Clinical Core

ORIENTATION

McLaren

FLINT

Clinical Education Materials

Welcome to Clinical Core Orientation at McLaren Flint

This manual provides resources and handouts for use during Clinical Core Orientation

Clinical Core Orientation Expectations

Staff are required to participate as outlined on the Core Clinical Orientation Agenda

Skills and self learning modules, to be completed:

RNs-LPN-ERT

- Blood Glucose Monitoring
- Blood Conservation
- Adult Abuse/Neglect
- Age Specific Care

Nurse Assistant II

- Blood Glucose Monitoring
- Adult Abuse/Neglect
- Age Specific Care

Unit Clerk

- Adult Abuse/Neglect
- Blood Conservation

Unit Specific Orientation Expectations

- Staff will successfully complete unit-based orientation with preceptors

- RNS-LPNs-ERTs will attend additional courses relevant to assigned area of practice

Survival Guide for the New Employee

1. Who do I call if I am unable to work my shift?
Nursing personal for ER, 2C, 4C SCU, 5N- rehab, 5N joint express, 5S ICU, 6C TCU, 6S CCU, 7C Behavioral Health, day treatment, 7S LDRP, 8S ortho/telemetry, 9S PCU, 10S stroke/telemetry, 11S oncology/med/surg, 12S telemetry, resource staff should call the nursing office at (810)-342-2177 two hours before your shift or as soon as you know you are unable to attend work. Other areas need to check with their manager for the number to use to call in.

2. How do I use the time clock?
To swipe in/out have your picture face you as you swipe.
To punch in/out push *1 then employee number on back of employee badge, press enter.

3. How do I get paid if I forget to punch in or work overtime?
Each unit has a "verification book" to be used to write in missed punch, overtime, charge nurse or preceptor pay, classes attended, etc. You can punch in 5 minutes before the start of your shift. *One minute after the start of your shift is considered tardy.*

4. Cafeteria Hours
Breakfast 6:30 am – 10:00 am
Snack (M-F only) 10:00 am – 11:00 am
Lunch 11:00 am – 2:00 pm
Snack (M-F only) 2:00 pm – 4:30 pm
Dinner 4:30 pm – 7:00 pm

McLaren Café Hours
M-F 7:00 am – 7:00 pm
M – Sunday 12 am -3:30 am

Buy 10 get one free beverage card can be obtained from cafeteria cashier.
Debit cards can be used in the cafeteria.

5. Where are policies and procedures found?
Go to MHCC Intranet on any computer in hospital, Click on MRMC policies and procedures, review policies under the main categories of Level 2 Hospital Policy Manual, MHC Corporate Policies, Department Policies.

6. Where are patient education materials?
Conference rooms on the units contain patient education materials. Additional information can be found on the computer (in the Novell window) "CD MicroMedex" icon, then "Carenotes", type in disease, procedure, or medication information needed for the patient. Click on "print now", "print preview" to review the material or print or on the MHCC Intranet under Patient Education.

7. Important beeper/phone numbers
- Transportation beeper #24040
- Supply distribution phone "cart" #22176
- Computer (PHNS) help 48400

8. How to get onto My Mclaren to review paystub and other information
The User Name is your first name (as it currently appears on your paystubs) and last four digits of your social security number and is not case sensitive (e.g. pluto1234). Your default password upon first login is your date of birth, formatted as mmddyyyy (e.g. 12141966).

Nursing Education Website home address: http://nursing education.mclarenregional.org

<table>
<tr><td>  </td><td colspan="2">McLaren Flint</td><td colspan="2">Policy Title:
Personal Appearance and Behavior</td></tr>
<tr><td rowspan="3">Section:
Employee Relations</td><td>Effective Date:</td><td rowspan="3">Oversight Level:
Tier 2</td><td rowspan="3">Policy No:
HR-405</td></tr>
<tr><td>Review Dates:</td></tr>
<tr><td>Revised: 07/19/10, 02/01/10, 01/21/08, 06/01/05, 01/01/02, 07/01/12</td></tr>
<tr><td colspan="2">McLaren Flint Business Unit: Human Resources</td><td colspan="2">Interpretation:
Vice President, Human Resources</td></tr>
</table>

Objective: To ensure that McLaren Flint staff reflect a professional image.

Scope: This policy applies to all employees, healthcare providers, students, interns, and volunteers.

Policy: It is the policy of McLaren Flint that all staff exercise proper professional judgment in ensuring that a positive image is displayed to co-workers, patients, and all other hospital customers. To achieve this goal, it is important that employees dress safely and conservatively, while maintaining a high standard of personal hygiene and conducting themselves in an exemplary manner.

Definitions:

Patient Contact Area: Any floor/unit where staff are providing hands-on patient care

Non-Patient Contact Area: All other areas of the hospital where patients are not receiving hands-on care.

Provisions:

Appearance

Appearance (i.e., apparel, jewelry, hair, facial hair, finger nails, etc.) should be neat, clean, safe and appropriate for the job, while avoiding extremes. Personal hygiene should be such that employees will be physically clean and void of strong odors (e.g., body odor, breath, excessive perfumes/scents, smell of smoke, etc.) Absent a department-specific policy regarding proper uniform and/or dress requirements, this policy will apply. Additionally, a non-patient care employee traveling into or working in a patient contact area must follow the dress code for a patient contact area.

Clothing:
(Patient and non-patient contact areas)
Scrubs: Hospital scrubs may be provided for select areas. Please refer to department specific guidelines, where appropriate:

- Clothing must fit properly and be neat and clean
- No tube or tank tops unless worn under other garments
- No t-shirts or shorts
- Slits in skirts/dresses should not be any higher than 2” above the knee
- Skirts and skorts are acceptable if at or below the knee
- No sheer, see–through clothing, or revealing clothing (no cleavage)
- No spandex, leggings, fish-net stockings, or stirrup pants
- No sweatshirts, sweatpants, or any other exercise attire. Crew neck and zipped sweatshirts with hospital logo are allowed..
- Denim jeans are not allowed to be worn by direct patient care givers and only allowed for non-direct patient care givers for approved fundraising events.
- No visible undergarments (no bright prints or colors under light colored pants or tops)

Hospital Issued Identification Badges

- Must be worn and visible at all times while working. Refer to the "Employee Identification Badge" policy (see corporate policy) for specific guidelines.

Hair

- Should be neat, clean, and well-groomed (includes facial hair).
- Hair should be off the shoulders/tied back away from the face (to not hang over patients – Direct contact employees only)
- Hair accessories must be limited to simple barrette or ribbon
- No extreme styles or colors (e.g, blue, purple, etc.)

Jewelry

- Employees will not wear more than three (3) earrings per ear
- Earrings (as measured below the ear lobe):
  - must be ½ inch or shorter for direct patient contact areas
  - must be 1 ½ inch or shorter for non-patient contact areas
- Necklaces and bracelets should be moderate and tasteful
- No ear gauges, tongue piercings, or other visible body or facial piercings
- No large costume jewelry

Shoes

(Patient contact areas):

- Must be clean
- Socks/stockings must be worn regardless of type of shoe
- No open toe shoes
- Shoe covers must be worn per department-specific policy

(Non-patient contact areas):

- Open toe shoes and appropriate sandals are acceptable
- Dress capris are acceptable with open toe shoes or dress sandals
- No flip flop/beachwear type shoes
- No slippers

Nails

- Artificial nails, nail extensions, and nail jewelry are prohibited for staff with direct patient contact or for staff that prepare food.
- Nails should be an appropriate length (not longer than ¼ inch for direct patient contact areas), clean, and well manicured
- Polish should not be chipped and should be subdued and tasteful in color.

Tattoos

- Must be covered

Any McLaren Flint property provided by the department (i.e., lab coats, scrubs) should remain on hospital property and not taken home for personal use (see policy HR – 408, Hospital Provided Scrub Attire).

As appropriate, employees are required to wear Standard Precaution garments and follow guidelines set forth in the Isolation Policy (IC-407). Safety should be of primary concern for all standards, with emphasis on safe and proper footwear.

Employees who arrive for work displaying inappropriate personal appearance and/or hygiene may be sent home and directed to return to work in proper attire. If an employee is sent home to change to appropriate dress, time away from the job is not paid and is not eligible for paid time off or mutual benefit time (MBT).

Incidents of inappropriate personal appearance may result in corrective action as outlined in the Corrective Action Policy (see policy HR – 410)

Conduct
Employees are expected to represent a courteous and helpful approach to all patients, visitors and co-workers at all times. Superior customer service is expected of all employees at McLaren Flint and should be demonstrated by appropriate behavior and conduct.

Employees should be aware and concerned about how behaviors impact patients, fellow employees and other individuals within the institution. It is each employee's responsibility to be familiar with policies, procedures, rules, regulations and protocols.

McLaren Flint maintains a zero tolerance of any intimidating and/or disruptive behavior. Employees should not engage in any behavior that interferes with the ability of others to effectively carry out their duties or that undermines the patient's confidence in the hospital or another member of the healthcare team including, but not limited to,:

- participation in practical jokes, horseplay, harassment, vulgarity, abuse, or any such behavior which may interfere with work, create risk of injury, or is unduly offensive to others.
- raising their voice at, insulting, demeaning, humiliating, using profanity toward, or degrading a patient, visitor; co-worker or physician. Loud, boisterous and intimidating language is not appropriate;
- negative interactions by engaging in behaviors such as gossiping, back-stabbing, non-verbal negative insinuations, undermining, infighting and arrogance;
- retaliating against any member of the healthcare team who has reported an instance of or participated in an investigation of a violation of the Code of Conduct or Personal Appearance and Behavior policy

Incidents of inappropriate behavior will result in corrective action as outlined in the Corrective Action Policy (see policy HR – 410)

Administrative Responsibility:	Human Resources Department
Exception Provisions:	If any provision of these policies conflict with an express provision(s) of an applicable collective bargaining agreement or letter of understanding, the latter shall supersede this policy to the extent necessary to comply with contractual obligations.
References or Appendices:	Hospital Provided Scrub Attire Policy (HR – 408), Corrective Action (HR – 410), Harassment and Discrimination Policy (MHCC Policy HR – 130), Employee Identification Badges (MHCC Policy HR – 117)

APPROVALS:

Rachelle Hulett

Rachelle Hulett, Vice President, Human Resources
McLaren Flint

2015 BLS Course Dates

FULL PROGRAMS Nursing Education Conf. Room 8 AM – 2 PM	RETRAINING PROGRAMS Nursing Education Conf. Room 8 AM – 12 PM
BLS FULL PROVIDER	***BLS RECERTIFICATION***
January 16th	January 9th
February 20th	February 6th
March 20th	March 6th
April 17th	April 3rd
May 15th	May 1st
June 19th	June 5th
July 17th	July 3rd
August 21st	August 7th
September 18th	September 4th
October 16th	October 2nd
November 20th	November 6th
December 18th	December 4th

BLS: 1st Friday of the month is always a recertification.
3rd Friday of the month is always a full provider course.
Nursing Education Conference Room – Maximum of 22 people

2015 ACLS/PALS Course Dates

FULL PROGRAMS
BALLENGER AUDITORIUM
4 PM - 10 PM
(Day Classes 9:30 AM – 3:30 PM)

ACLS

January 20th & 21st
February 24th & 25th
April 9th & 10th (Day Class)
April 21st & 22nd
July 28th & 29th
October 8th & 9th (Day Class)
October 20th & 21st
MHCC - $160.00
OTHERS - $200.00

PALS-BEECH HILL CTR

February 3rd & 4th
May 12th & 13th
August 18th & 19th
November 10th & 11th

RECERT DATES-BEECH HILL

January 12th
March 9th
June 8th
September 14th
Full - $250.00 Recert - $210.00
12.6 CE Full - 7.5 CE Recert

RETRAINING PROGRAMS
BALLENGER AUDITORIUM
4 PM - 10 PM
(Day Classes 9:30 AM – 3:30 PM)

ACLS

January 9th (Day Class)
January 13th
February 10th
March 10th
April 14th
May 5th
June 9th
July 7th
July 10th (Day Class)
August 11th
September 15th
October 7th
November 3rd
December 8th

MHCC - $100.00
OTHERS - $150.00

American Heart Association Basic Life Support for Healthcare Providers

BLS Course Study Guide & Review

Adult Chain of Survival:

- Early access: Establish Unresponsiveness/no breathing then activate EMS/911
- Early CPR: Provide BLS/CPR within 4 minutes
- Early defibrillation: Have an AED on them and shocking within 5 minutes of the arrest
- Early advanced care: EMS/code team arriving soon thereafter

CPR Adult

1. Adult 1 rescuer CPR

• Determine Unresponsiveness (shake and shout), if no response
• Check for no breathing or normal breathing (minimum 5 seconds; maximum 10 seconds)
• Activate emergency medical system and call for an AED
• Check for carotid pulse for (minimum 5 seconds; maximum 10 seconds)

If there is no detectable pulse, start chest compressions at the center of the chest, at the nipple line, with the heal of one hand on top of the other, at a ratio of:

30 compressions (Acceptable <18 seconds for 30 compressions)
• Give 2 breaths (1 second each)
• Deliver second cycle of 30 compressions at correct hand position (Acceptable >23 compressions)
• Give 2 breaths (1 second each)
• Continue CPR until help arrives

Push Hard, and Push Fast: compress at a minimum rate of at least 100 compressions per minute and a depth of 2 inches, and allow full chest recoil after each compression. Minimize the interruptions in chest compressions.

2. Adult 2 Rescuer CPR:

Ratio of 30 compressions to 2 breaths, Rate 100/minute or 5 cycles in 2 minutes

(Ventilator) the rescuer at the head,
– (Compressor) the rescuer at the chest
• Ventilator determines responsiveness, if no response

• Ventilator checks for no breathing or normal breathing (minimum 5 seconds; maximum 10 seconds)
• Compressor or bystander activates emergency medical system (call 911) and call for an AED
• Ventilator checks for circulation, carotid pulse (minimum 5 seconds; maximum 10 seconds)

If the victim has circulation (pulse)

Ventilator will rescue breath for them:
 1 breath every 5□6 seconds for about 10□12 per minute (each breath should be delivered over 1 second making the chest rise)

If the victim does not have circulation (no pulse)

Compressor will start chest compressions, with the heel of two hands at a ratio of:
 30 compressions by the compressor to 2 ventilations by the ventilator at a rate of at least 100 per minute and a depth of 2" or deeper for larger person
 The ventilator can check for a pulse during compressions to make sure they are effective by feeling a pulse every compression.
 After every 5 cycles or 2 minutes of CPR switch to maintain
effective CPR

CHILD AND INFANT (Pediatrics)

Pediatrics Chain of Survival:

 Prevention is # 1
 Early and effective bystander CPR, for two minutes if alone
 Rapid activation of EMS or Call 911
 Early and effective advanced Life support (EMS) (includes rapid stabilization and transport to definitive care and rehabilitation)

CPR Child

1. Child 1 rescuer CPR:
• Determine unresponsiveness
• Check for no breathing or normal breathing (minimum 5 seconds; maximum 10 seconds)
• Call for help□send bystander to call 911 or activate EMS. If no one comes you begin CPR and after 5 cycles or two minutes, you should activate 911/EMS.
• Check for circulation at the carotid artery for 5 seconds minimum; 10 seconds maximum
If there is no detectable pulse, or pulse is less than 60 beats/min., start chest compressions at the center of the chest, at the nipple line, with the heal of one hand on top of the other, at the depth of 1/3 of the child's body or 2"depth:
30 compressions (Acceptable <18 seconds for 30 compressions)
• Give 2 breaths (1 second each)
• Deliver second cycle of compressions at correct hand position (Acceptable >23 compressions)
• Give 2 breaths (1 second each)

• Continue CPR at a ratio of 30 to 2 until help arrives

2. Child 2 rescuer:
CPR Ratio = 15 compressions: 2 breaths, Rate = 100/min, 5 cycles per minute
• (Ventilator) the rescuer at the head, (Compressor) the rescuer at the chest
• Ventilator determines responsiveness, if no response
• Check for no breathing or normal breathing (minimum 5 seconds; maximum 10 seconds)
• Compressor or bystander calls 911 or activates EMS number
• Ventilator checks for circulation, carotid pulse > 60 beats/min. within 5□10 seconds

If the victim has circulation (pulse > 60 beats/min.)
Ventilator will rescue breath for them:
- 1 breath every 3 □ 5 seconds for about 12 □ 20 per minute (each breath should be delivered over 1 second making the chest rise)
- Recheck pulse every 2 minutes

If the victim does not have circulation (pulse < 60 beats/min.)
Ventilator will start chest compressions, with the heal of one hand or two at a ratio of: 15 compressions by the ventilator and to 2 ventilations by the bystander at a rate of: 100 per minute and a depth of 1/3 of the child's body depth or 2"
□switch/reassess after 5 cycles

INFANT (0□1 YEAR OF AGE)

CPR □ Infant

1. Infant 1 rescuer CPR
• Determine unresponsiveness, if no response no breathing
• Calls for help□if a bystander is present send them to call 911 or activate EMS. If no bystanders respond or present precede to:
• Check for circulation for 5□10 seconds: pulse (brachial or femoral) >60 beats/min.

If the victim has circulation (pulse > 60 beats/min.)
Rescue breath for them:
- 1 breath every 3 □ 5 seconds for about 12 □ 20 per minute (each breath should be delivered over 1 second making the chest rise)
- Recheck pulse every 2 minutes
- You activate the EMS or call 911 if no□one is around

If the victim does not have circulation (pulse < 60 beats/min.)
- Start chest compressions, 2 fingers one finger width below the nipple line, at a ratio of 30 compressions to 2 ventilations at a rate of at least 100 per minute and a depth of 1/3 of the infant's body depth or 1 ½"
- Reassess after 5 cycles of 30 to 2
- You activate the EMS or call 911 if no□one is around after the first 5 cycles
- Then return to the infant & provide CPR

2. Infant 2 rescuer CPR:
CPR Ratio = 15:2, Rate = 100/min, 5 cycles per minute
• (Ventilator) the rescuer at the head, (Compressor) the rescuer at the chest
• Ventilator determines responsiveness, if no response
• Ventilator checks for no breathing or normal breathing (minimum 5 seconds; maximum 10 seconds)
• Compressor or bystander calls 911 or activates EMS
• Ventilator checks for circulation for 5□10 sec: pulse (brachial or femoral) >60 beats/min.

If the victim has circulation

If the victim does not have circulation

(pulse > 60 beats/min.)
Ventilator will rescue breath for them:
- 1 breath every 3 □ 5 seconds for about 12 □ 20 per minute (each breath should be delivered over 1 second making the chest rise)
- Recheck pulse every 2 minutes

(pulse < 60 beats/min.)
Ventilator will start chest compressions, with thumb encircling technique at a ratio of 15 compressions by the bystanders to 2 ventilations at a rate of at least 100 per
minute and a depth of 1/3 of the infant's body depth or 1 ½",
-switch after 5 cycles

AED USE

□ An Automated External Defibrillator (AED) is used when the heart stops beating normally and needs to be reset by an electric shock.

□ The sooner the shock is delivered the better, since the probability of successful defibrillation diminishes rapidly over time. AEDs are designed for adults but most can be adapted for children and infants with pediatric pads.

