet coke 0

TOTAL- - - - - - - - - - - - 90

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-There are several different "types" of oral medications now for the treatment of Type 2 diabetes which we now know is a progressive disease.

-Sulfonylureas - stimulate insulin production from pancreas. Examples:

Amaryl, Glucotrol, Glynase, Diabeta, Micronase, PresTab. Most

Sulfonylureas are given before meals to enhance effectiveness. S/E -

hypoglycemia.

-Meglitinides - stimulate insulin production from pancreas. Examples:

Prandin, Starlix. These are short acting and are taken 15 minutes before

meals (only when eating). S/E - hypoglycemia.

-Biguanides - Examples: Glucophage (Metformin), Fortamet, Riomet. Primary

action is to inhibit the release of glucose from the liver. These are

taken with the largest meal of the day to decrease GI S/E. Additional S/E

may include lactic acidosis (therefore is only indicated in pt with adequate kidney

function - per creatinine tests. When performing a test using iodinated contrast

dye, Metformin should be d/c at time of test and 48 hours after.

-Alpha-glucosidase inhibitors - Examples: Precose

(Acarbose) and Glyset. These block the enzymes that break down starches in the gut so

that glucose is absorbed more slowly. They must be taken with the first bite of the meal

to work effectively.

-Thiazolidinediones - Primary action is to reduce insulin resistance by improving

target muscle cell responses to insulin. Examples: Actos and Avandia.

- DPP4 inhibitor - Example: Januvia, Onglyza, Tradjenta;

Blocks enzymes that lead to an increase in incretin hormones (GLP1 and GIP) which

in turn results in decreased glucagon concentrations and increased response of glucose

dependent insulin release.

- Combo drugs - Target sites may include muscle,pancreas, liver, and/or intestines.

These meds increase insulin release and suppress glucose release. Examples:

Glucovance, Metaglip, Avandamet, ActosplusMet.

-A good choice for treatment of moderate hypoglycemia (50-69 mg/dl) is 1 cup milk (preferably skim). Milk has natural sugar and protein which will raise the blood sugar

quickly and hold it. Additional treatment choices include 2 packets of sugar, 4 oz. of

juice or regular soda, 15 grams glucose tablets/gel. If the BG is not >= 70 mg/dl in

15 minutes, this should be repeated until BG >70 (see hypoglycemia protocol) . The

BG should be checked 1 hr. later to make sure it is still > 70.

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-Symptoms of mild hypoglycemia are: cold sweats, faintness, dizziness, headache,

palpitations, nervousness, blurred vision, hunger.

-As the hypoglycemia progresses, the patient may have a personality change being

disagreeable and be unwilling to take anything by mouth. If the hypoglycemia persists,

the patient may have seizures or become unconscious.

-All insulin is categorized as either BASAL or BOLUS. Basal insulins (Lantus/Glargine, Levemir/Detemir, and NPH) are long acting, background insulins that function like a

normal pancreas (therefore should not be held or skipped). Bolus insulins (Humalog/Lispro, Novolog/Aspart and Apidra/Glulisine) are rapid acting and used for meal time coverage and excursions.

-You can buy synthetic human insulins and purified port insulins. Human insulins are made

in the laboratory using recombinant DNA technology, where bacteria are used to make parts

of the human insulin molecule. Animal insulin/Novolin/Humulin insulin should not be interchanged.

-U-100 is the strength of insulin most commonly available. U-100 means 100 units of insulin per cc.

- Mixed insulins should be given within 5 minutes of mixture, if at all possible. Lispro is not stable when mixed and must be given right away. For purposes of home care, mixed insulin (except Lispro) can be stored in the refrigerator 3-4 weeks safely.

-Insulin syringes (for patient's home use) should be chosen according to the amount of insulin a patient will be taking at home. For greater accuracy, if a patient is on 30 units or less, he should be using a 30 unit syringe. If the patient is on 31-50 units, a 50 unit (or 1/2 cc) syringe should

be used. If the patient takes > 50 units, a 1cc syringe is necessary. With the 30 and 50

unit syringes, every line equals one. With the 1cc syringe, every line equals 2.

-For home care knowledge: Do not cleanse needle with alcohol. Alcohol removes

the silicone and makes the injection more painful).

-Insulin is absorbed most rapidly when injected into the abdomen, followed by arms,

thighs, and buttocks. Patients are taught to rotate within 1 site, preferably the abdomen,

using the calendar method. (Ask if you haven't heard of this.)

-Taking insulin at the same time every day is just as important as patients eating on a

consistent schedule.

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-Patients are taught to monitor their blood sugar at least 1 time daily at alternating times unless

their doctor recommends a different schedule. The purpose of this is to prevent the patient

from becoming frustrated with frequent testing, the cost of the strips, and the painful fingers. Alternating times before meals helps the patient/Doctor see what the body is doing

throughout the day. Patients can also check their BS 2 hrs. after a meal. This helps them see the effect of that meal on the BS. The HbA1C (or glycohemoglobin) test is the most accurate way of seeing how the patient has been doing. This gives a 2-3 month average of the BS. Research shows that keeping HbA1C levels less than 7% helps to prevent or delay the long-term complications of diabetes.

-When a patient with diabetes gets sick, the BS usually goes up. It is very important for this person to continue taking their insulin.

-Blood glucose test should be logged in the MAR, patients computer record, and the blood glucose log book.

**COMPARISON OF INSULINS**

------------------------------------------------------------------------------------------------

TYPE Source Color Approximate Length of

Action (Hours)

----------------------------------

Onset Peak End

------------------------------------------------------------------------------------------------

Rapid-acting

Lispro (Humalog) Human Clear 5 min. 1 4-6

Aspart (Novolog)

Apidra (Glulisine)

------------------------------------------------------------------------------------------------

Short-acting

Regular Human Clear 1/2-1 2-3 6-8

Pork

------------------------------------------------------------------------------------------------

Intermediate-acting

NPH Human Milky-white

Pork when mixed 1-1 1/2 6-10 14-18

------------------------------------------------------------------------------------------------

Long-acting

Lantus (glargine) Human CLEAR 1.25hr None 24

Levemir (detemir 1-2 ess. none 24

------------------------------------------------------------------------------------------------

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Mixtures

NPH 70:R30 Human Milky-white

when mixed 1/2 2-12 24

NPH 50:R50 Human Milky-white

when mixed 1/2 1-6 14+

---------------------------------------------------------------------------------------------------

Humalog Mix 75/25 Human Milky-white essentially all same as

when mixed Humulin 70/30 except may

be increased peak action

initially (Humalog

compared to the R in 70/30).

Novolog Mix 70/30 Intermediate acting and

rapid acting component.

\*For all cloudy insulins, pens, and bottles: Roll for 20 seconds to make sure properly mixed. Pen in use stays at room temperature. Keep unopened pens and vials in the refrigerator.