□ Provide 5 cycles of CPR, 30 compression to 2 breaths, for 2 minutes before using an AED on a child from 1 year to 8 or on an infant 1< of age.

Special Considerations:
• Hairy chest□remove enough hair to get good contact with the skin.
• Dry chest if visibly wet.
• Implanted device□place pad at least 1 inch away from implant, never place pad on top of device.
• Medication patch□remove it and wipe area before pad placement.

FYI: AEDs and Infants
For infants (<1 year of age), a manual defibrillator is preferred. If a manual defibrillator is not available, an AED with a pediatric dose attenuator is desirable. If neither are available, an AED without a dose attenuator may be used.
Note: Adult AED pads can be used on children and infants but pediatric pads are preferred. Pediatric pads cannot be used on adults.

Choking □ Adult

1. Conscious Choking
• Are you choking?
• Can you speak?
• Can I HELP you?
• Provide inward and upward Abdominal thrust, just above the navel.

2. Unconscious Choking: (NO BLIND FINGER SWEEPS)
• Call 911
• Open the airway remove the object if you see it, then begin CPR (30 compressions to 2 breaths)
• Every time you open the airway to give breaths look for the object
• Then continue CPR (30 to 2)

3. Adult Rescue breathing:
It is done only when the victim is not breathing adequately but has a pulse. Rescue breathing for the adult is 1 breath every 5 –6 seconds or 10□12/min. Agonal Gasps are inadequate breaths associated with Cardiac Arrest not Choking.

Choking □ Child

1. Conscious Choking:
• Are you choking?
• Can you speak?
• Can I HELP you? (ask the parent if you can help their child)
• Provide inward and upward abdominal thrust, just above the navel to relive the obstruction.
2. Unconscious Choking: NO BLIND FINGER SWEEPS
• Call for help, send bystander to call 911 or activate EMS
• Open the airway; remove the object if you see it, then begin CPR, with a ratio of 30 compressions to 2 breaths
• Every time you open the airway to give breaths look for the object
• Then continue CPR with a ratio of 30 compressions to 2 breaths
• If no one came to call 911 or activate EMS, you call after 2 minutes of CPR
3. Rescue Breathing:
1 breathe every 3 to 5 seconds or 12 to 20/min (only enough air to make the chest rise over 1 second each)

Choking Infant

1. Infant Conscious Choking:
• Look for choking signs, like bluish skin, lips or nose, high pitched noise
• Pick up the infant and give 5 back blows between the shoulder blades, with the head supported and with the head lower than the infant's bottom
• Then flip the infant and provide 5 chest thrusts just below the nipple line, keeping the head lower that the infant's Bottom
• Repeat until infants able to cry or becomes unconscious
2. Unconscious Choking: NO BLIND FINGER SWEEPS
• Call for help, send bystander to call 911 or activate EMS
• Open the airway, remove the object if you see, begin CPR at a ratio of 30 to 2
• Every time you open the airway to give breaths look for the object
• Then continue CPR at a ratio of 30 to 2
• If no one came to call 911 or activate EMS, you call after 2 minutes or 5 cycles of CPR
3. Infant Rescue Breathing:
1 breath every 3 to 5 seconds or 12 to 20/min (only enough air to make the chest rise, each breath over 1 second)

BLS for Healthcare Providers Student Manual Comparison Chart * 2010 AHA BLS Changes * CPR

New	Old	Rationale
Chest compressions, Airway, Breathing (C A B): New science indicates the following order: 1. Check the patient for responsiveness. 2. Check for no breathing or no normal breathing. 3. Call for help. 4. Check the pulse for no longer than 10 seconds. 5. Give 30 compressions.	Airway, Breathing, Chest Compressions (A B C) Previously, after responsiveness was assessed, a call for help was made, the airway was opened, the patient was checked for breathing, and 2 breaths were given, followed by a pulse check and compressions.	Although ventilations are an important part of resuscitation, evidence shows that compressions are the critical element in adult resuscitation. In the ABC sequence, compressions are often delayed.

6. Open the airway and give 2 breaths.
7. Resume compressions.

Compressions should be initiated within 10 seconds of recognition of the arrest.	Compressions were to be given after airway and breathing were assessed, ventilations were given, and pulses were checked.	Although ventilations are an important part of resuscitation, evidence shows that compressions are the critical element in adult resuscitation. Compressions are often delayed while providers open the airway and deliver breaths.
Compressions should be given at a rate of at least 100/min. Each set of 30 compressions should take approximately 18 seconds or less. Compression depths are as follows: • Adults: **at least** 2 inches (5 cm) • Children: **at least** one third the depth of the chest, approximately 2 inches (5 cm) • Infants: **at least** one third the depth of the chest, approximately 1½ inches (4 cm)	Compressions were to be given at a rate of about 100/min. Each cycle of 30 compressions was to be completed in 23 seconds or less. Compression depths were as follows: • Adults: 1½ to 2 inches • Children: one third to one half the diameter of the chest • Infants: one third to one half the diameter of the chest	Compression rates are commonly quite slow, and compressions >100/min result in better perfusion and better outcomes. Deeper compressions generate better perfusion of the coronary and cerebral arteries.

Airway &Breathing

New	Old	Rationale
Cricoid pressure is no longer routinely recommended for use with ventilations during cardiac arrest.	If an adequate number of rescuers were available, one could apply cricoid pressure.	Randomized studies have demonstrated that cricoid pressure still allows for aspiration. It is also difficult to properly train providers to perform the maneuver correctly.
“Look, listen, and feel for breathing” has been removed from the sequence for assessment of breathing after opening the airway. Healthcare providers briefly check for no breathing or no normal breathing when checking responsiveness to detect signs of cardiac arrest. After delivery of 30 compressions, lone rescuers open the victim’s airway and	“Look, listen, and feel for breathing” was used to assess breathing after the airway was opened.	With the new chest compression–first sequence, CPR is performed if the adult victim is unresponsive and not breathing or not breathing normally (ie, not breathing or only gasping) and begins with compressions (C□A□B sequence). Therefore, breathing is briefly checked as part of a check for cardiac arrest. After the first set of chest

deliver 2 breaths.

compressions, the airway is opened and the rescuer delivers 2 breaths.

AED Use

New

For children from 1 to 8 years of age, an AED with a pediatric dose attenuator system should be used if available. If an AED with a dose attenuator is not available, a standard AED may be used.
For infants (<1 year of age), a manual defibrillator is preferred. If a manual defibrillator is not available, an AED with a pediatric dose attenuator is desirable. If neither is available, an AED without a dose attenuator may be used.

Old

This does not represent a change for children. In 2005 there was not sufficient evidence to recommend for or against the use of an AED in infants.

Rationale

The lowest energy dose for effective defibrillation in infants and children is not known. The upper limit for safe defibrillation is also not known, but doses >4 J/kg (as high as 9 J/kg) have provided effective defibrillation in children and animal models of pediatric arrest, with no significant adverse effects. AEDs with relatively high energy doses have been used successfully in infants in cardiac arrest, with no clear adverse effects.

2015

McLaren Payroll Calendar

JANUARY

S	M	T	W	T	F	S
				■	~~2~~	3
4	5	6	7	8	9	(10)
[11]	12	13	14	15	~~16~~	17
18	19	20	21	22	23	(24)
[25]	26	27	28	29	~~30~~	31

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	(7)
[8]	9	10	11	12	~~13~~	14
15	16	17	18	19	20	(21)
[22]	23	24	25	26	~~27~~	28

MARCH

S	M	T	W	T	F	S
1	2	3	4	5	6	(7)
[8]	9	10	11	12	~~13~~	14
15	16	17	18	19	20	(21)
[22]	23	24	25	26	~~27~~	28
29	30	31				

APRIL

S	M	T	W	T	F	S
			1	2	3	(4)
[5]	6	7	8	9	~~10~~	11
12	13	14	15	16	17	(18)
[19]	20	21	22	23	~~24~~	25
26	27	28	29	30		

MAY

S	M	T	W	T	F	S
					1	(2)
[3]	4	5	6	7	~~8~~	9
10	11	12	13	14	15	(16)
[17]	18	19	20	21	~~22~~	23
24	■	26	27	28	29	(30)
[31]						

JUNE

S	M	T	W	T	F	S
	1	2	3	4	~~5~~	6
7	8	9	10	11	12	(13)
[14]	15	16	17	18	~~19~~	20
21	22	23	24	25	26	(27)
[28]	29	30				

JULY

S	M	T	W	T	F	S
			1	2	~~3~~	■
5	6	7	8	9	10	(11)
[12]	13	14	15	16	~~17~~	18
19	20	21	22	23	24	(25)
[26]	27	28	29	30	~~31~~	

AUGUST

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	(8)
[9]	10	11	12	13	~~14~~	15
16	17	18	19	20	21	(22)
[23]	24	25	26	27	~~28~~	29
30	31					

SEPTEMBER

S	M	T	W	T	F	S
		1	2	3	4	(5)
[6]	■	8	9	10	~~11~~	12
13	14	15	16	17	18	(19)
[20]	21	22	23	24	~~25~~	26
27	28	29	30			

OCTOBER

S	M	T	W	T	F	S
				1	2	(3)
[4]	5	6	7	8	~~9~~	10
11	12	13	14	15	16	(17)
[18]	19	20	21	22	~~23~~	24
25	26	27	28	29	30	(31)

NOVEMBER

S	M	T	W	T	F	S
[1]	2	3	4	5	~~6~~	7
8	9	10	11	12	13	(14)
[15]	16	17	18	19	~~20~~	21
22	23	24	25	■	27	(28)
[29]	30					

DECEMBER

S	M	T	W	T	F	S
		1	2	3	~~4~~	5
6	7	8	9	10	11	(12)
[13]	14	15	16	17	~~18~~	19
20	21	22	23	24	■	(26)
[27]	28	29	30	~~31~~		

□ **Pay Period Begins** ○ **Pay Period Ends**

╳ **Pay Day** ■ **National Holiday**

P21 Rev. (11/14)

Core Orientation

Day 1

Core Clinical Orientation
Day 1 Agenda

0700 – 0730 **Introduction/Welcome**

0730 – 0800 **Nursing Philosophy/Mission**

0800 – 0900 **Rapid Response Teams**

0900 – 0930 **Break**

0930 – 1030 **Wound Care**

1030 – 1100 **Restraints**

1100 – 1145 **Lunch**

1145 – 1230 **Gift of Life/ Michigan Eye Bank**

N/A, Psych Tech, Monitor Tech leave to go to Ballenger #3 for Glucometer/Age Specific (If large group of N/A, etc.)

1230 – 1300 **Hospice**

1300 – 1330 **Safe Body Mechanics, Patient Transfer, and Ambulation**

1330 – 1400 **Suicide Assessment/Prevention**

1400 – 1500 **Bariatric Sensitivity**

1500 **Excuse RN and ER Techs**

Collect Age Specific Quizes

1500 – 1525 **(N/A, UC, Monitor Techs/Psych stay)**

Review Policies/Procedures on Intranet

- Show link
- Level II VS Dept Policies
- Show how to find bereavement/attendance
- Procedure - Dept, Nrsg Procedure, Basic (Post Mortem Care)
- Order Sets (unit clerk)
- Nrsg Educ Website (BLS)
- Engineering Reports (flame on Novell)
- Bio Med Icon for equipment (sign on and password MRMC)

1525 - 1530 Questions/Summary

McLaren Flint Nursing Philosophy/Mission

McLaren · Flint

New Nursing Orientation

Diane Kallas RN, BSN, MBA
Vice President Nursing Services

McLaren Flint Nursing Vision Statement:

'The nursing staff at McLaren Flint share the joy and honor of advancing and applying the art and science of nursing for the benefit of our patients, their families, and each other.'

- Excellence in 'patient-focused' Nursing Practice
- Innovative thought and action towards Best Practice
- Integrated approaches to foster collaboration with the health care team to achieve continuity of care – caring for each other
- Sensitive and responsive relationships with patients, families and our community
- Commitment to pursue optimal outcomes which are mutually agreed upon, communicated and supported by the patient and health care team.

AIDET… The five fundamentals of successful communication

A	Acknowledge
I	Introduce
D	Duration
E	Explanation
T	Thank You

Nursing Standards of Patient Care

- **Patients can expect to know which nurse is accountable for their care and how to contact that person.**
- **Patients can expect to be involved in discussions and decisions about their plan of care.**
- **Patients can expect that nurses will collaborate effectively with health care colleagues to provide coordinated optimal care.**

4

Leadership Opportunities…Managing Up

- Shared Governance Councils
  - Nurse Practice Council (NPC)
  - Quality Council (QC)
  - Research Council (RC)
  - Education Council (EC)

5

Goals of Shared Leadership

- Promote nursing profession/professionalism by empowering front line staff in the decision making process related to improving patient care and outcomes
- Create environment that promotes participation and accountability for decision making
- Promote unit/dept pride and positive improve self image
- Build mutual collegiality and respect through team collaboration
- Facilitate a level of freedom that will promote creativity

6

Core Measures

- *Heart Failure*
- *Acute Myocardial Infarction (AMI)*
- *Pneumonia*
- *Surgical Care Improvement Project (SCIP)*

Why are Core Measures Important?

- Reflect recommended treatment – Best Practice of Care
  - Improve care
  - Decrease re-hospitalization
  - Decrease infection rates
  - Decrease mortality rates
- Public reported data – Allows consumers to review the care provided at McLaren Flint and compare to other hospitals nationwide

Medication Reconciliation

- **Medications ordered for the patient while under the care of the hospital are compared to those on the list created at the time of entry to the hospital or admission and then reconciled with physician and patient upon discharge**

HCAHPS

What is HCAHPS?
Why is it important?
How can I help?
http://youtu.be/cDDWvj_q-o8

10

11

It's All About Caring

*"**The Doctor"*** by Sir Samuel Luke Fildes, R. A.(1844-1927)

QUESTIONS?????????

Rapid Response

Nursing Orientation

Rapid Response Team
And Code Blue

When it is your responsibility to act!

What requires a Rapid Response Team?

"Any patient condition which requires an immediate response from a physician and specially trained staff."

What is a Code Blue?

"A patient in Cardiac Arrest which requires an immediate response from a physician and specially trained staff."

Resuscitation Review - Quality Management

- Code Committee
- Christina DeBlouw, Chair
- Educators
- Respiratory
- ICU/CCU/SCU Manager
- Physician's/Residents
- Directors
- Pharmacy

Emergencies? Call

Call 22222

Locate essential equipment!

Start Basic Life Support

- **BLS Adult**
  - Ratio 30:2
    - 30 Compressions
    - 2 Ventilations (2 sec)
  - Rate at least 100
    - A,B,C,D,E,F,…
  - Depth 2 Inches, center of chest on sternum

Members of Code Team

1. Medical and Surgical residents
2. Certified Nurse from CCU/ICU
3. Anesthesiology
4. Nursing Supervisor
5. Respiratory Therapy
6. IV Team
7. Staff from the patient care unit

Code Captain

- Directs the team and makes final decision on what orders are to be followed.

Residents

- Administers or supervises medication administration.
- Supervises and/or performs cardiac massage and/or ventilation.
- Supervises defibrillation.
- May insert central line as requested by code captain.

Anesthesiology

- Establish and/or intubate if necessary
- Anesthesia will document under anesthesia notes

CCU/ICU Nurse

- Attaches monitor and determines rhythm.
- Brings Lucas 1 or 2
- In the absence of physician will treat Unconscious V-tach, V-fib, and Asystole.
- Records strips.
- Signs Code record.
- Remains with patient until patient does not require monitoring.

Nursing Supervisor

- Coordinates environment.
- Supervises personnel as needed.
- Provides for ancillary supplies, drugs and equipment.
- Assists with family.
- Evaluates activities and makes recommendations to the Specialty Care Committee.
- Facilitates critical care bed transfer.

Respiratory Therapy

- Ventilates patient.
- Performs chest compressions.
- Draws ABG's if needed.
- Brings ventilator to patient if needed.

IV Team

- Starts peripheral IV line if one is not present.
- Assesses line patency for the administration of medication.

SWAT NURSE

- Dedicated nurse to respond to codes
- Monday-Saturday from 11a-1130p
- Utilize for help prior to code, IV start, medication question, or just to look at your patient.
- 25199

Patient Care Unit - RN

- After the code is called moves roommate to the lounge or hallway
- Sets up good lighting for procedures
- If patient has only one IV, sets up another on a pump
- Prepares drug labels for IV bags
- Takes BP every 3-5 minutes as indicated
- Designates a member of the floor staff to document times and routes of medications

Patient Care Unit – RN cont.

- Brings patient record to the scene of the code.
- Completes and signs post arrest condition section of the Code Blue report.
- Locks medication drawers.
- Requests other personnel to assist with CPR, Code Blue record, and to run errands as needed.

Patient Care Unit – LPN's, NAs, ERTs

- Assists with CPR.
- Brings crash cart to room and other equipment as requested.
- Documents on the Code Blue record.
- Performs other duties as assigned.

What to do if you find a Cardiac Arrest!

- Immediately start CPR!
- Call for help and have someone immediately call a Code Blue.

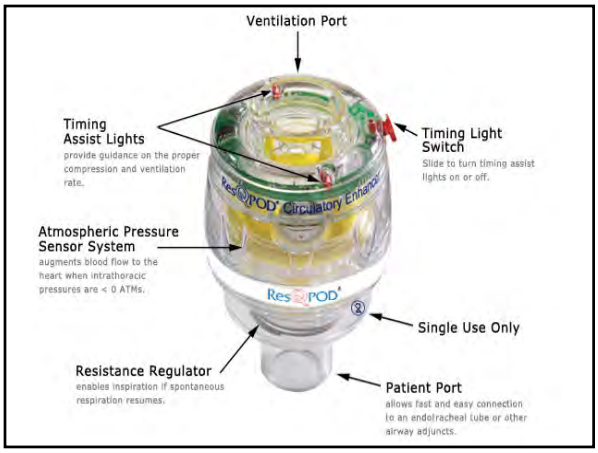
22222

- Stay with patient for duration of the code, do not leave the patient

ACLS facts…

- 68% of all cardiac arrest patients initially present with **VENTRICULAR FIBRILLATION.**
- Rapid recognition is essential.
- Early CPR and Rapid DEFIBRILLATION is the key to conversion.

LUCAS AND ResQPOD



How It Works The ResQPOD prevents unnecessary air from entering the chest during CPR. As the chest wall recoils, the vacuum (negative pressure) in the thorax is greater. This enhanced vacuum pulls more blood back to the heart, doubling blood flow during CPR. Studies have shown that this mechanism increases cardiac output, blood pressure and survival rates. Patient ventilation and exhalation are not restricted in any way.

McLaren FLINT		**Policy Title: Code Blue**	
Section:	**Effective Date: 3/02** **Review Dates: 9/15** **Revised: 5/04, 1/05, 12/06, 3/09, 9/13**	**Oversight Level: Level 2**	**Policy No: PC-107**
McLaren Flint Business Unit: Provision of Care, Treatment and Services		**Interpretation: Rapid Response Committee**	

Objective: To define the processes through which McLaren Flint prepares for and responds to emergency medical situations that includes cardiac arrest with loss of consciousness, pulse and respirations.

Scope: This policy applies to all employees, contract/agency employees, Physicians and Licensed Independent Practitioners.

Policy: McLaren Flint will respond promptly to unexpected cardiac or respiratory arrest, which occurs in patients or any other persons on hospital property, within 250 yards of the main hospital building. (Refer to the EMTALA Policy)

Definitions: *Code Blue:* Is the announcement that is made when there is a cardiac or respiratory arrest to indicate assistance is needed. A Code Blue may be initiated by any personnel who have successfully completed a CPR program as defined by McLaren Flint.

Provisions:

MITIGATION activities include:

Equipment Management:

1. Each nursing unit, procedure, diagnostic or otherwise interventional area of the hospital will house a crash cart. The crash cart will be used in accordance with established ACLS protocol.
2. It is the responsibility of each Nurse Manager to have the **c**rash cart completely stocked and ready for use at all times.
3. A registered nurse (RN) will be assigned to check the crash cart, each day the patient care unit is open and document the integrity of the locks. Checking the cart involves: 1) Checking that the inventory of supplies is available and in working order and 2) sterile supplies have not passed the outdate.
4. The Pharmacy Department is responsible for drawers 1 and 2, which contain medications.
5. It is the responsibility of the Nurse Manager to assure that the **defibrillator** (when one is assigned to the patient care unit) is checked for proper functioning, each day the patient care unit is open.
6. A registered nurse (RN) will be assigned to check the automated external defibrillators (**AED'**s) for readiness, each day the patient care unit is open.
7. The above checks will be **documented** on the appropriate form(s) found with each crash/defibrillator cart.

PREPAREDNESS activities include**:**

1. The Rapid Response Committee will review the crash-cart contents annually.
2. A list of crash cart contents will be placed on each crash cart.
3. Critical Care Nursing Staff who respond to the Code Blue will maintain a current ACLS certification.

RESPONSE activities include:

1. **Responsibility of the person detecting the Code Blue Condition:**
2. Call out to another person to contact the operator by dialing #22222 and stating "There is a Code Blue in/at *insert room number or other location*."
3. Immediately initiate chest compressions, rescue breathing and ongoing assessment of airway patency per BLS protocol.
4.

Responsibility of staff in the immediate area:

1. Bring the crash cart to the scene STAT.
2. Place the cardiac arrest board under the patient between the shoulders and waist.
3. Position the bed for ease of accessibility to the patient in order to administer chest compressions and rescue breathing.
4. In the absence of a physician, the ACLS RN initiates the following emergency interventions based on the American Heart Association (AHA) ACLS algorithms. Refer to Code Blue Team Responsibilities.
5. The Unit Clerk or representative shall notify the Attending Physician as soon as possible following the initiation of the Code Blue process for all Inpatients.

The following will respond as quickly as possible to Code Blue pages:

1. All designated Medical Residents in the hospital
2. ACLS certified nurse from the Critical Care (CCU or ICU), Anesthesia or Emergency Department. **(Refer to Code Blue Assignments)**
3. Anesthesiologist or CRNA
4. Respiratory Therapist
5. Two nursing staff members from the affected patient care unit (at least one RN)
6. The IV Team

The Code Team Captain, the ACLS Nurse or the Supervisor (when available) should dismiss all unnecessary personnel when the designated personnel and equipment is present.

Responsibility of the Telephone Operator:

1. The Operator will answer the emergency line (#22222) immediately.
2. The Operator will relay the following notification via the over head paging system until all members of the code team have arrived: "Code Blue, *insert unit or location*."
3. The Operator will also notify the Code Blue Team via the alpha page system.

Protocol for Chain-of-Command:

1. The first physician to arrive on the scene will assume charge responsibilities until the Code Team Captain arrives. The Code Team Captain is an Intensivist, an Emergency Department Physician, the most senior Medical Resident available in the hospital, or the Attending Physician.
2. Upon arrival, the Code Team Captain is to assume charge of the activities.
3. The Code Team Captain or the Attending Physician (if present) will discontinue the resuscitation efforts, as he/she deems appropriate.
4. The Attending Physician, when available, will retain the authority and responsibility for the resuscitation and post-resuscitation treatment of the patient. However, in his/her absence, the Captain of the Code Team will assume responsibility for the care of the patient.
5. No member of the Code Team shall leave the site of the resuscitation without permission of the Code Team Leader.
6. Responsibilities of the members of the Code Blue Team can be found at the end of this policy.

Repeat-Back:

1. A 'Repeat-Back" process will be utilized to verify receipt of orders prior to

execution of the order or administration of medication. The 'Repeat-Back" process will also be utilized to verify receipt of critical observations related to the patient's condition.

RECOVERY activities include:

1. The Attending physician (when present), the Code Captain or designated nursing personnel is responsible for notifying the family of the patient's condition.
2. A post code debriefing should occur following the conclusion of the Code Blue in order to critique the activities. See Attachment A
3. The used crash cart will be taken to the Pharmacy for re-stocking purposes. A stocked crash cart will be obtained from Pharmacy.

Select Specialty Hospital Code Blue Response

The McLaren Code Blue Team shall respond to all Code Blue activations in the Select Specialty Hospital. The McLaren Code Blue Team will work in conjunction with the Select Specialty Staff[1] to care for and treat the patient. This response shall mirror all other Code Blue responses activated within the Medical Center.

If any patient of a Select Specialty code requires transfer, the McLaren Code Blue Team will coordinate with Select Specialty Staff to insure the orderly transfer of the patient to a Select high observation room or to an appropriate unit within McLaren Flint.

Administrative Responsibility:

The administrative responsibility for enforcement of this policy is the Rapid Response Committee.

References or Appendices:

National Registry of Cardio-Pulmonary Resuscitation (NRCPR) *Resuscitation Review - Quality Management* worksheet - 2003.

Sections 1866 and 1867 of the Social Security Act, 42 U.S.C. 1395dd Clarifications as presented in the Federal Register September 9, 2003

2009 TJC National Patient Safety Goal NPSG 16.01.01

Policy CC 0125 – EMTALA Policy

AHA Guidelines 2010

Attachment A – Post Code Debriefing Form

Attachment B – Code Committee Analysis Tool

[1] All Select Specialty RN and RRT staff are certified in American Heart Association Advanced Cardiac Life Support (ACLS)

Code Blue – ACLS RN Response - Assignments

Area	Response Assignment
Central Building and Main/South Tower – 4th floor and above (except for self response units) including Dialysis, Joint Express and Rehab	CCU Staff
ICU, 12T, 10T and 6C (Self Response)	CCU/ICU, 12T, 10T and 6C Staff
North building – Cardiac Cath Lab, Cardiac Holding, Non-Invasive Cardiology and Radiology	Cardiac Holding Area Staff
Central Building and Main/South Tower – 3rd floor – PACU, POH, , OR and Endo Lab	Surgical Services/OR Staff
Second Floor and below across the hospital McLaren Flint property, outside, within 250 yards of the main hospital building.	Emergency Department Staff

Code Blue Team - Responsibilities

Team Member	Responsibility
Code Team Captain – The first physician to arrive on the scene will assume charge responsibilities until the Code Team Captain arrives. The Code Team Captain is an Intensivist, an Emergency Department Physician, the most senior Medical Resident available in the hospital, or the Attending Physician.	1. Directs the team and makes final decision on what orders are to be followed. 2. Dismisses unneeded personnel from the area. No member of the Code Blue team should leave without permission of the Captain. 3. Discontinues the resuscitation effort as appropriate. 4. Makes decision as to the patient status and if the patient needs to be transferred. 5. Reviews and validates entries on Code Blue record, completes and signs the section entitled, "Physician Comments." 6. Notifies the patient's family of the patient's change of condition. 7. Notifies the patient's physician of the patient's condition following the "Code Blue". 8. In the event of an unsuccessful resuscitation, encourages the family to grant permission for an autopsy when appropriate. 9. Initiates a debriefing that evaluates activities and makes recommendations for improvement to the Rapid Response Committee.
Residents – All designated Medical Residents in the hospital	1. Supervises and/or performs cardiac massage and/or ventilation as needed or until other members of the team arrive. 2. Determines the patient's cardiac rhythm. 3. Administers or supervises the administration of appropriate drugs. 4. Supervises administration of counter-shock when indicated. 5. When CPR is performed, even though a Code Blue was not called, the Resident or the Physician in charge of CPR must sign the Code Blue Record. 6. If a peripheral IV line cannot be established, a physician is to insert a central line as requested by the Code Captain.
Anesthesiology –	1. The Anesthesiologist or Nurse Anesthetist will establish an airway and/or intubate as necessary. 2. The Anesthesiologist or Nurse Anesthetist will write a note on the "Progress

Code Blue Team - Responsibilities

Team Member	Responsibility
Anesthesiologist or Nurse Anesthetist	Record" to document airway management/intubation interventions and patient tolerance or response.
ACLS RN – RN's with current ACLS Certification	1. Brings the portable monitor and defibrillator and Lucas device 2. Ensures the AED is attached or attaches the monitor to the patient and determines the cardiac rhythm. 3. In absence of a physician, treats the following dysrhythmias according to Routine CCU and ACLS Protocol: a. Unconscious Ventricular Tachycardia b. Ventricular Fibrillation c. Asystole 4. Assists in preparing and administering drugs and defibrillation as directed by the physician. 5. Informs the physician of changes in cardiac rhythm. 6. Records appropriate monitor strips. 7. Dismisses unneeded personnel from the area. 8. Signs the Code Blue Record in the appropriate area. 9. Mounts monitor strips to record cardiac rhythm events. 10. Remains with the patient until cardiac monitoring is no longer necessary, the patient is in Critical Care, or is relieved by another ACLS RN. 11. Participates in a debriefing that evaluates activities and makes recommendations for improvement to the Rapid Response Committee.
Respiratory Therapist	1. Maintains the patient's airway and ventilates per BLS protocol. 2. Performs external chest compressions. 3. Draws ABG's as directed by the Code Captain. 4. Remains with the patient until the Code Blue is terminated and/or the patient is transferred to Critical Care. 5. If necessary, brings a ventilator to the patient. 6.
Supervisor (when available)	1. Coordinates patient care environment – directs clearing the room of furniture, moving roommate, etc. 2. Supervises nursing personnel and assists as needed. 3. Ensures continuous availability of medications, supplies and equipment. 4. Requests unneeded personnel to leave. 5. Confirms notification of the family and attending physician. 6. Assists with family(s). 7. Evaluates activities and makes recommendations for improvement to the Rapid Response Committee.
IV Team	1. Starts peripheral line if none is present. 2. Assesses existing IV line to assure patency and that the lumen size is adequate for medication administration. 3. If unable to establish an IV route, the resident is responsible for starting a central line or performing a venous cut-down.
Patient Care Unit Nursing Personnel -- RN's	1. Prepares, labels and administers medications as ordered by the physician. The RN must sign the Code Blue Record in the Notes/Signature column for drugs that he/she administers. 2. Designate a member of the staff to note (on the Code Blue Record) the time of arrest, keep a log of events and chart all medications given, noting the route and dose. 3. Assures synchronization of the time(s) documented between monitor strips, medication administration and notations.

Code Blue Team - Responsibilities

Team Member	Responsibility
	4. Informs the supervisor about shortages of equipment or drugs and needed personnel. 5. Completes the Pharmacy and IV requisition and places it on the crash cart clipboard. 6. Completes and signs the "Post Arrest Condition "section of the Code Blue Record. 7. Locks both medication drawers before the crash cart leaves for restocking using the red plastic locks kept in the medication drawers. 8. Requests other personnel to assist with CPR, monitor other patients and run errands as needed. 9. Confirms notification of the family and Attending Physician. 10. Assists with the family. 11. Assures that the Gift of Life is notified of all deaths. 12. Participates, as appropriate, in a debriefing that evaluates activities and makes recommendations for improvement to the Rapid Response Committee.
Patient Care Unit Nursing Personnel -- LPN's, NA's, NT's	1. Initiates and assists with CPR. 2. Brings crash cart with the AED/Defibrillator and suction equipment to the room and prepares it for use. 3. Brings IV poles, infusion pumps and the patient's medical record to the room. Ensures continuous availability of medications, supplies and equipment. 4. Coordinates the patient care environment - directs clearing of the room of furniture, moving the roommate, etc. 5. Documents on the Code Blue Record. 6. Performs other duties as assigned.
Patient Care Unit Nursing Personnel -- Unit Clerk	1. Activate the Code Blue as directed by nursing personnel. Communicate with the hospital operator until all members of the Code Blue team arrive. 2. Direct the Code Team to the appropriate patient. 3. Notify physicians and family as directed by the Nursing Supervisor. 4. Stamp Code Blue miscellaneous slip and Pharmacy requisitions. 5. Label STAT laboratory tubes with the date, patient's name and hospital number. The person drawing the lab will initial the tubes to document identification of tubes. 6. Notify transportation via teletracking to exchange the crash cart as needed. 7. Notify Social worker to assist with family needs.
Transportation	1. Responds to the Code Blue (except from 11 p.m. to 7 a.m.). Brings a replacement crash cart to the patient care unit. 2. Following the Code Blue, transports used, locked crash cart to the Cart Room and takes used trays to Central Processing.
Code Blue Committee	1. It is the responsibility of the Code Blue Committee to audit all Code Blue Responses by auditing the Code Blue Documentation Form. 2. Upon completion of the analysis, issues/concerns identified will be placed on the Code Committee Analysis Documentation Form (Attachment B) and sent to the appropriate departments for implementation of action plan improvements recommended by the Code Committee.

APPROVAL:

_____

Diane Kallas
Vice President of Nursing Services

Patient Name _____MR#_____

POST CODE DEBRIEFING FORM

Confidential for Peer Review Only

Do Not Place in Medical Record

Complete for all patients who required ANY of the following:
-Emergency assisted ventilation (mouth to mask, mouth to barrier, bag/valve/mask or invasive airway)
-Chest compressions or Defibrillation

The following sections should be completed during or at the conclusion of the event.

Event Date: _____ Time: _____ Location: _____

Was a Hospital-wide resuscitation response activated? □ Yes □ No

Review each of the following categories and check the appropriate box:

□ **Airway:** □Adequate airway established □ Multiple Intubation Attempts - # of attempts=____ □ Delay
□ Aspiration □ Misplacement/Displacement □ Other
Comments:_____
_____

□**Chest Compressions:** □Adequate Compressions □Inadequate Depth/force to generate pulse □Delay
□Rib Fractures □No Board □Lucas Device □ Other
Comments:_____
_____

□**Equipment:** □Available □Not Available □Equipment malfunction □Personnel unable to operate equipment
□ Other
Comments:_____
_____

□**Medications:** □Appropriate Medications □Delay □Selection Issue □All Medications Available
□Dose Issue □Other
Comments:_____
_____

□**AHA Protocols:** □Appropriate protocol □Protocol Deviation □Critical Team Member arrival Delay

Comments:_____
_____

□**Documentation:** □Complete □Code Status not documented □ Other

Comments:_____
_____

Signature of person completing Form: _____

Printed Name: _____

Please complete and forward to Nurse Manager of Unit with the Yellow copy of the Code Blue Sheet.

CODE COMMITTEE

ANALYSIS TOOL

DATE: _____

Issue(s) Identified:

ACLS Educator:

Findings Regarding Above Issue(s):

Action Plan for Improvement:

- ☐ **Educated Physician/Staff involved**
- ☐ **Presented issue(s) at staff meeting**

Physician/Nurse Manager:

Issue Category (Please check issue that applies):

- ☐ 1. Education (Knowledge issue related to ACLS algorithm)
- ☐ 2. Protocol (Following policy/procedures)
- ☐ 3. Process Issues (Processing or follow-up procedures: Ex: Cart to Pharmacy)
- ☐ 4. Documentation (Not filling out code sheet properly)
- ☐ 5. Other

McLaren FLINT		Policy Title: Code Rapid Response	
Section:	Effective Date: 3/02	Oversight Level: Level 2	Policy No: PC-108
	Review Dates: 1/15		
	Revised: 1/05, 10/05, 12/06, 7/07, 9/07, 3/09, 6/10, 1/13		
McLaren Flint Business Unit: Provision of Care, Treatment and Services		Interpretation: Rapid Response Committee	

Objective: To define the processes through which McLaren Flint prepares for and responds to emergency medical situations that **do not** include cardiac arrest with loss of consciousness, pulse and respirations.

Scope: This policy applies to all employees, contract/agency employees, physicians and licensed independent practitioners.

Policy: McLaren Flint staff will respond promptly to medical emergencies on hospital property, within 250 yards of the main hospital building. (Refer to the EMTALA Policy)

Definitions:

Rapid Response: Is the announcement that is made when there is a medical emergency and a Medical Doctor is needed.

Acute Change: Is defined as a change that is abrupt in onset, rapidly progressive and in need of urgent attention. An acute change can also be described as a deviation from the normal trends exhibited by the patient that causes symptoms.

STEMI: Is defined as a ST elevation myocardial infarction

Signs & Symptoms of Stroke: Is defined as weakness, numbness, blurred vision, slurred speech, facial drooping, &/or altered level of consciousness

Provisions:

A Rapid Response will be initiated when the assessment of a patient indicates that the patient is in need of immediate medical attention. Conditions that could require immediate medical attention include, but are not limited to:

1. Acute change in heart rate, less than 40 or greater than 130 bpm
2. Acute change in systolic blood pressure (BP), less than 90 mmHg or greater than 180 mm Hg.
3. Acute change in respiratory rate, less than 8 or greater than 28 per min
4. Acute change in oxygen saturation, less than 90% despite supplemental oxygen.
5. Acute change in level of consciousness
6. Profuse, uncontrollable bleeding
7. Significant deterioration in patient condition
8. New onset seizures or status epilepticus
9. Adverse reaction to sedation
10. Acute allergic reaction
11. Any new signs and symptoms that the patient is having a stroke
12. Any new signs and symptoms that the patient is having a myocardial infarction
13. Staff concerned/worried about patient

Dialing the phone number x22222 and requesting the operator to announce a Rapid

Response will activate Rapid Response. The Rapid Response will then be announced via the overhead paging system in accordance with the Communications Department policy and procedure.

The Unit Clerk or representative shall notify the Attending Physician as soon as possible following the initiation of the Rapid Response process for all Inpatients.

The Rapid Response Team shall immediately report to the location of the patient in distress and be comprised of the following:

1. The Junior and Senior Medical Resident Physician on call
2. SWAT Nurse
3. A Registered Respiratory Therapist (RRT)
4. The RN caring for the patient
5. Other services and caregivers will be paged STAT as need is determined by the Rapid Response Team.

A physician must attend to the use of cardiac monitors on non-monitored patient care units for the term of use.

If a STEMI is confirmed by the Junior/Senior resident via 12 lead ECG a Cardiac Team Alert will be activated (Refer to the Cardiac Team Alert Policy PC-120)

If patient displays signs & symptoms of a stroke a Rapid Response Team-Stroke Alert will be activated (Refer to the Rapid Response Team-Stroke Alert Policy-PC-133)

If the patient's condition changes and the patient experiences a cardiac or respiratory arrest, a Code Blue will be activated. (Refer to the Code Blue Policy PC 107.)

The Code Flow Sheet will be completed at the completion of the patient event.

1. The original copy is placed on the patient's chart.
2. The pink copy will be sent to the Pharmacy to enter charges.
3. The yellow copy will be delivered to the Nurse Manager of the unit on which the event occurred.
4. The Nurse Manager will review the form for completeness and forward it to theRapid Response Committee.