Pens Pens in Use Pens Not in Use

Humulin N lasts 14 days until expiration date

Novolog 70/30 lasts 14 days until expiration date

Humulin 70/30 lasts 10 days until expiration date

Humalog Mix 75/25 lasts 10 days until expiration date

Humalog 50/50 lasts 10 days until expiration date

Humalog lasts 28 days until expiration date

Novolog lasts 28 days until expiration date

Apidra lasts 28 days until expiration date

Lantus lasts 28 days until expiration date

Levemir lasts 42 days until expiration date

Other Injectable Medications:

Symlin - replaces the naturally occurring amylin hormone. It has a glucose dependent action improving pp BG. It also decreases glucagon secretion, increases satiety 7 decreases food

intake, slows gastric emptying. Candidates for this medication include individuals with Type 1 or Type 2 DM who use meal time insulin. Bolus insulin should be decreased by 50% when initiating therapy. Common S/E is nausea. Do not take Symlin if consuming less than 30

grams carbohydrate.

Byetta - mimics the action of a naturally occurring intestinal hormone. Its action increases glucose dependent insulin release, restores initial phase of insulin release, decreases glucagon secretion, decreases food intake and slows gastric emptying. This medication is indicated for Type 2 individuals on either a sulfonlyurea or Metformin. New pen set up done only before initial use of pen.

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Victoza - Mimics the action of naturally produced intestinal hormone. Delays stomach emptying; stimulates insulin secretion; decreases glucagon secretion; may reduce weight.

**TARGET BLOOD GLUCOSE LEVELS**

--------------------------------------------------------------------------------------

People People with

without Diabetes:

Diabetes

--------------------------------------------------------------------------------------

Before Meals <100 mg/dl 70-130 mg/dl

--------------------------------------------------------------------------------------

After Meals

<140 mg/dl <180 mg/dl

--------------------------------------------------------------------------------------

Hemoglobin A1c Less than 5.7% Less than 7%

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**COLQUITT REGIONAL MEDICAL CENTER**

**CLINICAL ALARM SAFETY POLICY**

Subject: Clinical Alarm Safety Effective: 11/19/15

Clinical alarms are defined as any alarm that is intended to protect the patient receiving care or alert the staff that the patient is at increased risk and needs immediate attention. This includes all patient physiologic monitoring and patient care equipment alarms.

**Procedure:**

**A. General provisions:**

1. Biomedical Engineering is responsible for performing regular preventative maintenance and testing on all alarms on patient physiological monitoring and patient care equipment.

2. All clinical staff will ensure that all alarms are set to activate at appropriate settings

for each patient and are sufficiently audible with respect to distances and competing noise within the unit.

3. The above general provisions apply regardless of whether Colquitt Regional Medical Center owns, borrows, rents or leases the equipment for long term or short term use (i.e., demonstration).

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**B. Medical equipment/device alarms:**

1. All hospital and medical staff who use medical equipment shall check alarm parameters, as established by the department.

2. At no time shall hospital or medical staff bypass, shut off or adjust medical equipment alarm volumes to a level that cannot be readily heard when the alarm activates.

3. The hospital staff and/or physician assigned to or treating the patient will immediately respond to medical equipment alarms.

4. Nurses will ensure that equipment and devices that alarm locally at the bedside (i.e., infusion pump alarms) are carefully monitored with special attention given to patient care areas that are remote from a nurse’s station and isolation rooms.

**C. Telemetry alarms:**

1. Designed pre-set critical monitor alarms are unable to be turned off. Non-critical alarms may be adjusted to meet the patient’s medical condition/acuity level and/or physician’s order to decrease “nuisance” alarms.

**D. Alarm failure and alarm-related incidents:**

1. Clincial directors will implement department-specific procedures for response and notification of patient monitoring or clinical equipment alarm failure and procedures to identify alarms that are in disrepair or in need of assessment. Clinical staff will take such equipment out of service to prevent inadvertent reuse.

2. Any patient monitoring or clinical equipment alarm failure that caused or may have caused a death, serious injury, serious illness or a material change in the plan of care shall be reported in accordance with the Hospital Incident Reporting policy. Sentinel Event policy and the Safe Medical Devices Act, as applicable. Hospital staff, biomedical engineering or the department director will immediately take such equipment out of service and secure it.

3. Hospital and medical staff shall not bypass alarm functions. Any bypass of an alarm function will be reported on a hospital incidence reporting system.

**E. Alarm maintenance and testing:**

1. Biomedical Engineering will, as part of the patient care equipment inventory, identify those devices and systems that include physiologic and patient care alarms at the time new equipment is put into place or checked annually.

2. Alarms and alarm settings will be inspected and functionally tested during regularly scheduled preventative maintenance.

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**F. Patient safety and high risk areas:**

1. Based on equipment alarms, priority ratings, and environmental conditions, ICU, ER, and MIU will have an alarm evaluation and management program that consist of the department director being responsible for completing 15 alarm observations a quarter and completing the alarm observation forms. The findings will be reported to the Environment of Care Committee. The Environment of Care Committee will oversee the program along with the Biomedical Engineering Department. Other required components of this program will include:

a) Annual inventory of all alarms

b) Clinical risk and oversight

c) Work with department directors in the development of processes to customize alarms to individual patient care needs

d) Unit specific equipment competencies are completed by staff

e) Environment of Care Committee or other appropriate committee will review all alarm related events

**BEHAVIORAL RESTRAINT AND MEDICAL NECESSITY RESTRAINT**

**COLQUITT REGIONAL MEDICAL CENTER**

**NURSING PROCEDURES**

Subject: Restraint/Seclusion for Violent Effective: 9/90

or Self Destructive Behavior Revised: 3/99, 10/99

01/01, 10/02, 1/06

1/09, 9/09, 11/09

Approved:

Reviewed: 5/05; 1/09; 11/12; 11/14

Purpose: To quickly identify those patients who require restraint due to aggressive or assaultive behavior towards oneself or others associated with drugs, alcohol intoxication

or other severe metabolic pathology.

Definition: A restraint is any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs,

body or head freely. Under this definition, commonly used hospital devices and other practices could meet the definition of restraint, such as:

\* Tucking a patient's sheets in so tightly that the patient cannot move

\* Use of a "bed net" or an "enclosed bed" that prevents the patient from freely exiting

the bed.

Exception: Placement of a toddler in an "enclosed" or "domed" crib.

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\* Use of freedom splints that immobilize a patient's limb

\* Using side rails to prevent a patient from voluntarily getting out of bed

\* Geri chairs or recliners, only if the patient cannot easily remove the restraint

appliance and get out of the chair on his or her own.

A drug or medication when it is used as a restriction to manage the patient's behavior or restrict the patient's freedom of movement and is not a standard or dosage for the patient's

condition is considered a form of restraint. Drugs or medications that are used as part of a patient's standard medical or psychiatric treatment, and are administered within thestandard dosage for the patient's condition, would not be subject to the requirements of this standard.

Orders for the use of restraint must never be written as a standing order or on an as needed basis (PRN.)

**Responsibilities of the staff:**

1. When restraints are used for violent or self-destructive behavior, the patient must

be seen face-to-face within 1 hour after the initiation of the intervention by a:

\* Physician or other licensed independent practitioner; or

\* Registered Nurse or PA who has been trained in accordance with CMS requirements.

This requirement also applies when a drug or medication is used as a restraint. The order

for restraints should state the purpose for the restraint use, the type of restraint to be

used, and the length of time for the restraint to be in use. These time frames are listed

under #5 in this list of staff responsibilities.

1. If a patient's violent or self-destructive behavior resolves and the restraint intervention

is discontinued, the practitioner is still required to see the patient face-to-face and conduct the evaluation within 1 hour after initiation of this intervention.

1. The evaluation would also determine whether there is a continued need for the

intervention, factors that may have contributed to the violent or self-destructive behavior, and whether the intervention was appropriate to address the exhibited behavior. This evaluation should include:

\* The patient's immediate situation

\* The patient's reaction to the intervention

\* The patient's medical and behavioral condition; and

\* The need to continue or terminate the restraints

\* A complete review of systems assessment

\* A complete review of behavioral assessment

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\* A review and assessment of the patient's history, drugs

and medications usage, and most recent lab results,

etc.

1. Appropriate staff will be provided with initial and ongoing education regarding

restraint application. This will include required training/observation of the

techniques at nursing orientation, the annual skills fair and chart review. Staff

will be trained and able to demonstrate competency in the

\* application of restraints, implementation of restraints, monitoring,

assessment, and providing care for a patient in restraints.

\* techniques to identify patient behaviors, events, and environmental

factors that may trigger circumstances that require the use of a restraint;

\* the use of nonphysical intervention skills;

\* choosing the least restrictive intervention based on an individualized

assessment of the patient's medical or behavioral status or condition;

\* the safe application and use of all types of restraints used in the hospital,

including training on how to recognize and respond to signs of physical

and psychological distress (i.e.: positional asphysiz);

\* clinical identification of specific behavioral changes that indicate that

restraint is no longer necessary;

\* monitoring the physical and psychological well-being of the patient who

is restrained, including but not limited to:

~ respiratory and circulatory status

~ skin integrity

~ vital signs

~ any other special requirements needed

~ use of first aid techniques and certification in

the use of CPR

1. If the face-to-face evaluation is conducted by a trained RN or PA, they must consult

the attending physician or other LIP who is responsible for the care of the patient as soon as possible after the completion of the 1 hour face-to-face. This should occur

no longer than one hour before the specified time frame for the next order to occur.

\* Every 4 hours for patients age 18 and over

\* Every 2 hours for patients ages 9 to 17

\* Every 1 hour for patients less than 9 years of age.

1. The patient in restraint for violent or self-destructive behavior will be assessed at

least every 15 minutes with documentation entered on the patient's record and

assigned 1 on 1 care. All patients needing 1 to 1 care will be transferred to

ICU/CCU for this closer observation. Documentation includes but is not limited

to skin integrity, circulation, sensation, nutrition, hygiene, positioning, range of

motion, toileting, and communication with patient, family/significant other.

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7. The patient is transferred as soon as medically stabilized to a secured facility.

1. The need for restraint must be discussed with the patient/family/significant other

with documentation of this discussion made.

The use of restraints must be selected only when other less restrictive measures have been found to be ineffective. Some of these measures include but are not limited to:

\* having family members stay at the bedside of the patient

\* one to one continuous observation.

Reasons for removing restraints for violent or self-destructive behavior include but are not limited to:

\* patient is no longer exhibiting the behavior that the restraints were applied for

\* patient's family is present and restraint is no longer necessary

Strategies for restrain removal for episodes of use include but are not limited to:

\* retry initial restraint prevention measures

\* use of trial period with observation

**COLQUITT REGIONAL MEDICAL CENTER**

**NURSING PROCEDURES**

SUBJECT: RESTRAINT/SECLUSION FOR NON - EFFECTIVE: 06/03

VIOLENT OR NON-SELF DESTRUCTIVE REVISED: 05/05, 01/06

BEHAVIOR 1/09, 9/09, 11/09

APPROVED:

REVIEWED: 1/09

Purpose: To quickly identify those patients who require restraint application due to medical necessity. Restraint/seclusion for non-violent or non-destructive behavior is defined but not limited to: in acute medical or post-surgical care to prevent removal of an invasive line after a documented attempt; temporary limitation of mobility to prevent patient injury from falling; to prevent injury of the patient who due to confusion, disorientation or extreme restlessness, is

unable to make decisions regarding safety.

Definition: A physical restraint is any manual method or physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a patient to move his or her arms, legs, body or head freely.

Orders for the use of restraint must never be written as a standing order or on an as needed basis (PRN.)

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The application of such a restraint may be initiated by the registered nurse responsible for the patient's care. An order must be signed by the licensed independent practitioner within twenty four hours. The order must include the type of restraint being applied as well as the reason why it is being applied. The order for medical necessity restraint expires after twenty four hours. If continued medical restraint is required, the restraint order sheet must be completed by the physician after he has personally assessed the patient.

The need for medical restraint must be discussed with the patient/family/significant other. Documentation of family availability or lack of must be made.

The use of medical restraint must be selected when other less restrictive measures have been found to be ineffective to protect the patient, a staff member or others from harm. Some of the

measures include but are not limited to :

\*having family members stay at the bedside

\*re-orientation to present

\*bed alarm activation

\*side rails up x 2 or 3

\*patient reminders

\*one to one continuous observation

Patients in medical restraint are assessed at a minimum of every two hours. Documentation of assessment is made in the nursing module under the intervention: Restraints. Documentation includes but is not limited to skin integrity, circulation, sensation, nutrition, hygiene, positioning, range of motion, toileting and communication with family/significant other.

Reasons for removing medical restraint include but are not limited to:

\*patient is no longer pulling at medical devices

\*patient is no longer at risk for a fall

\*patient's family is present and restraints are no longer required

Strategies for restraint removal for episodes lasting 48 hours or more include but are not limited to:

\*retry initial restraint prevention measures

\*give the patient something else to do with their hands

\*use an observed trial period with patient unrestrained

Practitioner competency: Appropriate staff will be provided with initial and ongoing yearly in-service regarding restraint application. This will include training/observation of techniques at nursing orientation and the annual skills fair and in chart review.

\*\*\* Nursing staff receive education in restraint application during the nursing orientation process and are required to demonstrate competency at the annual nursing skills fair.

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**COLQUITT REGIONAL MEDICAL CENTER**

**NURSING PROCEDURES**

Subject: Reporting Requirements for Death

Related to Restraint Effective: 1/09

Revised: 9/09

Approved: 1/09

Purpose: Hospitals must report deaths associated with the use of restraint.

1. The hospital must report the following information to CMS:

\* Each death that occurs while a patient is in restraints (whether physical or

drugs were used as a restraint)

\* Each death that occurs within 24 hours after the patient has been removed

from restraint

\* Each death known to the hospital that occurs within one (1) week after

restraint where it is reasonable to assume that use of restraint contributed

directly or indirectly to a patient's death. "Reasonable to assume" in this

context includes, but is not limited to, deaths related to restrictions of

movement for prolonged periods of time, or death related to chest compression,

restriction of breathing, or asphyxiation.

2. Each death referenced in this paragraph must be reported to CMS by telephone no later

than the close of business the next business day following knowledge of the patient's death.

3. Staff must document in the patient's medical record the date and time the death was

reported to CMS.

**INFECTION CONTROL NURSING STAFF UPDATE**

**IV THERAPY**:

1. Change IV sites every 72 hours unless extreme circumstances are documented

(i.e.-lack of another access). Change site within 24 hours if it was not inserted

aseptically (i.e.-emergency situation).