Administrative Responsibility: The administrative responsibility for enforcement of this policy is the Rapid Response Committee.

References or Appendices: Sections 1866 and 1867 of the Social Security Act, 42 U.S.C. 1395dd Clarifications as presented in the Federal Register September 9, 2003

The Institute for Healthcare Improvement (IHI) 100,000 Lives Campaign, Getting Started Kit: Rapid Response Teams

Policy PC 107 – Code Blue

PC 120 – Cardiac Team Alert

Policy PC 133 – Stroke Alert

Policy MHC_CC0125 – EMTALA – Treatment of Emergency Medical Conditions and Patient Transfers

APPROVAL:

_____
Diane Kallas
Vice President of Nursing Services

Crash Cart Scavenger Hunt

Your patient has had a cardiac arrest. The crash cart is brought to the room.

- Ambu bag (Bag-valve-mask device) location _____
- Backboard is located _____

CPR is being performed

- Quick combo pads for the AED/defibrillator location _____

First medication requested 1 mg Epinephrine is located where _____

Find IV start kit, IV tubing, 0.9N/S IV
_____

Central line kit location_____

Need 300 mg Amiodarone. Where is it located _____

Repeat 1 mg epinephrine located where _____

1 gram magnesium is located where _____

Patient has a pulse and is in Normal Sinus Rhythm
Take blood pressure, cuff is located _____

B/P 60/40 start Dopamine is located where _____

True or False Dopamine and Dobutamine are interchangeable? _____

Nasal Gastric tube is located _____

Bulb syringe to check nasal gastric tube placement is located _____

Suction catheter is located _____

Intubation tray location _____

Suction set-up equipment _____

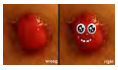
Check pupils, flashlight is located _____

Patient is trying to pull out his tubes, wrist restraints are located _____

Flumazenil (Romazicon) location _____

Wound Care

McLaren Flint
In-patient Wound, Ostomy, and Continence Department


What Can We Help You With?

- Evaluate, and develop a plan of care for wound, ostomy and continence patients
- Evaluate and order specialty beds
- Assist with case management of wound and ostomy issues

How to Consult Us

- Place Consult in Paragon/CPOE
- A physician's order is required for a wd care consult
- Office hours are typically Mon.- Sat. 8:00 to 4:30
- Our department is closed on holidays. Contact the attending for temporary wd care tx orders.
- We try to respond to consults within 24 hours (Consults received late Saturday or on Sunday will be seen on Monday)

Daily Braden

Is Your Patient's Braden Score 18 or Below and they are not on a Pressure Reducing Bed or Mattress???

It is our Policy that all patient's scoring 18 Or Less are to be placed on an Inflatable Overlay (unless already on a pressure redistribution surface).

A Physician's order is not needed.

Barrier cream (Regardless of Incontinence issues) can prevent Sheering.

Staging Pressure Ulcers

- Center for Medicare/Medicaid Services (CMS)
  - Ulcers that develop during a hospital stay will not be paid for by Medicare
- Staff nurses are not to Stage pressure ulcers. Simply describe the wound, its location and if it was present on admission. Remember to consult the wd team!

Prevent Deep Tissue Injury

Let's talk about Treatment Options

Prevent Tape stripping!

Use Adhesive Remover

Don't Over Use Tape!

Fungal infections

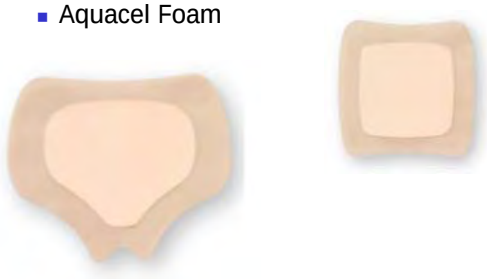
Creams or Powder?

Incontinence Associated Dermatitis (IAD)

What should I use?

Prevention & Treatment

- Aquacel Foam



Infected Wounds

Aquacel Ag

Wounds containing Slough or Eschar

Apply Nickel Thickness

Use with Santyl in dry wounds

Burns

Silvadene Cream

VAC therapy

Staff RN's responsibilities:

- Troubleshoot Pump Alarms
- Change VAC Canisters
- D/C VAC Pump if indicated
- Hang instill fluids if ordered

Ostomy Care & Teaching

We Look forward to working with you!

- Place a consult in Paragon/CPOE
- Remember – A physician's order is required!!
- Not sure if we have seen your patient? Check the Kardex for our yellow treatment orders.
- Look for our documentation under "Wound Assess" in Paragon!!

Restraints

Restraints

McLaren - Flint

Restraints

- Objective: To Strive towards a restraint free environment
- Restraint Definition: Any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of a pt to move freely.
- Restraints can also include drugs or medications.

What is not a Restraint?

- orthopedically prescribed devices
- surgical dressings or bandages
- protective helmets
- physical holding of a patient for the routine physical examinations or tests
- methods to protect the patient from falling out of bed
- Correction restriction used for security purposes by outside agencies

What is not a Restraint cont.

- Full side rails are not considered a restraint in the following instances:
  - When used for seizure precautions
  - For cognitively intact patients who request all side rails to be raised
  - Any comatose or semi-comatose patient or patients who are paralyzed
  - Side rails on stretchers and recovery room beds

McLaren Flint Restraint Policy

Prevent, reduce and eliminate the use of restraints or seclusion by:

•Limiting the use of restraints to emergencies where there is a risk of the patient harming himself or others.

•Using the least restrictive method that will be effective to protect the patient or others from harm.

Causative factors include but are not limited to:

- Oxygenation levels
- Uncontrolled pain
- Abnormal Lab values
- Environmental issues (noise)
- History mental health issues
- Alcohol and drug withdrawal
- Sedation/anesthesia effects
- Medications interactions

Restraints vs Alternatives

Restraint	Alternative to Restraint
Vest	Personal Alarm
Soft wrist	Hand Mitts
Freedom Splint	Family sitting with pt
Geri Chair	Orientation
4 Side Rails in upright position	Quiet environment
Using side rails to prevent pt from voluntarily getting out of bed	Simple explanations
Medication outside of normal treatment in which the intent is to restrain the pt.	Ambulation

Alternative methods employed to avoid restraint

Behavior	Alternative Measures
Pulling Tubes	Frequent Orientation Pt/family education Reposition Medicate for pain/anxiety Re-tape lines and tubes

Alternative methods employed to avoid restraint

Behavior	Alternative Measures
Fall Risk	Frequent orientation Pharmacy consult med review Personal Alarm Relocate near nurses' station Bowel/bladder program PT/OT consult

If alternatives are ineffective, determination the type of restraint appropriate for the patient's behavior

- Nonviolent or Violent
- Use of the least restrictive restraint that is effective to protect the patient from harm
- Consideration of risks

Procedure for Nonviolent Behavior Restraint

- In the event of an emergency, a RN may initiate Nonviolent Behavior restraint so as to prevent injury to the patient or others. A physician's order must be obtained within one hour of application
- Restraints **may not be ordered PRN**. Maximum duration of a non-violent restraint order is 24 hours.

Provisions:

A physician will conduct a face-to-face assessment to identify a patient's need for the restraint. (Within 24 hours of restraint application).

Non-Violent Behavior Restraint Standing Orders

- Date: _____ Time Begin _____ Time End _____

Order limit: 24 hours

Behavior	***Justification***
• Disoriented/confused	Protection of mechanical Ventilation/ET
• Inability to remember/follow directions	
• Pulling at lines/tubes	Protection of feeding / drainage tubes
• Pulling at treatment devices	
• Attempting to get up unassisted	Protection of invasive lines/equip.
• Sedated	High risk for falls
	Other

Non-Violent Behavior Restraint Standing Orders continued

- **Restraint Type**
  - □ Soft limb □ Vest □ Chemical _____
  - □ Freedom Splint □ 4 Side rails □ other _____
- **Points of Restraint**:
  - □ Right arm □ Right leg
  - □ Left arm □ Left leg
- **Other Directives**
  Other _____
- Patient and/or family informed concerning use of restraint Date _____Time _____
- Attending Physician notified within one hour of Restraint application Date _____Time _____
- *Discontinue restraint when behavior is no longer harmful to self or others (must obtain a new order if restraints are to be reapplied).*

Trial Release of the Restraint

- An authorized staff member can and should release a patient restraints if the pt returns of little to no risk of harm.
- When a patient is released from restraint for a trial release, the restraint intervention is considered discontinued.

Procedure for Violent Behavior Restraint

What's the difference??

- The order for a violent behavior restraint may not exceed 4 hours for an adult 18 years or older, 2 hours for children ages 9-17 and 1 hour for children under the age of 9.
- The RN will continually assess the patient and will document this assessment every four hours and as indicated by a change in behavior.

Violent Behavior Restraint Order Form

- Date: _____ Time Begin _____ Time End _____

Adult Order limit: 4 hours ***Age 9-17: 2 hours*** ***Under 9 years: 1 hour***

Behavior	***Justification***
• Hitting/kicking	Protection of self from injury
• Biting/spitting	Protection of others from injury
• Throwing objects	Destruction of property
• Cutting self	
• Extremity banging/Head banging	

Violent Behavior Restraint Order Form continued

- **Restraint Type**
  □ Soft limb □ Vest □ Chemical _____
  □ Full Body Net □ 4 Side rails □ other _____
- **Points of Restraint**:
  □ Right arm □ Right leg
  □ Left arm □ Left leg
- **Other Directives**
  Continuous Observation (mandated)
  Other _____
- Patient and/or family informed concerning use of restraint Date _____Time _____
- Attending Physician notified within one hour of Restraint application Date _____Time _____
- *Discontinue restraint when behavior is no longer harmful to self or others (must obtain a new order if restraints are to be reapplied).*

Patient/Family Education

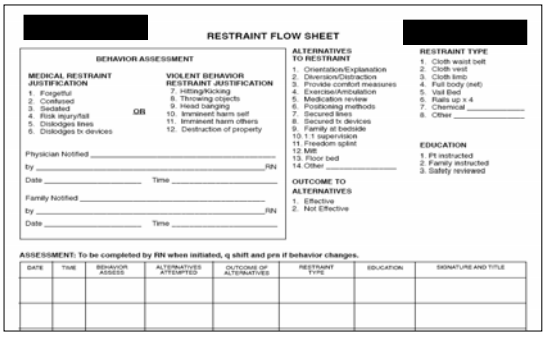
- The reason why the restraint is needed
- The negative aspects of the restraint
- Alternatives to the restraint
- Behavior required to discontinue the restraint

Documentation

- Behavior necessitating the use of restraint
- Alternatives attempted to avoid restraint
- Type of restraint
- Patient/family education
- Results of the RN assessment
- Care provided while restraints in use
- Physician order for restraints

- Violent restraint documentation requires assessment and documentation at least every 15 minutes.
- Non-Violent restraint documentation requires assessment and documentation at least every 2 hours

Down Time Restraint Flowsheet



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RESTRAINT FLOW SHEET

[redacted]

BEHAVIOR ASSESSMENT

MEDICAL RESTRAINT JUSTIFICATION
1. Forgetful
2. Confused
3. Sedated
4. Risk injury/fall
5. Dislodges lines
6. Dislodges tx devices

OR

VIOLENT BEHAVIOR RESTRAINT JUSTIFICATION
7. Hitting/Kicking
8. Throwing objects
9. Head banging
10. Imminent harm self
11. Imminent harm others
12. Destruction of property

Physician Notified _____
by _____ RN
Date _____ Time _____
Family Notified _____
by _____ RN
Date _____ Time _____

ALTERNATIVES TO RESTRAINT
1. Orientation/Explanation
2. Diversion/Distraction
3. Provide comfort measures
4. Exercise/Ambulation
5. Medication review
6. Positioning methods
7. Secured lines
8. Secured tx devices
9. Family at bedside
10. 1:1 supervision
11. Freedom splint
12. MIE
13. Floor bed
14. Other _____

OUTCOME TO ALTERNATIVES
1. Effective
2. Not Effective

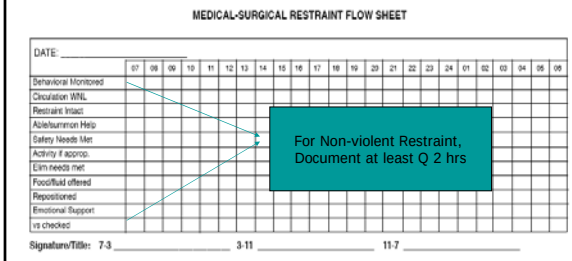
RESTRAINT TYPE
1. Cloth waist belt
2. Cloth vest
3. Cloth limb
4. Full body (net)
5. Vail Bed
6. Rails up x 4
7. Chemical _____
8. Other _____

EDUCATION
1. Pt instructed
2. Family instructed
3. Safety reviewed

ASSESSMENT: To be completed by RN when initiated, q shift and prn if behavior changes.

DATE	TIME	BEHAVIOR ASSESS	ALTERNATIVES ATTEMPTED	OUTCOME OF ALTERNATIVES	RESTRAINT TYPE	EDUCATION	SIGNATURE AND TITLE

Down Time Restraint Flow Sheet Hourly Assessments



MEDICAL-SURGICAL RESTRAINT FLOW SHEET

DATE: _____

	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	01	02	03	04	05	06
Behavioral Monitored																								
Circulation WNL																								
Restraint Intact																								
Able/summon Help																								
Safety Needs Met																								
Activity if approp.																								
Elim needs met																								
Food/fluid offered																								
Repositioned																								
Emotional Support																								
vs checked																								

For Non-violent Restraint, Document at least Q 2 hrs

Signature/Title: 7-3 _____ 3-11 _____ 11-7 _____

Restraint Demo & Questions????

McLAREN	**McLaren Regional Medical Center**	**Policy Title: Restraints**	
Section:	**Effective Date: 1/96** **Review Dates: 7/14** **Revised: 1/99, 1/02, 1/05, 3/06, 9/06, 11/07, 3/08, 1/09, 6/09, 8/11, 7/12**	**Oversight Level: Level 2**	**Policy No: PC-110**
MRMC Business Unit: Provision of Care, Treatment and Services		**Interpretation: Vice President of Nursing Services**	

Objective:

McLaren Regional Medical Center's philosophy is to strive toward a restraint free environment by continuously improving our practice to protect patients and respect their rights and dignity.

Scope:

This policy applies to all members of the patient care team who assess and/or provide care to patients. Behavioral health has their own policy regarding restraints and seclusion (Behavioral Health Procedure Manual Restraint BH/RR-110 and Seclusion BH/RR-120).

Definitions:

Restraint: 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; or 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 treatment or dosage for the patient's condition. (See Attachment E)

A restraint does not include devices, such as orthopedically prescribed devices, surgical dressings or bandages, protective helmets, or other methods that involve the physical holding of a patient for the purpose of conducting routine physical examinations or tests, or to protect the patient from falling out of bed, or to permit the patient to participate in activities without the risk of physical harm (this does not include a physical escort).

Seclusion: The involuntary confinement of a patient alone in a room or area from which the patient is physically prevented from leaving. Seclusion may only be used for the management of violent or self-destructive behavior that jeopardizes the immediate physical safety of the patient, a staff member, or others. Seclusion will only be used at MRMC on the Psychiatric Unit, 7 Central.

Policy:

It is the policy of McLaren Regional Medical Center that:

All patients have the right to be free from physical or mental abuse, and corporal punishment. All patients have the right to be free from restraint or seclusion, of any form, imposed as a means of coercion, discipline, convenience, or retaliation by staff. Restraint or seclusion may only be imposed to ensure the immediate physical safety of the patient, a staff member, or others and must be discontinued at the earliest possible time.

Prevent, reduce and eliminate the use of restraints or seclusion by:

- Preventing emergencies that have the potential to lead to the use of restraints and seclusion.
- Limiting the use of restraints and seclusion to emergencies where there is a risk of the patient harming himself or others.

- Using the least restrictive method that will be effective to protect the patient or others from harm.
- Develop staffing plans that minimize the need for restraint and ensure safe use of restraint and seclusion.

Protect the patient and preserve the patient's rights, dignity, and well-being during restraint use by:

- Respecting the patient as an individual.
- Maintaining a clean and safe environment.
- Encouraging the patient to continue to participate in his/her own care.
- Maintaining the patient's modesty, preventing visibility to others, and maintaining a comfortable body temperature.
- Provide for safe application and removal of the restraint by qualified staff.
- Monitor and meet the patient's needs while in restraints.
- Reassess and encourage release of restraints as soon as possible

Provisions: **Assessment/Decision**

A physician will conduct a face-to-face assessment to identify a patient's need for restraint. The assessment must determine whether the patient has a medical condition or symptom that indicates a need for protective intervention. The assessment includes the following:

- **The observed behavior** which includes:
  - Behavior that may interfere with life saving and/or necessary medical treatment. This includes pulling at lines, catheters and tubes, picking at an open wound, interfering with complex dressings, drains and traction, etc.
  - Behavior that indicates the patient is unable to follow directions to avoid self-injury. This includes climbing out of bed or ambulating without the strength or cognition to safely do so.
  - Behavior that is imminently harmful to self, others or property. This includes hair pulling, hitting, kicking, biting, throwing objects, head banging, cutting self, etc.

- **An assessment of causative factors for the behavior**

  Causative factors include but are not limited to:
  - Oxygenation levels
  - Uncontrolled pain
  - Abnormal Lab values
  - Environmental issues such as noise or fear
  - History of anxiety or mental health issues
  - Alcohol and drug withdrawal
  - Sedation/anesthesia effects
  - Medications or drug interactions
  - Loss of control in the hospital

- **Alternative methods employed to avoid restraint**

Alternative measures refer to interventions that are utilized to maintain the safety of the patient and/or others and avoid the use of restraints. Alternatives to restraints are to be considered prior to the application of restraints. See Attachment A for examples.

- **Discussion with the patient/family concerning the use of restraints**

- **Determination of the type of restraint appropriate for the patient's behavior**

This includes:

- The restraint standard to be used: Nonviolent or Violent (See Attachment B.)
- Use of the least restrictive restraint that is effective to protect the patient or others from harm.
- Consideration of risks in vulnerable populations.
  - For example: A pregnant patient of 20 weeks or greater gestation should not be positioned supine and should not be restrained with vest or waist restraints.
  - A patient with fragile skin should have frequent skin inspections and padded limb restraints.
  - A patient with respiratory compromise should not be restrained in a prone position.