2. Change IV tubing every 72 hours. Exceptions: TPN, Lipids, Change every 24

hours. Blood sets change with each infusion (unless emergency).

3. Filter all TPN and blood. Filter tubings used for patients that are:

a. immunocompromised (by diagnosis or disease process)

(i.e.-cancer, HIV infection, Leukopenic)

b. neonates

c. receiving 3 or more IV access and/or piggyback medications.

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4. Filter any other medications as specifically recommended by manufacturer

practice guidelines. (i.e.-Amphotericin B, Taxal)

5. Do not access IV needleless system with a needle. Swab with an alcohol

prep and access with a syringe tip or administration set.

**DRAINAGE SYSTEMS**

1. Maintain a closed system as much as possible, avoid any unnecessary disconnections.

2. Keep the foley catheter drainage bag below bladder level at all times.

3. Avoid unnecessary contamination when draining contents and wear the appropriate

personal protective equipment.

**ENTERAL FEEDINGS**

1. Change the feeding tube bags and tubing (not the feeding tube itself) every 24 hours.

2. Wash the infusion bottle after each infusion.

3. Do not add fresh formula to formula already hanging.

4. Rinse administration containers and tubing with water before adding fresh formula.

5. Infuse feeding formula within 6-12 hours of hanging. Add only the amount of feeding

that will infuse over 6-12 hours.

6. Keep the head of the bed elevated at least 30 degrees at all times during infusion.

1. Label the contents of the feeding bag with the type of feeding, the time hung, the

amount hung, and who hung it.

**MISCELLANEOUS TOPICS**

1. Notify Infection Control (send referral) for patients with infections, elevated temperature, post-operative wound infections, known or suspected communicable illnesses, etc.
2. Keep Isolation Precautions updated in the computer especially in the Order Entry

Administrative Data Screen. This information is printed on other departmental requisitions (i.e.-Rad., Lab) and alerts them to special patient needs. For work orders, Isolation Precautions can be typed in the "Comments Section" to alert Facility Operations, Information Systems, Personnel, etc. of special precautions.

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3. The nurse may order/institute Isolation Precautions if the physician fails to do so.

4. Isolate patients promptly as indicated.

5. Document the type of Isolation Precautions on the Kardex.

6. Monitor staff compliance with Infection Control Policies, Standard Precautions,

and Isolation Precautions.

7. Notify Infection Control coordinator of "Opportunities for Improvement (OFI)", areas

of concern, in-service topics, etc.

1. Read TB Skin tests 48-72 hours after placement. Read results "transversely" (across

the arm). Measure **any** induration and record in millimeters (mm).

9. Always use "proper technique" as indicated for the task.

10. Be alert for Signs/Symptoms of infection in all patients and document.

11. Clean/disinfect equipment, surfaces in between patients. Use "Foaming

Disinfectant". (i.e.-Bedside commode, exam tables, IV poles, etc)

12. Ice Dispensing: Pre-fill plastic bags with ice before distributing to patient's room.

**Do not** dispense ice using a carafe from patient to patient. Each patient needs their

own individual bag of ice. Wash ice scoop every shift. Visitors do not need to enter

the kitchen area. Ice refills need to be distributed in a plastic bag, not dispensed

directly into patient carafes.

13. **Label** and **bag** all specimens **prior** to placing at the nurses' station. These need to be

contained" before placing in the "clean environment".

14. Reusable instruments need to be transported to the Central Sterile Decontamination

room in a closed, rigid puncture proof **container.** Rinse and soak in enzymatic solution

prior to transporting to Central.

**ISOLATION PRACTICES**

-"Standard Precautions"-Treat ALL patients as if they are infected with blood-borne illness

such as HIV, Hepatitis B.

-"TRANSMISSION BASED PRECAUTIONS" are used to prevent infections:

CONTACT, DROPLET, and AIRBORNE are used in addition to Standard

Precautions. The nurse may order isolation if the Physician does not.

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**CONTACT PRECAUTIONS (Yellow Sign) (Red Sign For Drug-Resistant Bacteria)**

-Contact spread is the most common way germs are spread. Use for patients

known or suspected to have serious illness easily transmitted by direct

patient contact or by contact with items in the patient's environment.

-Examples: Gastrointestional, respiratory, skin, or wound infections or

colonization with multi-drug resistant bacteria (MRSA, VRE) respiratory

syncytial virus (RSV), scabies, impetigo.

-Use gloves, gowns, dedicated equipment plus Standard Precautions.

**DROPLET PRECAUTIONS**  **(Orange Sign)**

-The patient's immediate surroundings (three feet diameter) may contain

infectious germs. Use for patients with known or suspected infections

transmitted by large particle droplets.

-Examples: Meningococcal meningitis, pneumonia and sepsis, pertussis,

streptococcal pharyngitis, pneumonia, or scarlet fever in infants and

young children. Use masks, private room, transport patient with surgical

mask (if possible) plus Standard Precautions.

**AIRBORNE PRECAUTIONS**  **(Blue Sign)**

-The germs are spread through the air currents or on dust particles.

-Examples: Measles, varicella (chicken pox), tuberculosis.

-Use private room, mask, transport patient with a surgical mask plus

Standard Precautions.

--Post the appropriate isolation sign(s) according to the symptoms/illness the

patient has. Housekeeping personnel will remove the isolation sign and

return it to the nurse.

--Record isolation category on the kardex. The Red Isolation trash can is to

be placed inside the patient's room.

--Patients placed in isolation precautions need their own equipment, supplies,

etc. (i.e. stethoscope, thermometer, B/P cuff, bedside commode). If the

patient cannot have their own equipment (i.e. IV tray, glucose meter, etc.)

the item must be disinfected before it is used with another patient. Use

Foaming Disinfectant product or manufacturer's recommendations.

--Patients with infections or colonization due to drug-resistant bacteria must

be cared for extra carefully to prevent the spread of these germs. Good

handwashing is extremely important! Strict adherence to isolation practices

is very important. When these patients are discharged and the room has been

cleaned, the room may be blocked for 24 hours if possible.

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**COLQUITT REGIONAL MEDICAL CENTER**

**NURSING PROCEDURE**

SUBJECT: "K" Rider Potassium Infusion EFFECTIVE: 06/25/99

REVIEWED: 08/11/99

REVISED:

PURPOSE: TO PROVIDE A SAFE METHOD OF ADMINISTERING IV POTASSIUM TO

SYMPTOMATIC HYPOKALEMIC PATIENTS

**IV POTASSIUM IS ADMINISTERED AS A CONTINUOUS OR INTERMITTENT INFUSION ONLY! (NEVER BY IV PUSH ON IN AN UNDILUTED FORM)**

**I. GENERAL GUIDELINES:**

A. Potassium infusions > 40 mEq/L will be initiated and monitored by a

Registered Nurse (RN) or an Licensed Practical Nurse (LPN).

B. Prior to initiation of a Potassium infusion, two (2) people, a nurse

and the Nursing Supervisor or Pharmacist, will validate the

concentration, dosage, and infusion rate.

C. Vital signs will be monitored q 30 minutes at an infusion rate of >=

10 mEq/hr, otherwise q 4 hrs.