Procedure for Nonviolent(Non self destructive) Behavior Restraint

- If initiation of restraint is based on a significant change in the patient's condition, the primary physician must be contacted immediately.
- In the event of an emergency, a RN may initiate Nonviolent Behavior restraint so as to prevent injury to the patient or others. A physician's order must be obtained within one hour of application.
- Obtain an order for non-violent restraint from the physician (Attachment C). The Attending physician must be consulted within one hour if he/she did not originally order the restraint.
- The order must include the reason for the restraint, the patient's behavior, and type of restraints, number of limbs to be restrained, and the duration of the restraint.
- Restraints **may not be ordered PRN**. Maximum duration of a non-violent restraint order is 24 hours. The physician bases each order upon an examination of the patient.
- Circulation status, behavior, ability to summon help, maintenance of safety, assistance with foods and fluids, toileting, ROM or activity and repositioning and restraint integrity are monitored and documented at a minimum, every 2 hours.
- and as appropriate.
- The RN will reassess the patient for the need of restraints continuously and document the results of the assessment at least every shift. The reassessment will include:
  - The actual behavior observed
  - Alternatives attempted
  - Outcome to the alternatives
  - Justification of restraint versus readiness to discontinue the restraint
  - Status of the physician order
  - Patient/family education

- An RN can release or direct a trained staff member to release a patient from restraints or reduce the level of restraints. This decision will be based on:
  - Less restrictive measures are effective
  - A reduction in behaviors that warranted use of restraints
  - ~~o~~ The return to a level of little or no risk for harm or interference with medial interventions
- When a patient is released from restraint for a trial release, the restraint intervention is considered discontinued. A new order is required prior to reapplying the restraint regardless of the time frame. The restraint may be released temporarily for things such as Therapies, eating, and using the bathroom, must be under direct staff supervision at all times when the restraint is released.
- Only staff that are trained and evaluated annually for competency can apply restraints.
- Restraint or Seclusion must be discontinued at the earliest possible time, regardless of the length of time identified in the order.

Procedure for Violent (Self destructive) Behavior Restraint

- If there is a significant change in the patient's condition that requires initiation of restraint, the primary physician must be contacted immediately.
- In the event of an emergency, an RN may initiate restraints so as to prevent injury to the patient or others. A physician must do a face-to-face evaluation of the patient's behavior and the need for restraints within 1 hour after the restraint has been initiated. The physician must evaluate and document 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 restraint or seclusion and document the 1-hour, face-to-face medical and behavioral evaluation.
- The Attending physician must be consulted within one hour if he/she did not originally order the restraint.
- The order must include the reason for restraint, type of restraint, number of limbs to be restrained, and the duration of the restraint (Attachment D).
- Restraints are time limited and **may not be ordered PRN**. The order for a behavior management restraint may not exceed 4 hours for an adult 18 years or older, 2 hours for children ages 9-17 and 1 hour for children under the age of 9.
- The original order may be renewed by verbal order up to 24 hours within the time limits: every 4 hours for an adult 18 years or older, 2 hours for children ages 9-17, and 1 hour for children under the age of 9.
- Circulation, vital signs (pulse and respiration) as appropriate, maintenance of safety measures, behavior, and emotional support will be addressed and documented every 15 minutes.
- Assistance with foods and fluids, toileting, ROM or activity, and repositioning is provided every hour as appropriate while awake.
- The RN will continually assess the patient and will document this assessment every four hours and as indicated by a change in behavior. This assessment will include:
    - The actual behavior observed
    - A determination of the patient's behavior continues to justify the use of a
    - Behavioral restraint
    - Alternative measure which may be employed to avoid restraint and the effectiveness of those methods
    - Discussion with the patient and/or family concerning the continued use of restraints and the behavior required to discontinue the restraint.
- A Registered Nurse can release or direct a trained staff member to release a patient from restraints or reduce the level of restraints. This decision will be based on:
    - Less restrictive measures are effective
    - A reduction in behaviors that warranted use of restraints
    - The return to a level of little or no risk for harm or interference with medical interventions
- When a patient is released from restraint for a trial release, the restraint intervention is considered discontinued. A new order is required prior to reapplying the restraint regardless of the time frame. The restraint may be released temporarily for things such as Therapies, eating, and using the bathroom, must be under direct staff supervision at all times when the restraint is released.
- Only staff that are trained and evaluated annually for competency can apply restraints.
- Restraint or Seclusion must be discontinued at the earliest possible time, regardless or the length of time identified in the order.

Patient/Family Education

If a restraint is required, the following information will be provided to the patient/family as soon as possible during waking hours:

- The reason why the restraint is needed
- The negative aspects of the restraint
- Alternatives to the restraint

- Behavior required to discontinue the restraint

Documentation

The following must be documented in the patient's medical record:

- Behavior necessitating the use of restraint
- Alternatives attempted to avoid restraint
- Type of restraint
- Patient/family education
- Results of the RN assessment
- Care provided while restraints in use
- Physician order for restraints

Staff Education

Education of staff fosters a culture that first encourages alternatives to restraints and the use of least restrictive methods of restraint if the alternative strategies are not effective. In addition, education fosters a culture that respects the patient's rights and dignity.

All staff that apply Restraints and Seclusion, are educated, trained, and demonstrate knowledge based on the specific needs of the patient population in at least the following:

- Techniques to identify staff and patient behaviors, events, and environmental factors that may trigger circumstances that require restraint or seclusion.
- The use of non-physical 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 restraint or seclusion used in the hospital, including training in how to recognize and respond to signs of physical and psychological distress
- Clinical identification of specific behavioral changes that indicate that restraint or seclusion is no longer necessary
- Monitoring the physical and psychological well-being of the patient who is restrained, or secluded, including but not limited to, respiratory and circulatory status, skin integrity, vital signs, and any special requirements specified by hospital policy associated with the 1-hour face-to-face evaluation
- The use of first aid techniques and certification in the use of CPR, including required periodic recertification.
- All physicians authorized to order restraints must have a working knowledge of this hospital policy regarding the use of restraint or seclusion.

Initial and ongoing education, training, and competency assessment is mandatory for staff that applies or monitors patients in restraints and seclusion. Education and competencies are formatted according to staff needs.

Performance Improvement

Unit based continuous performance improvement opportunities will be sought to understand the cause of restraint use and incorporate this understanding into patient care planning.

Quality Improvement Data will be collected as follows:

- All occurrences of restraint will be concurrently reviewed on all Acute Care Patient Units.
- Data will be collected from Critical Care Units on 10 restrained patients per month.
- The information in table A will be collected on a quarterly basis and forwarded to the Nursing Quality Council

- Data will be collected from all other units that have utilized restraints on 20 patients a month.

Table A

Non Violent (Non Self Destructive) Requirements	**Monitor**	**Data Review/Trending Analysis**
	Physician order within 1 hour of application	Data reviewed and action items identified quarterly by restraint team. Annual summary reviewed by Provision of Care Committee.
	New order Q 24 hours	
	Circulation status, behavior, ability to call help ROM, toileting, fluids etc…documented Q 12 hours.	
	Q shift RN assessment of need for continued restraintROM, toileting, fluids Q 2 hours while awake	
Violent Behavior (Self Destructive)	**Monitor** Q shift RN assessment of need for continued restraint	**Trending analysis**
Violent Behavior	Physician face to face within 1 hour of application **Monitor**	Data reviewed and action items identified quarterly by restraint team. Annual summary reviewed by Nursing Quality Committee **Trending analysis**
	Attending consulted within 1 hour if not	Data reviewed and action items identified

	original ordererPhysician face to face within 1 hour of application	quarterly by restraint team. Annual summary reviewed by Nursing Quality Committee
	Order does not exceed 4 hoursAttending consulted within 1 hour if not original orderer	
	Circulation and vitals documented Q15 minsOrder does not exceed 4 hours	
	Assistance food fluids toileting Q hourCirculation and vitals documented Q15 mins	
	Assistance food fluids toileting Q hour	

- Quarterly reports will be presented to Nursing Quality Council.

Reporting
MRMC will report to CMS each death that:

- Occurs while a patient is in restraint or in seclusion at the hospital.
- Occurs within 24 hours after the patient has been removed from restraint or seclusion.
- Each death known to the hospital that occurs within 1 week after restraint or seclusion where it is reasonable to assume that use of restraint or placement in seclusion contributed directly or indirectly to a patient's death.

"Reasonable to assume" 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.

Upon knowledge of a patient's death with the use of patient restraints, during regular business hours, the nursing manager or supervisor will e-mail or contact Risk Management with the following information

1. Name
2. Medical Record Number
3. Birth date
4. Time and date of Death
5. Circumstances surrounding death
6. Type of Restraint Used
7. Date & Time Restraint Applied
8. Total Length of Restraint
9. Date and Time Last Monitored
10. Reason for Restraint

During Non business hours or on the weekends the nursing manager or supervisor should call the patient safety help line @ 342-4357 to have Risk/Quality Management alerted.

B. Risk Management will report the death to the Regional Office prior to the close of business on the business day following the day of the patient's death Risk Management will maintain a log of all notifications made to CMS.

Administrative Responsibility:

Hospital Leadership demonstrates its commitment to the restraint policy by providing and promoting:

- Ongoing staff orientation and training
- Patient and family education as appropriate
- The development and promotion of preventive strategies and the ongoing assessment of alternative measures
- The use of safe and effective alternative measures including adequate human resources.
- Limiting the use of restraint to situations where there is appropriate clinical justification.
- The integration of restraints into the Performance Improvement Program for the purpose of reducing restraint or seclusion use.

In addition to the above, the levels of leadership have specific responsibility for restraint practice:

- Nurse Managers are responsible for monitoring compliance with the restraint policy within their Units of responsibility
- The Director of Nursing is responsible for monitoring restraint usage within their units of responsibility.

Exception Provisions:

The following are not considered restraints in this policy:

- A restraint does not include devices, such as orthopedically prescribed devices, surgical dressings or bandages, protective helmets, or other methods that involve the physical holding of a patient for the purpose of conducting routine physical examinations or tests, or to protect the patient from falling out of bed, or to permit the patient to participate in activities without the risk of physical harm (this does not include a physical escort).
- Forensic and correction restriction used for security purposes by outside agencies
- Full side rails are not considered a restraint in the following instances:
  - When used for seizure precautions
  - For cognitively intact patients who request all side rails to be raised
  - Any comatose or semi-comatose patient or patients who are paralyzed
  - Side rails on stretchers and recovery room beds

References or Appendices:

Comprehensive Accreditation Manual for Hospitals

CMS Guidance Document Survey and Certification Policy Letter; October 17, , 2008

Federal Register Part IV: Medicare and Medicaid Programs; Hospital Conditions of Participation: Patient's Rights; Final Rule December 2006 482.13(e-g)

Zusman, J., Restraint and Seclusion: Understanding the JCAHO Standards and Federal Regulations, Marblehead MA: Opus Communications, Inc. 2001

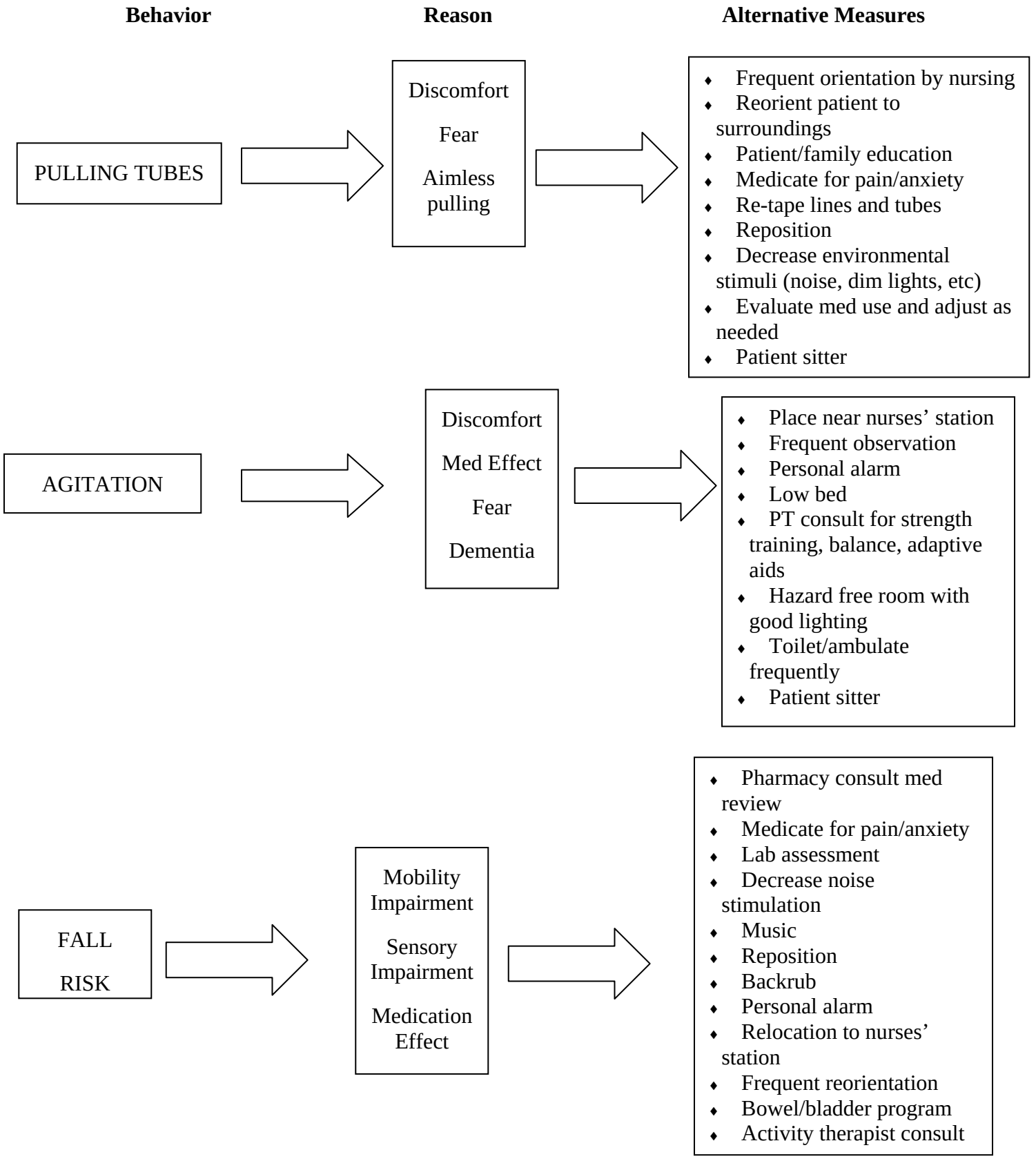
APPROVAL:

_____

Diane Kallas
Vice President of Nursing Services

Attachment A

Alternative Decision Tree



Attachment B

Restraint Summary

Non-Violent	Violent Behavior
▪ **Behavior indicating need: Pulling out lines or treatment devices, falls.** ▪ Search for a cause for the behavior. ▪ Try alternatives to prevent restraint ▪ If alternatives not successful, need a physician order to apply ▪ Use physician order form for Non-Violent Restraint. Cannot order prn. ▪ Attending physician must be notified ASAP if didn't write/give original order ▪ Order outdates every 24 hours ▪ Notify Nurse Manager that patient is in Restraint ▪ RN assessment when restraint is applied and every shift. ▪ Document care minimally every two hours and as indicated. ▪ Family to be notified when restraint is applied ▪ Review safety needs with patient every assessment period ▪ Continue to search for a way to discontinue restraint ▪ Death reporting requirement (See reporting provision).	▪ **Behavior indicating need: Kicking hitting, biting, throwing objects, cutting self, spitting, head or limb banging.** ▪ Must be **evaluated by physician in person** within 1 hour and **order written** on physician order form for Violent Behavior Restraint. ▪ Attending physician must be notified within one hour if didn't write original order ▪ Order outdates every 4 hours for adults age 18 and up; every 2 hours ages 9-17; and every 1-hour for patients under 9 years and may be renewed by verbal order up to 24 hours. ▪ Notify Nurse Manager that patient is in Restraints ▪ Must be continuously monitored ▪ Must document monitoring every 15 minutes ▪ RN assessment when applied and before order outdates (every 4 hours adult; 2 hours adolescent; and 1 hour child) ▪ Teach the patient the behavior needed to discontinue the restraint ▪ Family to be notified when restraint is applied. ▪ Continue to search for ways to discontinue the restraint ▪ Death reporting requirement (See Reporting provision)

Restraint vs. Alternatives

Restraint	Alternative to Restraint
Vest	Personal Alarm
Soft wrist	Hand Mitts
Freedom Splint	Family sitting with patient
Geri Chair or any appliance that prevents patient from getting of the chair on his own	Orientation
Sheets tucked too tightly	Distraction
4 Side Rails in upright position *	Quiet environment
Using side rails to prevent patient from voluntarily getting out of bed (any)	Simple explanations
Medication outside of normal treatment in which the intent is to restrain the patient.	Ambulation
	Secured treatment devices (arm board, tape for IV sites)

* See Exception Provisions Page 7 of policy.

A general rule of thumb is that if a patient can easily remove a device, the device would not be considered a restraint. This means that the patient can remove it intentionally in the same manner it was applied by staff (side rails put down not climbed over; buckles intentionally unbuckled).

Attachment D

McLaren Flint
FLINT, MICHIGAN

NON VIOLENT RESTRAINT ORDER FORM

PATIENT IDENTIFICATION

Order *Limit*: 24 hours

Behavior	Justification
☐ Disoriented/confused	☐ Protection of mechanical ventilation/ET
☐ Inability to remember/follow directions	☐ Protection of feeding/drainage tubes
☐ Pulling at lines/tubes	☐ Protection of invasive lines/equipment
☐ Pulling at treatment devices	☐ High risk for falls
☐ Attempting to get up unassisted	☐ Other_____
☐ Sedated	

Restraint Type:

☐ Soft Limb ☐ Vest ☐ Chemical ☐ Freedom Splint
☐ 4 Side Rails ☐ Other _____

Points of Restraint:

☐ Right Arm ☐ Right Leg

☐ Left Arm ☐ Left Leg

Other Directives:

Patient and/or family informed concerning use of restraint: Date:_____ Time:_____

Attending Physician notified within one hour of Restraint application: Date:_____ Time:_____

Discontinue restraint when behavior no longer meets behavioral justification for restraint (must obtain a new order if restraints are to be reapplied)

Date Begin:_____ **Time Begin:**_____

Date End:_____ **Time End:**_____

_____ _____ _____
Physician Signature Date (required) Time (required)

Revised 08/11/2009
M – 1708 – 227

690B

PHYSICIANS ORDERS AND INSTRUCTIONS TO NURSE

Attachment E

McLaren Flint
FLINT, MICHIGAN

VIOLENT BEHAVIOR RESTRAINT ORDER FORM

PATIENT IDENTIFICATION

Adult order limit: 4 hours

Age 9-17 order limit: 2 hours ***Under 9 years limit: 1 hour***

Behavior	Justification
☐ Hitting / Kicking	☐ Protection of self from injury
☐ Biting / Spitting	☐ Protection of others from injury
☐ Throwing Objects	☐ Destruction of property
☐ Cutting Self	
☐ Extremity banging / Head banging	

Restraint Type:

☐ Soft Limb ☐ Vest ☐ Chemical ☐ Freedom Splint
☐ 4 Side Rails ☐ Other _____

Points of Restraint:

☐ Right Arm ☐ Right Leg

☐ Left Arm ☐ Left Leg

Other Directives:

Continuous Observation (mandated)

Physician must evaluate within 1 hour of initiation. May be renewed by verbal order up to 24 hours at these times.