D. Infusion rates greater than 10 but less than 20 mEq/hr should be

reserved for emergency situations; ie: symptomatic hypokalemia

**II. SPECIFIC REQUIREMENTS OF POTASSIUM INFUSION:**

A. **ALL** potassium infusions **WILL** be maintained on infusion pumps. This

pump will be locked after the rate is set.

B. **ALWAYS** piggyback potassium infusions into a main IV line with

compatible IV fluids using the infusion valve closest to the IV site.

C. **ALWAYS** use a 2 channel pump-one channel for main fluid and the other

for the potassium infusion. **NEVER** use the secondary mode on the IV

pump to administer potassium.

D. Maintain an additional IV site (Hep-lock) for administration of IV

medications and/or fluids.

E. Telemetry **will be maintained on all patients** receiving potassium

infusions >= 10 mEg/hr. ICU personnel will be notified that the

patient is receiving a potassium infusion and to be alert for the

risk of arrhythmias.

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**III. EQUIPMENT:**

A. Two (2) Channel IV Infusion Pump.

B. Telemetry Unit.

**\*\*RECOMMENDED DOSAGES AND CONCENTRATIONS\*\***

**Description Max Concentration "K" Rider Max Rate**

**maintenance infusion bolus conc. on telemetry**

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Adult patient

with serum K+

<3 mEq/L with:

a. Central Line 80 mEq/L 20 mEq/100ml 20 mEq/hr

b. Central Line 80 mEq/L 20 mEq/50ml 20 mEq/hr

fluid restricted

c. Peripheral IV 40 mEq/L 10 mEq/100ml 10 mEq/hr

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Adult patient

with serum K+

>=3 mEq/L with:

a. Central Line 80 mEq/L 20 mEq/100ml 10 mEq/hr

b. Central Line 80 mEq/L 20 mEq/50ml 10 mEq/hr

fluid restricted

c. Peripheral IV 40 mEq/L 10 mEq/100ml 10 mEq/hr

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%Pediatric ICU patient

<20 kg 60 mEq/L 1 mEq/4ml 0.75 mEq/kg/hr

(central)

20-40 kg 40 mEq/L \*\*\*\*\*\*\*\*\* 15 mEq/hr

(peripheral)

>40 kg \*\*\*\*\*\*\*\*\* 20 mEq/hr

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

\*\* **For pediatric ICU patients, dilute each 1 mEq of KCL (0.5 ml) in a minimum**

**of 4 ml of compatable IV solution.**

Note: For fluid restricted patients, only 20 mEq KCL in 50 ml may be infused over 1 hour. Repeating this infusion more than once is not indicated without EKG and serum K+ determination before continuation of K+ infusion. In case of symptomatic hypokalemia an infusion of 20 mEq KCL in 100 ml over 1 hour is appropriate in an adult.

**\*\*BASED ON RECOMMENDATION FROM MEDICAL COLLEGE OF GEORGIA\*\***

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**MEDICATION/PROCEDURAL ERRORS/OCCURRENCES**

PURPOSE:

To establish a system for classifying and monitoring medication errors/incidents

and to establish a protocol to determine disciplinary action based on the number

of points accumulated from the severity rating system.

REPORTING PROCEDURE:

1. Medication/Procedure Errors/Occurrences are reported to the patient’s

charge nurse and, as deemed appropriate, to the ordering physician,

floor director and Nursing Supervisor.

B. An Occurrence Report is completed per hospital policy and forwarded to

the Performance Improvement Coordinator.

C. The Performance Improvement Coordinator forwards the occurrence report

to Nursing Services for Department Head follow-up.

D. The Occurrence Report will then be forwarded to the Vice-President of

Patient Services for her review and then sent back to the Performance

Improvement Coordinator.

E. The Performance Improvement Coordinator will report monthly trended

data to the EOC Committee and the Medication/Procedure Safety Task

Force.

F. The Medication/Procedure Safety Task Force will study trended data for

root cause and intervention planning to reduce the number of errors.

**ADVERSE DRUG REACTIONS**

1. An adverse drug reaction is here defined as: "A detrimental response to medication,

undesired, unintended, or unexpected in doses recognized in accepted medical practice. This reaction will result in one or a combination of the following: discontinuation of

the drug, prolongation of hospital stay, supportive therapy to combat the reaction, or

an effect complicating the diagnosed disease state".

1. An "Adverse Drug Reaction Report" should be completed with any adverse drug reaction and one copy should be sent to the Pharmacy and one copy to Performance Improvement.

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**CALL**

**1-800-882-7177**

**DONATION REFERRAL LINE**

**TO REFER ALL DEATHS**

**FOR POTENTIAL EYE, ORGAN, AND/OR TISSUE DONATION**

**MANAGEMENT OF PAIN**

Policy: Recognizing that pain is a major stressor for patients and that each person experiences and deals with pain in different manners, assessment and management of pain by the nursing staff will be a priority for all clinical staff at CRMC.

Procedure:

Emphasizing the prevention of pain and also making pain assessment a part of each vital sign routine, a common goal is to not allow pain to gain a foothold. The following are pain guidelines:

1. At least in the first hours of pain having begun, ask physicians to write orders for

standing pain medications. This allows the patient to avoid worries such as overdosing, addiction, or being a bother to the nurse.

1. Include with each administration of a pain medication, repositioning and other nursing

care techniques that might help comfort the patient.

1. Anticipate procedures, etc. that might create or enhance pain and consider additional

pain medications or sedatives.

1. Make pain assessment a part of your routine nursing assessment. Do not wait for the

patient to mention pain.

1. Assess pain in a subjective manner, using a scale of 0 to 10 with 0 being no pain and

10 being pain as bad as it could possibly be or by using a scale of no pain to mild pain to moderate pain to severe pain to very severe pain to worst possible pain. Either one of these can be easily drawn off on a paperboard for pointing by the patient who cannot verbalize. Children that do not read can be assessed using the happy face to sad face scale, which asks the child to point to the face best depicting how they feel at the moment. Document this score with the documentation of the complaint of pain.

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1. Do not rely on the patient verbalization alone, learn to interpret body language, and

listen to the family regarding usual pain tolerance.

1. Always assess the effectiveness of pain medication. Consider the route of administration and the time needed for maximum effect and schedule the re-assessment around that time interval.
2. Assist the physician in choosing the pain medication route best for the patient, and

his/her complaint. The intravenous route is best for acute pain, eventually progressing to other routes as pain decreases or when changing from standing administration to an as needed basis.

1. Chronic pain or pain associated with cancer should cover the entire 24 hour period. Initially IV drips may be helpful with progression being to oral or topical longer acting preparations such as MS Contin or Fentanyl patches.

**COLQUITT REGIONAL MEDICAL CENTER**

**NURSING PROCEDURE**

Subject: PAIN MANAGEMENT Effective:\_\_\_\_\_\_\_\_\_\_\_

Reviewed:\_\_\_\_\_\_\_\_\_\_\_\_

Revised:\_\_\_\_\_\_\_\_\_\_\_\_\_

PURPOSE: To optimize pain control, recognizing that a pain free state may not

be achievable, minimize adverse outcomes and costs, enhance

functional abilities and physical and psychological well-being, and

enhance the quality of life for patients with pain. To recognize the

patients right to pain management.

PROCEDURE: ADMISSION:

Pain will be addressed and assessed on the Admission Assessment. Each patient

will have a notation of pain presence, location, intensity, and present management.

These indicators will help to formulate the pain management plan for each patient.

CARE PLAN:

Pain assessment and reassessment of pain will be included in each Care Plan.

The reassessment will be done at least every shift and as often as indicated by

the patient's response to treatment.

REASSESSMENT:

Reassessment of pain is included in the Med/Surg shift assessment.

Reassessment will also occur after any Intervention for pain, to document the

response to the Intervention.

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DOCUMENTATION:

The patient's response to any Intervention done to alleviate pain will be documented.

This includes response to medication, repositioning, application of heat or cold,

education, etc. If the current techniques do not lessen or relieve the pain, this fact

should be reported to the Physician. Care should be taken to not judge the patient's

dependency on medication usage, i.e. "She knows when her time is up for her meds"

"He wants more meds before it's time". Each patient’s presentation of pain and the level

of tolerance is individual and should be respected. Use of the scales given will insure consistency in measuring the intensity and quality of the patient's pain, which will present a

measurable means to update the pain management plan.

EDUCATION:

Education of the patient will include both education of the disease process involved in

causing the pain and the pain management plan itself. Any barriers to learning are addressed and an appropriate action plan is instituted.

**SKIN CARE ASSESSMENT**

**INSTRUCTIONS**

1. Apply the number next to the description that applies to the patient.

2. Add the numbers in each row.

Date Initiated Assessment:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Braden Scale** for Breakdown Risk

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Sensory 1. Completely 2. Very 3. Slightly 4. No

Perception Limited: Limited: Limited: Impairment.

Ability to Unresponsive Responds only Responds to

respond (does not moan, to painful verbal commands

meaningfully flinch or grasp) stimuli. but cannot

to pressure- to painful stimuli. communicate.

related discomfort.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Moisture 1. Constantly 2. Moist: 3. Occasionally 4. Rarely

Degree to moist. Skin is often moist. Moist.

Which skin is moist.

Exposed to

moisture.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Activity 1. Bedrest: 2. Chairfast: 3. Walks 4. Walks

Degree to Confined to bed. Ability to occasionally frequently:

physical activity. walk severly with help. Walks outside

limited or the room.

nonexistent.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%Mobility 1. Completely 2. Very 3. Slightly 4. No

Ability to Immobile. limited. limited. limitation.

change and Makes Makes frequent

control body occasional changes.

body position. slight changes.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Nutrition 1. Very poor: 2. Probably 3. Adequate: 4. Excellent:

Usual food Rarely eats more inadequate: Eats over 1/2 Eats most of

intake than 1/3 of food/ Generally of most meals every meal.

pattern. fluid offered. eats only

about 1/2 of

any food offered.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Friction 1. Problem: 2. Potential 3. No apparent

and Shear Requires maximum Problems: problem.

assistance in Moves feebly moving. Complete or requires

lifting without assistance.

sliding against

sheets is impossible.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%Age/Sex: Attending:

Unit #: Account #:

Admitted: Location:

Status: ADM IN Room/Bed:

Colquitt Regional Nursing \*Live\*

Wound/Skin Admit Assessment

:

**DRUG CALCULATIONS**

**Math Review**

Math principles are used in calculating drug dosages. Emergency nurses are often called on to respond quickly with specific doses of medication. Because of this, a review of specific math techniques is vital.

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**Multiplying Fractions**

To multiply two fractions, simply multiply both numerators (the top numbers) together and both denominators (the bottom numbers) together.

Examples:

5 x 1 is 5 (the numerator); 6 x 3 is 18 (the denominator).

The result is 5/18.

7 x 3 is 21 (the numerator); 9 x 4 is 36 (the denominator).

The result is 21/36.

Step two is to make sure the obtained fraction is down to its smallest numerator and denominator. Let’s look at the fraction obtained of 21/36. Is there any number that both 21 and 36 can be divided by? Yes, 3. If there is an option of more than one number, pick the largest. Now, divide both 21 and 36 by 3. The final fraction is 7/12.

Examples:

In the second example, both numbers are divisible by 6; therefore, the end fraction is 1/15. If you choose to divide by 3, the result is 2/30, which can then be divided by 2. The final answer then is 1/15.

In the above example, both numbers are divisible by 15; therefore, the end fraction is 1/8.

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If multiplying a fraction and a whole number, make the whole number into a fraction by placing the whole number over 1.

Examples:

To convert the answer into whole numbers, divide the numerator by the denominator.

15 divided by 4 = 3 with a remaining 3/4. The answer is 3 3/4.

In the above example, 6/5 is converted to 1 1/5.

**Dividing Fractions**

To divide fractions, simply invert one of the fractions and then proceed to multiply the two together.

Examples:

The answer is 9/4 or 2 1/4.

The answer is 40/21 or 1 19/40.

**Converting Fractions to Decimals**

To convert a fraction to a decimal, simply divide the numerator by the denominator.

Example: 1/8

**32**

0.125

81.00

8\_

20

16\_

40

\_40\_\_

The answer is 0.125.

**Decimals**

When using decimals, think of the decimal point as a divider between wholes and parts. If the number is on the left of the decimal point, it is a whole number. If the number is on the right of the decimal point, it is part of a whole. The first number to the right of the decimal point represents tenths. Consequently, 0.3 would be read as 3/tenths. As you move further to the right, the parts become smaller since they are moving further from the left (which are wholes). The second slot to the right represents one/hundredths: 0.03 is 3/hundredths and 0.27 is 27/hundredths. Do not get confused if the number is 0.50. The correct amount here is 5/tenths since a zero at the end has no value. Another way to consider it would be to read the decimal number as 50/hundredths. However, if you reduce that fraction by dividing by 10, you have 5/tenths. After tenths and hundredths, the third number represents thousandths. The decimal number of 0.452 would represent 452/thousandths. Decimal numbers can have wholes and parts. For example, 1.3 is one and 3/tenths (1 3/10).

**Percentages**

Percentage is simply another way of writing a fraction or decimal. If one is discussing 60%, you are addressing 60 parts of something that has a total of one hundred parts. Therefore, the fraction would be 60/100. The decimal would be 0.06.

Examples:

42%

42 parts of a total of 100. The fraction would be 42/100, and the decimal would be

0.42.

**33**

99%

99 parts of a total of 100. The fraction would be 99/100, and the decimal would be

0.99.

**Systems**

Nurses work with calculations in three different systems: apothecary, metric, and the household system. Sometimes the calculations involve converting from one unit to another unit within the same system. Other times, the conversion may mean converting from one system to another.

**Metric System**

The three major units in the metric system are the gram, liter, and the meter. The gram addresses weight, the liter refers to volume, and the meter represents length. Meters will not be discussed in this module. The following table identifies the different common prefixes used with grams.