Other: _____

Patient and/or family informed concerning use of restraint: Date:_____ Time:_____

Attending Physician notified within one hour of Restraint application: Date:_____ Time:_____

Date Begin:_____ **Time Begin:**_____

Date End:_____ **Time End:**_____

_____ _____ _____
Physician Signature Date (required) Time (required)

Attachment F

McLAREN FLINT
Flint, Michigan
RISK MANAGEMENT

CMS DEATH REPORTING REQUIREMENTS

To: Director of Health Information Services

From: Risk Management

Date: _____ / _____ / _____

Re: CMS Death Reporting Requirements

Please file this memo under "Correspondence" in the patient record stated below as verification that CMS was contacted concerning requirements with the use of restraints and death:

Patient Name: _____

Medical Record Number: _____

Financial Number: _____

Date(s) of Hospital Stay: _____

Time and Date of Death: _____

❑ Report made to CMS: _____

Time and Date/Person Reporting to CMS: _____

❑ Recorded on Internal Log: _____

Original copy of this form is kept in Risk Management

PT.

MR.#/P.M.

DR.

Educational Resources and Development
Restraint Application Competency Assessment

Skill Activity	Yes	No	Comments
1. Soft Limb Restraint			
• Applies restraint so that index finger fits between restraint and limb			
• Threads both straps through loop			
• Ties a knot on top of the loop			
• Ties a quick release knot to frame of bed above hinge point			
2. Vest Restraint			
• Selects correct size (Yellow=L, Green=M, Red=S)			
• Zips restraint in back			
• Ties waist straps according to patient's girth			
• Able to slide 4 fingers & hand under strap			
• Ties quick release knot correctly to:			
1. Bed frame without crossing straps & above hinge point			
2. Kick spur of wheelchair & crosses straps			
3. Mitt			
• Places padded surface on palm side of hand			
• Fastens strap at wrist			
• Able to insert one finger between strap & wrist			

Name_____Unit_____Date_____

Verified By_____

Gift of Life

Organ and Tissue Donation… "Give So Others Can Live!"

A Collaborative Effort Involving
You, Your Patients, Your Facility and
Gift of Life Michigan

What Do We Do?

- "Gift of Life Michigan" acts as an intermediary…

Donor Families ➡ Donor Hospitals ⬌ Gift of Life ⬅ Transplant Centers ⬅ Potential Recipients

- Acting under Federal and State Law, we and/or our designees are the sole entity permitted to approach potential donor families regarding donation issues and/or to determine donor medical suitability.
- *Most importantly, we exist to help save the lives of those on organ transplant waiting lists, and enhance the lives of those in need of tissue transplants!*

The Magnitude of the Need.

- In 2008, 3,194 Michigan patients waited for an organ transplant…
  - 925 received an organ transplant.
  - **179 patients died waiting.**
- In 2008, 95,000* patients nationwide waited…
  - 28,932 received an organ transplant.
  - **6,111 patients died waiting.**

*UNOS Data, 2008

17 people die waiting on the transplant lists, every day…

10 % of those waiting are pediatric patients…

How is a Potential Donor Identified? When Must I Call Gift of Life?

- When any patient has been identified as meeting the following “imminent death” criteria;
  - **On a ventilator, *with;***
  - **Intact cardiac circulation, *and;***
  - **Severe brain injury/insult,** e.g., secondary to trauma such as [GSW, MVA, drowning], or other cause, such as [CVA, SAH, ICB or “Anoxic Brain Injury;”] ***and;***
  - **Glasgow Coma Scale [GCS] of 5 or less.**
- …We must be contacted!

When Should You Call… …a Subset

- Within an hour of the aforementioned “imminent death parameters" [previous page] being identified, and/or:
- As soon as possible [within one hour] when considering initiation of “Do Not Resuscitate” [DNR] orders, “Withdrawal of Support” and/or “Brain Death Protocol” procedures.
- After every expiration, ***and:***
- ***Prior to any discussion of organ/tissue donation issues with the family!***

Who Can Be a Donor?

- As the depth of medical knowledge increases, as transplant procedures evolve, parameters for "suitable" donors are constantly changing.
- In the past, only "pristine" donors of exceptional pre-trauma health would have been considered for donation.
- "Aggressive" transplant centers are now offering the option of transplantation of "less than pristine" organs.
- Additionally, transplants have been completed from HIV, hepatitis and other donors to recipients having the same diagnosis.
- Therefore, donor age, medical history [and/or medical examiner involvement] do not automatically preclude the possibility of organ donation.

Discussing Organ Donation With the Family

- An Overview
- "What Works, What Doesn't"
- Some Sobering Findings!
- Best Practices
- Hospital Policy and Federal Mandate

"The Approach," An Overview

- The importance of a trained and skillful approach cannot be overstated!
- Discussions with the family require high [documented!] levels of training and an extensive medical background [in the realm of recovery and transplant.]
- It is profoundly ineffective, not to mention illegal, to approach families without documented training.

What Works, What Doesn't"

- What Works?
  - Potential donor involvement and documentation of "Donor Registry."
  - Documented training in approach methodology.
  - A collaborative approach, including you, the caregiver, and Gift of Life coordinators.
  - Timely recognition of "imminent death" criteria.
  - Remembering that your current, expired patient, may provide a lifeline to a waiting recipient.

- What Doesn't Work?
  - Violation of hospital policy and federal/state mandates by initiating "Inappropriate Approaches."
  - What are "Inappropriate Approaches?"
    - Attempts by untrained or unskilled personnel.
    - When attempted at an inappropriate time.
    - Often, when attempted solely by the primary caregivers!
      - It may seem counter-intuitive, and even in the event that physicians and/or nurses may have an unusually high rapport with a specific family, numerous studies show that consent statistics are dismal when closely involved health care personnel request organ donation consent.

Gift of Life Michigan

2001 Comparison of Requestor Consent Rates

Requestor Category	# Approached Families	# Consents Obtained	Consent Rate
Gift of Life Donation Coordinator[1]	625	377	60%
Hospital Trained Designated Requestor	1,223	299	25%
Hospital Personnel, Untrained Requestor[2]	8,217	1,265	15%
Total	10,065	1,941	20%

1. Collaborative approach by Gift of Life Donation Coordinator and hospital representative for offering organ and tissue donation.
2. Hospital representative not designated by their hospital to offer organ and tissue donation to families, and have not attended a Gift of Life training program for offering tissue or organ donation to a family.

It is critical to note that most approaches were initiated, statewide, by untrained requestors! If the 8,217 families *[approached by untrained hospital personnel]* had been approached by trained requestors, given the success rates for a trained, collaborative approach method, *the "waiting list" for organs in Michigan, Illinois, Ohio and Indiana could have been wiped clean in one year!*

New Legislation

- "First Person Consent" law:
  - Essentially states that when a person has registered with the donor registry, in the Secretary of State database, their wishes to become donors cannot be rescinded by the surviving family members.
  - Also states that persons holding a "durable power" document for medical decisions may make the decision to donate, as in the past they were not allowed to do.

- "Kyle Ray Hornung's Law."
  - Essentially states that Medical Examiner's offices, throughout the state of Michigan, may not prevent organ or tissue donation.
  - Every effort is made [all successful so far] to provide the ME access to all evidence necessary to prosecute a criminal case, up to and including their presence at organ recoveries.

- Michigan's "Uniform Anatomical Gift Law"
  - Enacted May of 2008, there are two critical aspects of the law which directly address on-site health care:
    - There is a "due diligence" line which requires a search for state ID or driver's license, in order to determine if a patient is on the Michigan donor registry.
    - A clause is included which requires hospitals to provide Gift of Life the opportunity to assess a patient's suitability for donation ***before life support measures are withdrawn!***

Best Practices

- We must always remind ourselves that our duty is to the patient and family.
- What is good medical care for the patient is always good medical care for the potential donor.
- The goal is not to “get organs or tissue.”
- Our goal is to provide the family with the knowledge and information they need to make an informed “End of Life” decision!
- The vast majority of donor families polled during follow up surveys state that they would donate again, and that it gives them a “great source of comfort” to have consented to donation.

- As tragic as the death of any child is, death does sometimes occur.
- That same grief is shared by those parents who wait, watch and pray in some ICU, somewhere, that a donor might save their child.
- 200 potential pediatric recipients in 2008 waited in vain, dying.
- 876 times in 2008, a transplant saved a pediatric life.

Does this all work? Is it worth the effort?

Lilly



McLaren FLINT		Policy Title: Tissue/Organ Donation	
Section:	**Effective Date: 3/93** **Review Dates: 7/14** **Revised: 3/99, 3/02, 4/04, 6/06, 6/08, 6/10, 7/12**	**Oversight Level: Level 2**	**Policy No: RI-104**
McLaren Flint Business Unit: Patient Rights, Ethics and Responsibilities		**Interpretation: Bioethics Committee**	

Objective: McLaren Flint intends to comply with the Medicare Conditions of Participation and all applicable State and Federal Laws. In following these, employees with McLaren Flint are committed to saving lives, however, understand that they play an integral part in the dying process. With this in mind, McLaren Flint employees will comply fully with the agreement made with Gift of Life (GOL). Gift of Life (GOL) will work collaboratively with McLaren Flint to be the designated requestor for all potential organ donations. McLaren Flint will use the LIFE program for all tissue donations, i.e., bone, skin, heart valves, veins, and eyes. GOL will be the designated requestor for all tissue donations.

Scope: Because McLaren Flint utilizes GOL as the designated requestor for organ donation and utilizes the LIFE program for tissue donation, nursing staff should not independently approach the family about a possible donation. Individuals from the GOL must always coordinate the request. If the patient or family has questions regarding the donation process, nursing staff can and should ensure that the questions are answered. The hospital will not rule out any potential organ or tissue donor. This will be done in accordance with the procedures outlined below.

Definitions: Imminent Death*:* When a patient meets the clinical triggers: Glasgow coma scale (GCS) ≤5, severe brain injury (stroke, gun shot wound, motor vehicle accident, anoxia, etc.), on a ventilator with intact circulation~~)~~. Age, medical condition, or Medical Examiner involvement does not preclude organ donation.

Terminal Wean*:* The process of removal of the patient from the ventilator

Brain Death: Refer to Policy MS-111 – Determination of Brain Death

Designated Requestor (Gift of Life): An individual having successfully completed an approved course for approaching potential donor families and requesting organ and tissue donation. The Gift of Life (GOL) Representatives are the only individuals specified as Designated Requesters.

Policy: GOL will be notified of all in hospital deaths and all imminent deaths that meet clinical triggers per state regulatory requirements.

For cases that fall under the Medical Examiner's jurisdiction, donation cannot be processed without the Medical Examiner's consent to release the patient for donation. GOL will obtain consent from the Medical Examiner prior to carrying out the donation.

GOL is contacted for viable infant deaths on the OB/Women's Health Unit.

To increase hospital staff awareness of the importance of donation and ensure staff knows to whom they can direct a patient or family member with questions, education is available

to all employees through on-site training by GOL and continuous access to multi-media education materials. GOL also provides education at new nurse orientation.

Potential Organ Donors:

Timely referral for potential donors occurs when death is imminent (when a patient meets the clinical triggers, prior to initiating terminal wean from ventilator support, when the brain death declaration process starts, and prior to discussing organ donations with the family). **NOTE**: See Policy MS-111 – Determination of Brain Death. All imminent deaths must be called, even if the family has stated that they do not wish to be contacted regarding organ donation. The call to GOL must occur regardless of whether or not the nurse and physician believe that the patient is a potential candidate.

The GOL representative and a representative from the hospital staff who has established a rapport with the family will work collaboratively to approach the family after the physician has made the determination that death is imminent.

Potential Tissue Donors:

Timely referral for potential donors will occur within 60 minutes of asystole.

A hospital staff member will give the family a pre-approved condolence card and obtain a phone number of where the patient's legal next of kin will be for the next few hours. Hospital staff should not ask whether the family has or will consider tissue donation. If the next of kin states that the family does not wish to consider tissue/eye donation, hospital staff should inform GOL. NOTE: At the time of the call to GOL, they will ask if the patient has been approached regarding organ donation. It is a violation of the Medicare Conditions of Participation for someone who is not a designated requestor for the hospital to approach the family. Be certain to clarify with GOL regarding whether we approached the family or the family made their wishes known to us without an approach.

The deceased patient should be cooled as soon as possible after death to preserve and extend recovery time in the event the next of kin agrees to tissue donation.

The deceased patient should be sent to the morgue, not the funeral home, until such time that GOL states the body can be released.

A GOL staff member will contact the legal next of kin and approach the family for tissue donation.

GOL will maintain records of those families who accept or decline the opportunity to be a tissue/eye donor.

Provisions:

Identify the patient as a potential donor when brain death is imminent as evidence by the following:

1. severe/acute brain injury
2. on a ventilator with intact circulation
3. Glasgow coma scale ≤ 5

Or for those patients where:

1. physicians are evaluating a diagnosis of brain death or

2. a plan is being discussed to discontinue mechanical or pharmacological support

Contact GOL within 60 minutes of the time the patients meets the criteria. Identify the

contact person in the medical record.

When on the unit, GOL will collaborate with hospital staff to determine the appropriate time to approach the family for organ donation. Families will be informed of the imminent death separately from discussions about potential organ or tissue donation. An appropriate interval will be given between the time the family is given the explanation of brain death and the time the family is approached for organ or tissue donation. Families are not to be approached by the hospital staff without a representative from GOL. Family dynamics, objections of the next of kin, contrary indications, including medical information specific to infection, cancer, high risk behaviors, etc. will be discussed privately between hospital personnel and GOL members before the family is approached.

The hospital will provide a quiet and private setting for discussion with families about potential organ donations.

GOL will not intervene in the hemodynamic management of a potential donor prior to actual pronouncement of death. Until a potential donor is pronounced dead, the potential donor shall remain under the care of the potential donor's attending physician who shall be responsible for all medical care and treatment interventions and who shall have no role in the consent, organ procurement, or donation process. The time of death shall be determined by the attending physician or other physician who certifies death, and shall be documented in the patient's record.

Document on required forms the time of declaration of brain death as the time of death. Refer to the Record of Death Form Guidelines Policy (M-1716) in the Nursing Policy Manual. The hospital staff working in collaboration with GOL will document in the medical record that the family accepts or declines the opportunity for the patient to become an organ or tissue donor. Refer to the Organ/Tissue Donation Form Guidelines Policy (M-17200) in the Nursing Policy Manual.

Following declaration and documentation of brain death in the medical record and family consent for organ donation, obtain a physician order to use GOL protocol for donor maintenance. All subsequent orders received from GOL must have the physician's name on them.

Inform lab personnel of potential donor in an effort to save blood samples, if possible.

Notify lab supervisor if autopsy is requested with organ donation.

Notify nurse manager or supervisor to book OR room, obtain OR crew, and notify anesthesiologist, if necessary. Organ recovery may be facilitated at a Gift of Life surgical recovery facility.

Prepare body and chart information as required for any preoperative patient.

Upon completion of organ procurement, follow procedure for death of patient preparation and transfer to the morgue. If the family requests viewing of the deceased at this time, a private viewing area is provided.

For tissue and eye donation, the deceased must be placed in the morgue cooler. GOL will perform the retrieval in the autopsy suite, morgue, or surgical suite. Check with lab supervisor/pathologist or the OR for room availability. The chart remains on the nursing unit for GOL technician to complete the necessary forms.

The body should not be released to the funeral home or other aftercare facility without release from GOL and Michigan Eye Bank.

For eye donation, the body must be in the morgue cooler. Place sterile saline pads on each

eye with ice bags over each pad. Elevate the head 10-15 degrees on a bath blanket to decrease circulatory pooling and possible post enucleation hemorrhage. Send the chart to the Admitting Department for the Enucleator to complete the forms.

For entire body donation, ideally prior arrangements are made through the family funeral director. Total body donation programs are available through Michigan State University, University of Michigan, or Wayne State University. If the entire body donation is handled through the funeral director, the hospital's informed consent for organ/tissue donation is not required. Notify GOL of the family's desire for donation of the entire body for research and document this in the patient's progress notes.

The Director of Critical Care and Gift of Life liaison are responsible for coordinating organ/tissue donation activities and will regularly review the statistics on the Michigan Data Summary Report as compiled by the Gift of Life. The Gift of Life will compile their statistics in accordance with established policy. Those items found not to be in compliance will be further investigated to determine the accuracy of the data and to identify opportunities for improvement. Statistics will be reported regularly to the McLaren Flint Critical Care Council and nursing staff.

Administrative Responsibility:

The Medical Executive Committee has overall administrative responsibility for this policy.

References or Appendices:

Appendices:
Attachment A – Organ/Tissue Process Flow Diagram

References:
Hospital Policy – MS-111 – Determination of Brain Death
Nursing Policy – Record of Death Form Guidelines (M-1716)
Nursing Policy – Organ/Tissue Donation Form Guidelines (M-17200)

APPROVAL:

_____

Jason White, M.D.
Vice President of Medical Affairs

RI-104 - Attachment A

The Organ Donation Process

Identify a potential ORGAN donor
GCS ≤ 5
Severe neurological injury
On a vent with heart rate and blood pressure to maintain organ function

Notify GOL 1-800-482-4881
Develop a family communication plan in collaboration with GOL to explain grave prognosis then brain death

Brain Death is Declared by Physicians
Inform family of death
Ensure understanding of death

Offer Option of Donation
Always collaboratively
With GOL & Hospital Staff

Evaluate Donor's Medical Suitability
GOL responsibility

Provide Donor Management
GOL responsibility

Surgical Recovery of Organs
GOL and hospital staff in OR

Make the Funeral Arrangements

Ensure Follow-Up

The Tissue Donation Process

Identify a potential TISSUE donor

Any patient declared dead based on irreversible cessation of spontaneous respiratory or cardiac functions, asystole

Notify GOL 1-800-482-4881
Do not approach the family re: donation!
Inform GOL of death
(routine notification)

Evaluate Donor's Medical Suitability
Via phone with GOL

Provide the Legal Next of Kin with LIFE
Give the LIFE brochure

Obtain Telephone Number
Get a phone number where the legal next of kin will be for the next few hours

Maintain Body According to Policy
Maintain body according to policy until GOL notifies the hospital of either approval or decline of the family for tissue donation. **Do not send the body to the funeral home until GOL releases.**

Ensure Follow-Up

Hospice

HOSPICE

with

McLaren Homecare Group

Objectives

- Overview of Hospice
- Levels of Care
- Hospice Eligibility Criteria
- Hospice Referral Process- Home
- Hospice Referral Process - Hospital

What is Hospice….

"Hospice is care for the dying.
Its primary purpose is to work with the terminally ill and their families,
to help them make the most of the time that's left and to make their dying more comfortable, less frightening, and in every way more bearable."