Table 1

|  |  |  |
| --- | --- | --- |
| PREFIX WITH GRAM | DEFINITION | VALUE |
| Kilogram | One thousand | 1,000 grams (kg) |
| Gram | One | 1 gram (g) |
| Centigram | One-hundredth | One-hundredth of a gram;  0.01 gram; 1/100 gram |
| Milligram | One-thousandth | One-thousandth of a gram;  0.001 gram, 1/1000 gram |
| Microgram | One-millionth | One-millionth of a gram;  0.000001 gram; 1/1,000,000 gram |

By looking at the table, it becomes quite obvious that kilo represents more than a gram while all the other prefixes are portions of a gram or fractions. These same prefixes can be used for liters and meters.

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When converting, it is much easier to write numbers with decimal points. For example, 3 grams would be 3.0 grams. Take notice of the values of each of the prefixes above. You will notice that milli represents one-thousandth. When written as a fraction, one-thousandth is three digits to the right of the decimal point, 0.001. The first to the right is tenths, the second is one hundredths, and the third is one thousandths. Six to the right of the decimal point is one millionths. Therefore, if you want to convert the 3.0 grams above to milligrams, you know that milli is three digits further to the right of the decimal point than grams. All you do then is move the decimal three digits to the right, and you have 3,000. This 3,000 represents how many milligrams are comparable to 3 grams.

The same is true of converting grams to micrograms. Micrograms are six digits to the right of the decimal. If you wanted to convert 6.0 grams to micrograms, you simply move the decimal point six digits to the right, and you have 6,000,000 micrograms.

Suppose you wanted to convert 3 milligrams to micrograms. Milligrams are 3 digits to the right of the decimal point or thousands. Micrograms are six digits to the right or millions. The difference between 6 and 3 to the right is 3. So, by moving the decimal point 3 digits to the right, you have 3,000 micrograms (which is equal to 3 milligrams).

Examples:

5 grams to milligrams: 5.0 x 1,000 or move the decimal point 3 to the right with the

answer being 5,000 milligrams.

2 grams to micrograms: 2.0 x 1,000,000 or move the decimal point 6 to the right with

the answer being 2,000,000 micrograms.

4 milligrams to micrograms: 4.0 milligrams with the decimal point moved 3 to the right

is 4,000 micrograms.

To this point, gram is the largest amount you have used, which is simply the whole number. What about kilograms to gram? Kilograms are 1,000 *more* than grams. How do you convert kilograms to grams? One kilogram is equal to 1,000 grams. Consequently, when converting kilograms to grams, simply multiply the amount of kilograms by 1,000

Examples:

7 kilograms to grams: 7 x 1,000 = 7,000 grams

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4 kilograms to grams: 4 x 1,000 = 4,000 grams

Always think of grams as home base. When converting from kilogram to milligrams or micrograms, first convert to grams. Then, convert grams to the milli- or micrograms.

Examples:

3 kilograms to milligrams: 3 kilograms to grams = 3 x 1,000 or 3,000 grams. Now 3,000

grams to milligrams means moving the decimal point 3 to the right; 3 kilograms is

equal to 3,000,000 milligrams.

2 kilograms to micrograms: 2 kilograms to grams = 2 x 1,000 or 2,000 grams. 2,000

Grams to micrograms means moving the decimal point 6 to the right; 2 kilograms =

2,000 grams = 2,000,000,000 micrograms.

So far, you have converted from larger units to smaller units. You have done so by moving the decimal to the right. What about smaller units to larger units? Now you simply move the decimal point to the left. For example, 3 milligrams to grams. When you converted grams to

milligrams, you moved 3 digits to the right of the decimal point. Now to convert milligrams to grams, you will move three digits to the *left* of the decimal point. That means 3.0 milligrams is equal to 0.003 grams.

Examples:

6 milligrams to grams: 6.0 milligrams to grams = 0.006 grams.

4 micrograms to grams: Move the decimal point 6 digits to the left with the answer

being 0.000006 grams.

When converting grams to kilograms, divide by 1,000 or, since 1,000 represents 3 digits, move the amount 3 digits to the left of the decimal point. For example, 3 grams would be equal to 3 divided by 1,000 or 0.003 kilograms. You get the same answer by moving the decimal 3 digits to the left, 3.0 grams = 0.003 kilograms.

If converting from micrograms to milligrams, simply move 3 digits to the left of the decimal since 3 is the difference between milli’s 3 and micro’s 6.

4 micrograms to milligrams: 4.0 micrograms = 0.004 milligrams. Notice that if

you reversed the question and asked how many micrograms equal 0.004 milligrams,

you would move the decimal 3 to the right to get the answer 4 micrograms.

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**Apothecary System**

The major units involved in the apothecary system are the ounce for liquid volume and the grain for dry weight. Other units are the drop, minim, dram, pint, and quart. At present, the apothecary system is being phased out. Consequently, most conversions generally involve converting an amount in this system to either the metric or household system. Table 2 lists the standard units of measurement in the apothecary system.

**Table 2**

|  |  |
| --- | --- |
| WEIGHT | LIQUID VOLUME |
| 1 ounce = 480 grains | 1 quart = 2 pints |
| 1 ounce = 8 drams | 1 pint = 16 fluid ounces |
| 1 dram = 60 grains | 1 fluid ounce = 8 fluid drams |
|  | 1 fluid dram = 60 minims |
|  | 1 minim = 1 drop |

**Household System**

Household measurements are becoming more and more popular. However, because of the lack of accuracy with household measuring items, you will notice that there is sometimes a discrepancy between household and metric measurements. For example, in the apothecary and metric system, one tablespoon is equal to four teaspoons. In the household system, three teaspoons are equal to one tablespoon. Commonly used measurements in the household system are listed below with their abbreviations.

1 drop (gtt) = 1 minim (m)

60 drops (gtts) = 1 teaspoon (t)

3 teaspoons = 1 tablespoon (T)

2 tablespoons = 1 ounce (oz)

6 ounces = 1 coffee cup

8 ounces = 1 medium glass

8 ounces = 1 measuring cup

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**Table 3**

|  |
| --- |
| COMMON CONVERSIONS BETWEEN DIFFERENT SYSTEMS |

|  |  |  |
| --- | --- | --- |
| **Metric System** | **Apothecary System** | **Household System** |
| 1 gram | 15 grains |  |
| 60 mg | 1 grain |  |
| 0.6 mg | 1/100 grain |  |
| 0.4 mg | 1/150 grain |  |
| 0.3 mg | 1/200 grain |  |
| 30 ml or cc | 1 ounce | 1 shot glass or 2 T |
| 1 ml |  | 15 to 16 drops |
| 4 to 5 ml or cc |  | 1 teaspoon |
| 1 kg | 2.2 pounds |  |

**Conversions**

To convert from within a system or between two systems, use one simple equation. This same equation will be used for calculating future drug dosages and intravenous rates. Convert 3 ounces into tablespoons. The first step is to always take the equation known. In this case, it is known that 1 ounce equals 2 tablespoons. Write this information as:

\_\_\_1 ounce\_\_\_\_\_

2 tablespoons

Think of this equation as a ratio of 1 ounce to 2 tablespoons. The second ratio is the amount being converted or 3 ounces to “x”. Write this the same way. BE SURE TO PLACE THE OUNCES ON THE SAME LINE AS OUNCES OCCUR IN THE FIRST RATION. The whole equation is:

\_\_1 ounce\_\_\_\_ 3 ounces

2 tablespoons x

1 ounce is to 2 tablespoons as 3 ounces is to x. The final step is to cross multiply and divide. Multiply 2 x 3 = 6 ÷ 1x; x = 6 tablespoons.

Example:

18 teaspoons = x tablespoons. It is known that 3 teaspoons equal 1 tablespoon. The equation would be:

3 teaspoons 18 teaspoons

1 tablespoon x

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Again, make sure that all teaspoon references are either the denominator or the numerator. (A common mistake is to place teaspoons in one ratio as the denominator and in the other ratio as the numerator.) Next multiply 1 x 18 ÷ 3x; x = 6 tablespoons.

In calculating dosages per weight, kilograms rather than pounds are used. Suppose you had a patient who weighed 180 pounds, and you wanted to convert the weight to kilograms (kg). The equation would be:

1 kilogram x kilograms

2.2 pounds 180 pounds

180 x 1 = 180 ÷ 2.2x; x = 81.8 or rounded off to 82 kilograms.

It is acceptable to setup these equations in reverse. For example, in the equation above, it would also be correct to write it as:

2.2 pounds 180 pounds

1 kilogram x kilograms

Suppose you had a patient that weighed 100 kilograms. How many pounds does that convert to?

1 kilogram 100 kilograms

2.2 pounds x pounds

100 x 2.2 = 220 pounds ÷ 1x; x = 220 pounds.

This same equation using ratios can be used to calculate drug dosages. For example, suppose you had a liquid antibiotic that contained 50 mg to 1 cc. You needed to give 500 mg.

50 mg 500 mg

1 cc x cc

500 x 1 = 500 ÷ 50x; x = 10 cc.

Suppose you need to give heparin subcutaneously. You have a multi-dose vial of 10,000 units per cc. You need to give 7,500 units.

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10,000 units 7500 units

1 cc x cc

7,500 x 1 = 7,500 ÷ 10,000x; x = 0.75 cc.

**Intravenous Rates**

The same equation can be used to calculate intravenous drug rates. For example, you have 10,000 cc that the physician wants to infuse in three hours. The first step is to determine how many cc’s must run in one hour. The equation would be:

1000 cc \_ x cc\_

3 hours 1 hour

1,000 x 1 = 1,000 ÷ 3x; x = 333 cc/hr.

If you need to break that down to cc’s per minute, you must convert from hour to minute. Therefore, instead of 333 cc/hr, you would use 333 cc/60 minutes. The equation would be:

333 cc\_\_ \_\_x cc\_\_

60 minutes 1 minute

333 x 1 = 333 ÷ 60x; x = 5.5 cc/minute.

Suppose you were asked how many drops would the above 5.5 cc be per minute? Every intravenous tube has a specific ratio of drops per cc, and it varies according to the manufacturer. For a minidrip, it is 60 drops per cc. Suppose the above intravenous line were on a minidrip, how may drops would 5.5 cc be per minute?

60 drops x drops

1 cc 5.5 cc

60 x 5.5 = 330 ÷ 1x; x = 330 drops per cc. Because that is an absurd amount for a minidrip, you change the tubing to macro tubing, which has a given ratio of 15 drops per cc.

15 drops x drops

1 cc 5.5 cc

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15 x 5.5 =82.5 ÷ 1x; x = 82.5 drops per minute.

**Medication Administration Per Weight**

Suppose you have a pediatric patient that needs 15 mg of Tylenol per kg. She weighs 30 pounds, and Tylenol is 165 mg. per cc. First, convert the weight to kg.

1 kg x kg\_

2.2 lb 6

1 x 30 = 30 ÷ 2.2x; x = 13.6 kg. She needs 15 mg per kg. So multiply 13.6 x 15 =204.5 mg. Next calculate the drug.

165 mg 204.5 mg

1 cc x cc

204.5 x 1 = 204.5 ÷ 165x; x = 1.2 cc.

*ALWAYS CALCULATE THE WEIGHT FIRST, THEN THE DRUG AMOUNT FOR THAT WEIGHT. FINALLY CALCULATE THE DOSAGE.* Using the same routine makes calculating much easier.

Suppose you have a patient that needs a dopamine drip. The patient weighs 175 pounds. The dopamine drip is a standard drip of 800 mg in 500 cc. The physician wants the patient to start at 3 micrograms/kg/minute. First, change the patient’s weight to kilograms.

\_1 kg\_ \_x kg\_

2.2 lb 175 lb

175 x 1 = 175 ÷ 2.2x; x = 79.5 kg.

This patient is to receive 3 micrograms per kg. Therefore, 79.5 x 3 = 238.5 micrograms per minute. Notice that you are talking about micrograms, and the medication is in milligrams. You need to convert to one or the other; either one can be used. Convert 238.5 micrograms to milligrams. Remember that to convert from micro to milligrams, simply move the decimal three digits to the left because you are going from a smaller unit to a larger unit. Consequently, this patient will receive 0.2385 milligrams per minute.

Next, calculate the drip. You know that 800 mg are in 500 cc. The first step is to calculate how many mg per cc.

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800 mg x mg

500 cc 1 cc

800 x 1 = 800 ÷ 500x; x = 1.6 mg per cc. You know the patient needs 0.2385 mg per minute.

How many cc’s is 0.2385 mg?

1.6 mg 0.2385 mg

1 cc x cc

0.2385 x 1 = 0.2385 ÷ 1.6x; x = 0.149 cc. You need 0.149 cc per minute. Since the pump is cc/hr, calculate the rate per hour.

0.149 cc\_ \_\_\_\_x cc\_\_\_

1 minute 60 minutes

0.149 x 60 = 8.94 ÷ 1x; x = 8.94 cc/hour.

Calculate:

* The weight in kilograms.
* The dose desired with the weight.
* The mg of medication per cc.
* The dose per cc.
* The cc’s per hour.

Example:

You have a 350 pound male in the emergency department. The physician has ordered dobutamine 7 micrograms/kg/minute for the patient. The standard mix in the emergency department is 500 mg/500 cc.

**First**, calculate the weight.

1 kg\_ \_x kg\_

2.2 lb 350 lb

1 x 350 = 350 ÷ 2.2x; x = 159 kg.

**Second**, calculate the dose per weight.

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159 kg x 7 micrograms = 1,113 micrograms/minute.

**Third**, calculate the intravenous dose of medication per cc.

This mix is easy. 500 mg per 500 cc = 1 mg/cc.

**Fourth**, calculate the dose per cc (either in micrograms or milligrams) using micrograms this time. 1 mg = 1,000 micrograms.

1000 mcg 1113 mcg

1 cc x cc

1,113 x 1 = 1,113 ÷ 1000x; x = 1.1 cc/minute.

**Fifth**, calculate the dose per hour.

1.1 cc x cc\_\_\_\_

1 minute 60 minutes

1.1 x 60 = 66 ÷ 1x; x = 66 cc/hr.

Drug calculations do not have to be an intimidating aspect of nursing. Always remember to take your time. If unsure, have another person recheck your calculations, or ask them to figure their own calculations and compare yours against theirs.

Using standard mixes for intravenous drips (i.e., lidocaine, bretylol, dopamine, Tridil) is very beneficial to emergency nurses. Charts can then be formulated and available with the appropriate dosage for different weights calculated according to the standard mix.

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