Larry Beresford

What is Hospice…

- A concept of care for the terminally ill
- Recognizes the patient and family as the "unit of care"
- Focuses on:
  - Caring, not curing
  - Physical, psychosocial and spiritual needs
  - Patient, not the disease

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What is Hospice…

- Addresses pain & symptom management to increase comfort and improve quality of life
- Addresses fear(s) about dying
- Accepts death as a natural outcome
- Supports patient & family throughout the illness, and through a 13 month bereavement period
- Provides support through a multidisciplinary team

McLaren

What is Hospice…

The Multidisciplinary Team

McLaren

Benefits of Hospice

- Referral ⟹ hospice admission can occur < 4 hours
- Hospice provides informational visits to assist with explaining of the hospice benefit and philosophy of care
- Prevention of unnecessary ER visits / hospitalizations
- Allows the patient's own physician to continue medical management of their care

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Hospice Provides…

- Pharmacological care for symptom and pain relief
- Non-pharmacological care for symptom and pain relief
- Medical supplies
- Medical equipment
- Interdisciplinary care

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Hospice Provides…

- 24 hour on-call availability
- Ongoing education and support throughout the disease process and death
- Psychosocial and spiritual support
- Bereavement support for 13 months following the death of a family member

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Levels of Care…

1. Routine
2. Respite
3. Continuous
4. Inpatient

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Levels of Care…

- Levels of Care:
  - Determines category of care patient receives
  - Affects documentation, where care is provided, and how hospice is reimbursed for that care
  - Is assessed and re-assessed at every visit to determine appropriateness

McLaren

Levels of Care …

- Routine Home Care
  - Routine home care is provided where the patient resides:
    - Home of a patient or family member
    - Skilled Nursing Facility (SNF)
    - Assisted Living Facility (ALF)
    - Adult Foster Care (AFC)
  - Majority of days in hospice are under routine level of care

McLaren

Levels of Care …

- Respite Care
  - Respite care is available to the patient for up to five (5) consecutive days within a contracted state licensed Medicare or Medicaid skilled nursing facility which provides twenty-four (24) hour nursing services
  - Provides relief for family members or caregivers

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Levels of Care…

- Continuous Care
  - Provided in the patient's home to help manage an acute crisis
  - Short term care only
  - Intent is to meet patient's higher acuity need and keep client in home setting
  - Patients must need services for a period of at least 8 hours within a 24-hour period from midnight to midnight. (51% of care must be provided by skilled nursing)

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Levels of Care…

- General Inpatient Care (GIP)
  - Requires skilled nursing care to manage acute medical or psychosocial crisis associated with the terminal illness
  - Care/management that cannot be managed in home setting
  - Highest level of hospice care
  - May be provided in a Medicare-certified hospital, skilled nursing facility (SNF), or a hospice inpatient unit
  - Short term care only
  - Once stabilized, patient must return to routine care
  - Hospice retains medical management of patient

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Goal of Inpatient Level of Care…

- Less costly than acute care setting
- Increased comfort for patient and family
- Increased availability of multidisciplinary team

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Who is Appropriate for Inpatient Level of Care…

Criteria may include but is not limited to:

- Imminently dying with uncontrolled symptoms
- Terminal agitation
- Respiratory distress that becomes unmanageable e.g. oxygen needs, terminal congestion, etc.
- Uncontrolled pain requiring frequent evaluation by RN or Physician
- Sudden, acute, with deterioration requiring intensive nursing interventions

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Who is Appropriate for Inpatient Level of Care…

- GI/GU hemorrhaging
- Intractable nausea/vomiting
- Intestinal obstruction
- Withdrawal or discontinuation of life sustaining treatment

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When is it Time for Hospice…

- Disease is progressing
- Prognosis is limited
- Curative treatment is no longer effective
- Burden of treatment outweigh the benefits
- Patient refuses treatment
- Lack of response to treatment
- Declining activities of daily living (ADL's)
- Frequent after hours phone calls
- Repeated emergency room visits
- Quality of life and comfort are goals of care

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When is it Time for Hospice…

- Weight loss or decreased appetite
- Weight gain due to fluid retention
- Decrease in cognitive abilities
- Declining activities of daily living (ADL's)
- Recurring infections/episodes of illness
- Recent change to "DNR" status

McLaren

When is it Time for Hospice…

Considerations:

- Has this patient been in the ICU recently or had multiple hospitalizations?
- Does this patient have a metastatic cancer, advanced COPD, end stage renal disease, advanced cardiac disease, end stage neurological illness, multiple systems failure or other end stage illnesses?
- Is there associated disease processes/co-morbidities?

McLaren

When is it Time for Hospice…

Questions to ask yourself:

- What was the patient able to do within the last month that they cannot do at this time?
- What changes have occurred?
- If the patient died within the next six months, would you be surprised?

McLaren

Hospice Appropriate Terminal Diagnoses…

- Cancer
- End Stage Heart Disease
- End Stage COPD
- End Stage Liver Disease
- End Stage Neurological Disease
- Renal Failure/Nephritis
- Multiple System Failure

McLaren

Initiating Hospice Care…

- Diagnosis of a terminal illness with limited life expectancy of 6 months, given the normal disease course
- Attending physician and Medical Director certifies a terminal illness and orders for hospice care
- Patient/family desire hospice care
- Important Points to Remember:
  - An advance directive is NOT required to be admitted
  - A DNR, or "No Code" is NOT required
  - Earlier hospice referrals are important to allow the added support and education for patients and families

McLaren

Initiating Hospice Care in the Home Setting …

- Can be driven by the patient, family, nursing staff, social work, or physician
- Decision is made to focus on pain control/symptom control/comfort care rather than curative treatment
- Referral/ order from physician is written and processed
- Contact is made with hospital Hospice Representative

Monday-Friday Business Hours:
Becky Smith - Flint Laura Owen - Lapeer
After Hours/ Weekends:
Call - 1-800-206-4806

- Informational meeting can be arranged within 4 hours of contact from the hospital
- NOTE: If referral is family-driven a physician will be required to certify as appropriate for hospice.

McLaren

Initiating Hospice Care in the Home Setting …

A Home Referral:

- Discharge is completed as any other discharge
- Prescriptions written as appropriate
- Equipment orders written as appropriate
- Report called to hospice with pertinent discharge time and instruction.

McLaren

Initiating Hospice Care in the Hospital…

(General Inpatient Level of Care-GIP)

Criteria may include but is not limited to:

- Imminently dying with uncontrolled symptoms
- Terminal agitation
- Respiratory distress that becomes unmanageable e.g. oxygen needs, terminal congestion, etc.
- Uncontrolled pain requiring frequent evaluation by RN or Physician
- Sudden, acute, with deterioration requiring intensive nursing interventions

McLaren

Initiating Hospice Care in the Hospital…

(General Inpatient Level of Care –GIP)

(continued)

Criteria may include but is not limited to:

- GI/GU hemorrhaging
- Intractable nausea/vomiting
- Intestinal obstruction
- Withdrawal or discontinuation of life sustaining treatment

McLaren

Initiating Hospice Care In the Hospital Setting …

- Can be driven by the patient, family, nursing staff, social work, or physician
- Decision is made to focus on pain control/symptom control/comfort care rather than curative treatment
- Referral/ order from physician is written and processed
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  Monday-Friday Business Hours:
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  Call 1-800 - 206 - 4806
- Informational meeting within 4 hours of contact from the hospital
- NOTE: If referral is family-driven a physician will be required to certify as appropriate for hospice.

McLaren

Hospice Role for Inpatient Hospice…

The hospice nurse will:

- Instruct patient/family re: hospice concepts and certification, admission criteria, insurance benefits, and the plan of care
- Collaborate with the physician regarding appropriate level of care and plan of care
- Patient will be discharged through patient registration and new orders written by the hospice nurse
- Initiate orders and provide follow-up to staff and patient/family

McLaren

Hospital Role for Inpatient Hospice…

- Obtain/process referral/order for hospice
- Clarify transition of patient to hospice (GIP)
- Transfer medical records to new chart:
  - History & Physical
  - Discharge Summary
  - Pertinent labs/x-rays
  - Social Work Evaluation

McLaren

Hospital Role for Inpatient Hospice…

- Documentation needs to support/ define:
  - *What is the reason for GIP now?*
    - *The precipitating event*
  - *What are you doing for patient specific to need for GIP?*
    -Medications, Interventions, Education
  - *Progress notes should describe patient response to interventions and continued need for GIP care.*

McLaren

Hospital Role for Inpatient Hospice…

(continued)

- Documentation needs to support/ define:
  - *Progress notes should reflect new manifestations of symptoms*
  - *New/changes in physician orders*
  - *Supportive documentation every 2 hours for General Inpatient care (GIP)*

McLaren

Inpatient Hospice …

- In keeping with the hospice philosophy and regulations, any testing, diagnostics, or labs need to be ordered in consultation with the hospice team unless in the current plan of care.
- Hospice is available 24 hours a day, 7 days a week for consultation, the number is left in the admission orders. 1-800-206-4806
- If the patient stabilizes hospice nurse will facilitate discharge to home hospice (routine level of care)
- Discharge orders will include: discharge, prescriptions, and equipment needs

McLaren

Hospice is a special concept of care designed to provide comfort and support to patients and their families when a life-limiting illness no longer responds to cure-oriented treatments.

Offers a multi-disciplinary approach to care that addresses the medical, emotional, social and spiritual aspects of the disease.

Specializes in pain and symptom management.

Provides nursing, social work, chaplain, volunteers and bereavement to patient, family, friends and staff.

Improves the quality of life for the dying patient.

Cares for patients in *any* setting.

Enable patients to die with comfort and dignity.

McLaren

QUESTIONS ?

McLaren Homecare Group

1-800-206-4806

McLaren

Therapy Services and Body Mechanics

THERAPY SERVICES

Objectives

Know differences between each discipline and when to appropriately get a consult for your patient

Know proper body mechanics to incorporate into EVERY aspect of your new job

Know how to properly move a patient for their safety and yours

- Transfers
- Bed mobility
- Ambulation with proper device

Physical Therapy (PT)

- What is Physical Therapy
  - Skilled training for transfers, bed mobility, stairs, ambulation, strength and balance
- When to get consult:
  - Poor balance
  - Increased fall risk
  - Inability to get out of bed
  - Unable to ambulate
  - Concerns for safe return home directly from hospital

Occupational Therapy (OT)

- Skilled Training for personal hygiene, bathing tasks, dressing tasks, feeding tasks, UE mobility, fine motor tasks, visual/ perceptual deficits
- When to get a consult:
  - UE weakness, decreased ROM, fine motor deficits
  - Difficulties with bathing/dressing/hygiene/feeding tasks
  - Concerns for safety with return home and ADL's
  - Visual/ Perceptual deficits

Speech Therapy (ST)

- Skilled training for dysfunctions involving production of speech, verbal/non-verbal communication, memory, swallowing
- When to get a consult:
  - New swallowing difficulties/choking
  - New memory deficits
  - Acute change in mental status

How Can We Help You At MRMC

- To be used in EVERY aspect of your job
- Keep spine in neutral position
- Keep feet shoulder width apart
- Use your legs, not your back
- Keep the load close to you
- Tighten abdominal muscles

Basic Body Mechanics

- Mentally rehearse lift first
- Don't twist
- Push, Don't pull
- When in doubt, ASK FOR HELP
- BREATHE!

Safety With Patient Transfers

- Always use a transfer belt
  - Fingers pointed up
  - One or two handed grasp
- Always prepare the area first
  - Lock the brakes of bed/chair
  - Have sturdy chair to transfer to in appropriate area
  - Transfer toward stronger side as able
  - Encourage patient to do as much as possible for themselves
- Don't let patient pull on your neck or back, place their arms on rails/armrests
- Instruct the patient before moving

Assistive Equipment

- Gait belt
- Draw sheets
- Slide board
- Walkers
- Canes
- W/C: leg rests, arm trough
- Personal alarms
- Prosthetics/Orthotics

Basic Steps to Transfers

- Prepare Area
  - Position chair and lock brakes
  - Position assist device in front of patient
  - Secure gait belt
- Instruct Patient
  - Scoot patient to edge of seat
  - Feet flat on floor under knees
  - "Nose over toes" – lean forward
  - Push up with your arms
- Stand steady for moment
- Turn device, then move feet
- Feel chair at back of both legs
- Reach arms back to armrests of chair to sit

Transfers

- Bed Mobility
- Stand with Walker
- Stand Pivot
- Swing Pivot
- Two person transfer

Bed Mobility

- Make sure brakes are locked
- Don't pull on extremities
- Use shoulder and pelvic girdle to assist
- Roll patient to side
- Gently have patient lower their legs over side of bed
- Push with UE's to sit up
- Have patient help as much as possible
- Stop briefly between transitions

Stand with Walker

- Prepare area
  - Position Chair and Walker
  - Lock brakes
  - Secure gait belt
- Prepare patient
  - Instruct patient in steps
  - Scoot forward
  - Feet flat on floor
- Perform transfer
  - Patient to lean forward
  - Reach for walker after pushing up from chair
  - Turn walker and then feet to the chair
  - Back up until patient feels legs on the chair
  - Lower self with UE's via the armrests

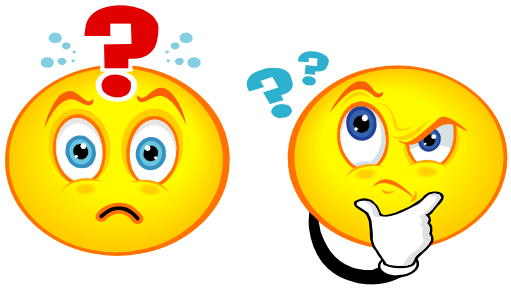
Stand Pivot Transfer

- Prepare area
  - Position chair, remove arm & legs rests if necessary
  - Lock brakes
  - Secure gait belt
- Prepare patient
  - Instruct patient in steps
  - Scoot forward
  - Feet flat on floor
- Perform transfer
  - Patient to lean forward
  - Push up from chair
  - Grasp your arms for support
  - Turn feet toward the chair
  - Lower self with UE's via the armrests

Swing Pivot Transfer

- Prepare area
  - Position Chair, remove arm & leg rests if necessary
  - Lock Brakes
  - Secure gait belt
- Prepare patient
  - Instruct patient in steps
  - Scoot Forward
  - Feet flat on floor
- Perform transfer
  - Patient to lean forward
  - Grasp gait belt on either side of patient
  - Position your legs on either side of patient legs
  - Squeeze your legs as you lift patient and swing to chair

Questions???



Competency

Thank you for your time and attention!

Print Name _____
Unit _____

Therapy Services & Body Mechanics Orientation for New Hire Nursing

1. You notice that your patient sis having difficulties swallowing their medications. The proper therapy to consult is:
    a. Occupational Therapy
    b. Physical Therapy
    c. Speech Therapy

2. When lifting heavy objects you should: (circle all that apply)
    a. Keep load close to your body
    b. Tighten your abdominal muscles
    c. Keep your fee together
    d. Keep your spine in neutral
    e. Twist at your waist

3. Twisting at the waist is one of the primary causes of back injury TRUE/ FALSE

4. Hospital employees can benefit from repeatedly lifting heavy objects TRUE/ FALSE

5. The patient is encouraged to participate in the transfer process as much as possible TRUE/ FALSE

6. It is not safe to sit a patient with their feet flat on the floor TRUE/ FALSE

7. When transferring a patient from bed to chair: (Circle all that apply)
    a. Lock the brakes of the chair
    b. Use a safety belt
    c. Have patient transfer toward the strong side
    d. Have the patient pull with their arms around your neck

BODY MECHANICS	DATE	VALIDATOR SIGNATURE
Demonstrates proper body mechanics when lifting chair		
Demonstrates proper body mechanics when moving chair		

Please turn this in at end of class

Suicide

Preventing Intentional Self Harm on Medical Surgical Units

McLaren FLINT

Objectives

At the end of this session, participants will:

- Understand the prevalence of suicide attempts and fatal outcomes in the United States and in hospitals
- Understand the risks associated with suicide attempts on medical/surgical units and ways to minimize the risk
- Know what it is expected when working in a one-to-one staffing situation with a patient identified to be at risk of intentional self harm

Is Suicide a Common Event?

True or False

1. Each year more people die from suicide than homicide
2. In 2004, 1131 deaths in Michigan were ruled to be suicide
3. New Jersey is the State with the highest rate of suicide.
4. Suicide is the 10th ranking cause of death in the United States
5. More men die from suicide than women
6. Most suicides are completed using a firearm
7. A person older than 65 is less likely to attempt suicide than a person in their 50s

1. True – in 2007 there were 34,598 deaths by suicide and 18,361 deaths by homicide
2. True - In 2004, 1131 deaths in Michigan were ruled to be suicide
3. False - New Jersey is the State with the lowest rate of suicide. Alaska has the highest rate of death by suicide (Michigan is slightly below national average)
4. True - Suicide is the 10th ranking cause of death in the United States. It is the 3rd ranking cause of death for people 24 and younger.
5. True - 3.6 male deaths by suicide to each female death by suicide
6. True – 50.2% of all suicides are completed using a firearm
7. False – there is a statistically significant increase in suicide rates over the age of 65

Do Suicides Take Place in Hospitals?

- Yes! In 2008, 102 suicides in hospitals were reported to the Joint Commission. This ranked second to wrong site surgery as the most commonly reported sentinel event.
- Since 1995, over 680 suicides have been reported to the Joint Commission as sentinel events.

What Means Have People Used to Suicide in Hospitals?

The Joint Commission reviewed 65 suicides and found that –

- **75% of the suicides were completed by hanging in a bathroom, bedroom, or closet**
- **20% were completed by jumping from a roof or window**
- **Of 26 suicides that occurred in general hospitals, 14 were in Emergency Departments and 12 on medical surgical units**

What has McLaren done to address this potential problem?

- Improved screening process to ensure that persons at risk of self harm are appropriately identified
- For persons who are not on 7 Central (Adult Psychiatric Unit) and who are deemed at significant risk, implemented the use of one-to-one staffing

Expectations of the Person providing One-to-One

- Be **alert, awake, and vigilant** at all times
  - If fatigued, request assistance from a team member and/or supervisor
- Remain within **direct visual contact** and **close** to the patient (no more than 6 feet away) at all times
  - This includes bathroom use – door remains open to staff person

Expectations of the Person providing One-to-One

- Maintain a kind, non-judgmental, and professional demeanor with the patient
- **NEVER** bargain with a patient identified to be at risk of self harm
  - "No harm contracts" in which a person promises not to harm self have been shown to be ineffective. A suicidal person may lie to you to get the opportunity to harm self.
- Listen
  - Do not provide advice or counsel
- Communicate concerns with

Expectations of the Person providing One-to-One

- Remove any bags, purses, briefcases, laptop cases or any other items that could be used to hide a weapon, sharp object, or other item that could be used for self harm

Expectations of the Person providing One-to-One

- **Watch** for items that a person could use to hang or suffocate self
  - Cords
  - Plastic Bags
  - Belts
  - Wires
  - Tubing
  - Shoe laces
  - Strips of linen or clothing

Expectations of the Person providing One-to-One

- **Watch** for items that a person could use to overdose or poison self
  - Pills
  - Liquid medications
  - Cleaning supplies
    - Solvents and solution
    - Bleach
  - Alcohol
    - Rubbing alcohol
    - Hand sanitizer

Expectations of the Person providing One-to-One

- **Watch** for items that a person could use to cut or pierce self/others
  - Knives
    - including plastic knives
  - Razors
  - Box cutters
  - Letter openers
  - Screwdrivers
  - Pens or long pencils
  - Springs or other sharp objects

Expectations of the Person providing One-to-One

- **Watch** for items that a person could use to set a fire
  - Matches
  - Lighters
  - Wire or metal foil that can be used to create a spark from an electrical outlet

Expectations of the Person providing One-to-One

- IMMEDIATELY REMOVE any potentially dangerous items as soon as they are identified
- Notify the assigned Registered Nurse and/or the Nurse Manager of the item discovered and removed

Expectations of the Person providing One-to-One

- Be aware of potential risk of jumping
  - Can the person use something to break a window?
  - Could the person run toward a window or an exit to a rooftop?

Expectations of the Person providing One-to-One

- What Do You Do If the Patient Starts Running?
  - Immediately YELL “I NEED HELP NOW”
  - Call 2-2222 to activate…
    - CODE WALKER (if patient is out of your sight)
    - CODE DR STRONG (for security response)
    - CODE GRAY (for combative person)
    - CODE SILVER (for a person with a gun or

Other Questions? Concerns? Feedback?

Bariatric Sensitivity

Treating the Obese Patient: What health care professionals can do to improve patient care

Dr. Nicole Franklin
Clinical Health Psychologist
McLaren Bariatric Institute

Topics that will be addressed during this lecture include:

- Defining Obesity
- Labeling common biases about obese patients
- Improving health care professionals' empathy toward obese patients

Obesity Defined

- The American Society for Metabolic and Bariatric Surgery defines obesity as "a life long, progressive, life threatening, genetically related multifactorial disease of excess fat storage with multiple comorbidities."[1]

What Is BMI?

- **Body mass index (BMI)**

  Metric System
  Formula: weight (kg) / [height (m)]^2
  English System
  Formula: weight (lb) / [height (in)]^2 x 703

- **BMI is an effective screening tool; it is not a diagnostic tool**
  - One is considered overweight if their BMI is > or =25
  - One is considered obese if their BMI is > or = 30
  - One is considered morbidly obese if their BMI is > or = 40

Health Risk Based on BMI

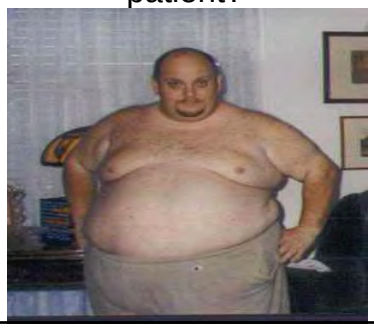
- 18 - < 25
- 25 - < 27
- 27 - < 30
- 30 - < 35
- 35 - < 40
- >/= 40

- Minimal
  - No weight reduction tx.
- Low
  - No weight reduction tx.
  - Pt. should avoid weight gain
- Moderate
  - Weight reduction tx.
- High
  - Weight reduction tx.
- Very High
  - Weight reduction tx.
- Extremely High
  - Weight reduction tx.

What factors contribute to weight gain?

- Genetics
- Dietary Habits
- Exercise Habits
- Medical Conditions and Medication Regimens

What are your first thoughts when you see this potential patient?



Common Responses to Question on Slide #7

- The responses listed below were given in lectures that contained a variety of healthcare professionals. Did any of these responses come to mind when you were asked the question on Slide #7?
  - Uneducated
  - Heavy to lift
  - Noncompliant
  - Unclean
  - Low Self Esteem

Prejudice vs. Discrimination

- Prejudice
  - A prejudgment
- Discrimination
  - A behavior based on a prejudgment

Prejudice and the Health Care Provider

- In one study more than half of health professionals described their obese patients as weak-willed (60%), unattractive (54%), or awkward (55%).
- In another study, (63%) health professionals attributed obesity to lack of will power and more than 1/3 describe them as lazy.

Discrimination and the Health Care Provider

- Several patients heard the following remarks from their health care provider:
  - "Overweight individuals are unattractive"
    - Gives the patient a shot through his or her gown.
  - "How can I tell if you are pregnant?"
    - Fails to order a urine screen.
  - "With this mountain of fat I can't feel anything."
    - Fails to send the patient for x-rays.
  - "All of your problems are due to your gross fat."
    - Fails to control pain because the health care provider believes this will make the patient less likely to lose weight.

Creating a User-Friendly Environment

- Have a scale that can weigh all patients.
- Have gowns available that fit larger patients.
- Use larger blood pressure cuffs when appropriate.
- Provide some armless chairs in waiting area.

Creating a User-Friendly Environment

- Determine the weight limit (and width) of equipment the patient is likely to need before the patient arrives to use the equipment.
  - Operating room tables
  - Wheelchairs
  - Radiology Equipment
  - Wall mounted toilets

Improving Empathy

- Assume that obese patients know that they are overweight.
- Listen carefully to the patient's presenting problem, independent of weight.
- Provide same care to obese individuals as to non-obese patients.
- Do not blame patients for a less-than-desired outcome.

Some guiding principles

- Examine your own feelings about obesity and the obese.
- View each patient as a unique individual worthy of your time and respect.
- Encourage your patients to work in a partnership with you to reduce their weight.
- Make every effort to recognize and comment on positive changes in health status.

Contact Information

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- Flint, MI 48532
- 810-342-5470
- nicolef@mclaren.org

References

- 1. American Society for Metabolic and Bariatric Surgery. Available at www.asbs.org: Access date: June 2004

Core Orientation

Day 2

Core Clinical Orientation 2015
Day 2 Agenda

0700 – 0845	IV Therapy
0845 – 0900	Break
0900 – 0930	Utilization Management
0930 – 1000	Quality in Nursing/Scope of Practice
1000 – 1030	Blood Conservation, Transfusion Policy
1030 – 1100	Patient Diversity DVD and discussion
1100 – 1145	Lunch
1145 – 1200	Paper MAR and downtime process
1200 – 1230	Policy & Procedures, Computer Resources
1230 – 1300	Chest Tube demonstration equipment
1300 – 1330	Union Representation
1330 – 1345	Crash Cart Scavenger Hunt
1345 – 1415	CAPD DVD and demonstration
1415 – 1445	CAUTI/ CLASBI/ MDRO
1445 – 1530	Equipment Stations & self-learning modules • Blood Glucose demonstrate quality controls • IV pump demonstrate set-up, primary, secondary and options • Pain Management read material in orientation manual, Do post-test and evaluation • Age Specific read material in orientation manual, Do post-test and evaluation • Urinary catheter insertion/ maintenance • Blood Transfusion Reactions review policy and complete handout

IV Therapy

McLaren Flint

IV Therapy

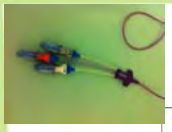
Role of the IV Team

- Responsibilities
- Members
- Contacting
- Hours
- Location

Infection Prevention

- Use proper hand hygiene
- Swab needle free devices vigorously with alcohol for 15 seconds

PICC Lines



- Description
- Indications
- Insertion
- Maintenance
  - patency
  - dressing changes
- Blood draws
- Removal

PICC Lines

- Any RN can change the PICC dressing if an IV Team nurse is not available. *(MHCC Intranet, Department Policies, Nursing Procedure Manual, Intravascular Therapy, PICC Dressing Change Procedure When IV Team unavailable)*
- All PICCs at MRMC are SOLO Power PICCs, meaning they only need Saline Flush and are Power injectable
- SOLO PICC can be used for CVP monitoring in ICU/CCU/SCU
- Site must be monitored every 4-hours and documented every shift

PICC Lines

- SCRUB the HUB 15 seconds...direct line to patient's blood stream
- PICC must be flushed with 20 ML (2-10 ML syringes) after blood is drawn through the PICC
- All lumens should have a positive pressure cap...we use Maximus Clear (clear outer housing with blue inset)
- Tegaderm dressing with Biopatch

Biopatch vs Bioseal

When to use:
On ***ALL*** CVP, Central Lines, PICCs, Medport, Dialysis Catheter dressings
Used to prevent central line associated blood stream infections (CLABSI)
Changed every 7 days

When to use:
Only to be applied by IV team or physician when there is a problem with bleeding &/or oozing.

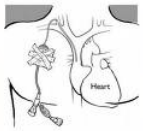
PICC Line Summary

- Inserted by trained RN
- Removed by trained nurse
- Dressing changes every 7-days by IV Nurse
- Bloody/saturated dressing should be changed, refer to Nursing Procedure Manual if IV nurse unavailable
- SCRUB THE HUB 15 seconds
- Document site assessment every shift
- Tegaderm dressing with biopatch for sustained kill time
- When in doubt about the site, call the IV nurse
- Outside PICC admitted must be called to the IV Nurse for follow up and monitoring

Ports

- Description
- Types
  - Passports - arm
  - Mediports - chest
- Access
- Maintenance
  - patency
- Dressing change

Ports



- Any port access outside of the IV Team must be called to the IV Nurse for monitoring and dressing/needle changes
- Need to be heparinized when not used with 5ml of 100 units/ml heparinized saline
- SCRUB THE HUB for 15 seconds

Port Summary

- Accessed by trained RN
- De-accessed by trained nurse
- Dressing changes every 7-days by IV Nurse
- Bloody/saturated dressing should be changed, refer to Nursing Procedure Manual if IV nurse unavailable
- SCRUB THE HUB 15 seconds
- Document site assessment every shift
- Tegaderm dressing with Biopatch for sustained kill time
- When in doubt about the site, call the IV nurse
- Patient admitted with a port must be called to the IV Nurse for access, follow up and monitoring

Central Lines

- Short term catheter inserted by physician
- Location
- Flushing
- Dressing change
- Removal

Central Lines

- A Central line can be pulled by any trained RN
- Have the patient hold their breath and bear down (Valsalva Maneuver)
- Hold pressure until hemostatsis has been obtained
- Apply triple antibiotic and an air occlusive dressing
- Keep covered for at least 24 hours

Blood Products

Before obtaining blood:

- Type and Cross verified and labeled at bedside with lab
- Doctor's order
- Signed consent
- Baseline vitals
- Equipment
- IV site requirements

Blood Products

Administration

- Obtain
- Initiate
- Monitor
- Complete

Blood Products

- Documentation
- Reactions
  - signs/symptoms
  - procedure

Initiating Peripheral IV Therapy

Peripheral IV Procedures

- Physician orders IV fluid, etc.
- No more than 2 attempt allowed (new cath each time) then call IV Team
- Document each attempt
- EMS field starts MUST BE RESTARTED as soon as the patient's condition is STABLE
- All peripheral IV (PIV) sites should be changed every 96 hours

Site Selection

Start low on arm

Peripheral IV Procedures

- All PIV should have an extension
- Scrub the hub for 15 seconds with Alcohol wipe (sing the ABCs) prior to any access of the line
- Flush PIV Saline Lock every 8-hrs with 3 ML NS
- Visually assess PIV every 4-hours, document assessment once a shift

Peripheral IV Procedures

- If the site is reddened, streaked, painful STOP THE INFUSION. Remove the catheter and treat appropriately
- If the dressing is bloody/saturate/loose, change the dressing

Peripheral IV Procedures

- Not all are this obvious.... If your site looks suspicious, error on the side of caution.
- Attend to the patient first by stopping the infusion.
- Notify the physician, document in the medical record, complete an incident report.
- Notify Wound Care if there is tissue damage.

Peripheral IV Procedures

- All continuous IV tubing must be labeled when hung for change date in 96 hours
- Intermittent IV tubing must be labeled and changed in 24 hours
- IV solution must be tagged for 24 hour change
- If tubing disconnected from insertion and not outdated, must keep end sterile, not hanging in the breeze on the IV pole
- Tubing change means down to the extension set...replace longer extensions, filters, stopcocks, etc

Peripheral IV Summary

- 2 pokes, that's it
- Restart EMS field starts ASAP... prevent infection, it's considered a "dirty start"
- Monitor your patient's IV every 4 hours, especially if harsh drugs used
- Document your site every shift
- Remove if it looks wrong
- Change sites every 96 hours
- Document incident reports for extravasations/infiltrates
- Tag tubing and bags
- Keep tubing ends sterile
- Scrub the hub 15 seconds before anything injected into that IV...it's the direct line to the patient's bloodstream and heart

Equipment

- Catheter
- IV start kit
- Syringe (10cc) w/saline
- Tubing/extension
- IV solution
- Pump

Venoscope II

- This vein finder has been purchased for Nursing's use with your patients to help locate appropriate veins for peripheral IV placement.

Complications

- Infiltration
- Infection
- Thrombophlebitis
- Extravasation

Skills Practice

PREVENTING NEEDLESTICK INJURIES

HEALTH CARE WORKERS CHECKLIST

Following proper work practice procedures will minimize the risk of needle stick injury. Here are practical steps you should take:

Prior to Procedure Using Sharps:

1. Ensure all equipment is available and within arms reach.
2. Ensure lighting is adequate.
3. Place a sharps disposal container nearby and know where it is located.
   Assess patient's capacity for cooperation; request additional help if patient needs to be physically stabilized.
5. Instruct patient to avoid sudden movement.
6. Do not expose sharps/needles until moment of use and keep pointed away from user.

During Procedure:

1. Maintain visual contact with sharps during use.
2. Remain aware of positioning of other staff to avoid accidental contact.
3. Do not pass sharps by hand; place and retrieve from predetermined centralized location/tray.
4. Alert other staff when placing or retrieving sharps.

Post Procedure:

1. Activate safety features of sharps and check (visual, auditory) to ensure features are activated and locked in place.
2. Ensure all sharps are accounted for and visible.
3. Check trays, linens, waste materials prior to handling for sharps accidentally misplaced or left behind.
4. Transport reusable sharps in secured closed container.
5. For non-reusable sharps, visually inspect disposal container to ensure device will fit.
6. Keep fingers away from tip of device when disposing, and avoid placing hands close to the opening of the container.

7 THINGS TO DO IN RESPONSE TO NEEDLE STICK INJURY

1. Provide care to exposure site by washing wound and skin with soap and water and flushing mucous membranes with water (for a blood splash or other potentially infectious material exposure incident).

2. Immediately seek evaluation and treatment for the injury from the emergency department or your employee health center.

3. Report the incident to your supervisor and document it according to employer policy, including the type and brand of device causing injury, department where injury occurred, and explanation of incident.

4. Identify and document source patient (if known) who should be tested for HIV and hepatitis. Hospital may have to seek consent.

5. Be tested immediately and confidentially for HIV and Hepatitis.

6. Get post-exposure prophylaxis (PEP) when source patient is unknown. If source patient tests positive for:
    a. HIV, then start prophylaxis within two hours of exposure.
    b. Hepatitis B, get the hepatitis B Immune Globulin (HBIC) injection and initiate the Hepatitis vaccine series if you are unvaccinated. No treatment necessary if you are vaccinated with known immunity.
    c. Hepatitis C, then no customary prophylaxis; but consult your physician or other care provider about experimental post-exposure prophylaxis (PEP).

7. Get follow-up testing, counseling and monitoring of post-exposure prophylaxis toxicity.

Peripheral Intravenous Access Competency Validation Record

	IV start attempt date	1st Attempt Success	2nd Attempt Success	Unable to Start IV	RN Observers Signature
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

I have previous peripheral IV experience and my preceptor observed that I am competent and responsible to start IVs at McLaren—Flint

Employee Signature _____Date _____

Preceptor Signature _____ Date _____

OR

After 10 Successful attempts in starting a peripheral IV, I am competent and responsible to start IVs at McLaren – Flint

Employee Signature _____ Date_____

Return form to your manager to be placed in your employee file

Utilization Review

Utilization Management

810-342-3030

UM and/or UR Purpose

Utilization Review (UR), also termed Utilization Management (UM):

- **Determine the level of care provided is consistent with admission status (inpatient, observation, extended recovery). Status determination is supported by the intensity of services provided and/or medical necessity.**
- **Ensures appropriate reimbursement to the hospital for services provided and prevents payment denials.**

UM Function-What We Do!!!

Utilization Review examines medical records and treatment guidelines for a specific symptom or health condition.

- **Utilizes** admission screening criteria pertaining to specific diagnoses, symptoms & treatment.
- **Collects** data about diagnosis, symptoms, required services, treatment & diagnostic test results
- **Reviews** the criteria that describe the conditions or services to support the level of care request
- **Compares** medical information to both admission screening criteria and medical necessity indicators
- **Refers** case to Physician Advisor if screening criteria is not met
- **Contacts** attending physician if documentation criteria is not met
- **Collaborates** with Case Management, Social Work, Staff RN

Inpatient Stay

Medical information to support:

1. **Medical necessity** (clinical indicators, potential for adverse outcome, co morbid conditions & risk factors appropriate for inpatient level of care).
2. **Inpatient admission screening criteria** (specific guidelines for severity of illness and intensity of service needed to diagnose and treat inpatient level of care).

Observation

- Observation stay is intended for short term diagnostic testing and monitoring, which are reasonable to evaluate the patient's condition.
- This is done in order to determine if the patient should be admitted as an inpatient or stable for discharge with further testing & work-up done as outpatient.

What can the Floor Nurse do for UM?

Think with Ink !!!

DOCUMENT, DOCUMENT, AND DOCUMENT

1. *VS & Neuro checks*
2. *Nausea and vomiting> frequency/treatment*
3. *IV medication upon arrival from the ED*
4. *IV medication in general*
5. *PRN medication*
6. *Note reasons treatment, testing or discharge held, delayed, cancelled.*

UM Contacts:

OBS Nurses:

- Krista Emery RN - Mon-Fri 6am- 2pm 810-342-3006
- Denise Drake CIS – Fri – Sun 6am-6pm 810-342-3006

Clinical Integration Specialists:

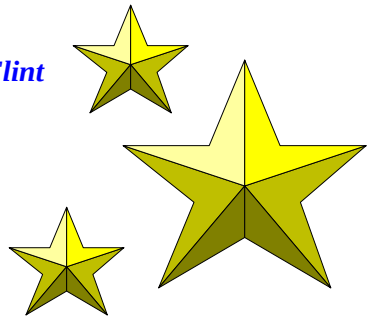
- Brenda Cichoracki, Patricia Hill & Luanne Cech
  - CIS located in the ED- 7 days 11:00 am to 11:30 pm
  - 810-342-2405

UM Department: 810-342-3030

Nursing Quality

Quality / Performance Improvement Overview

McLaren – Flint
2015



Determines your department's effectiveness!

PERFORMANCE MEASUREMENT

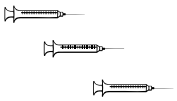
- Identifies a problem to be addressed
- Measures a process or outcome
- Process indicator – focuses on the execution of the actual process
- Outcome indicator – the result of a function or a process

Why Do Performance Measurement?

- Show recognition of a problem and a plan to correct the problem
- Allow for monitoring our success
- Allow oversight of our commitment to quality
- Satisfy the requirements of outside agencies
- **It's the right thing to do**

HOW IS A PERFORMANCE MEASUREMENT DEVELOPED?

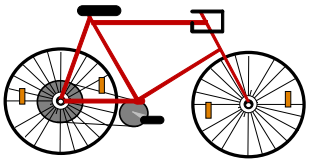
- Looking for problems or things that must be dealt with frequently
- At the department level - review areas that are important to you
- Match strategic initiatives
- Look at areas that are:
  - High risk
  - High volume
  - High cost
  - Problem prone



PDCA CYCLE

Plan
Do
Check
Act

an approach to assist in the evaluation of a process



Performance Improvement Examples

Regulatory Agencies

Risk Mgmt Issues

Financial Data

Patient Safety

Productivity

Strategic Goals

Turnaround time

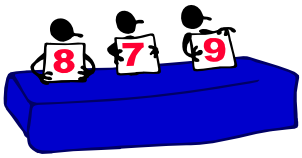
Patient Satisfaction

Infection Control Issues

SAMPLE SIZE

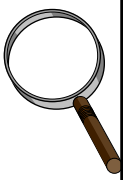
- What is a population?
  A population is all who receive the services
- 100% review of the population is not always necessary
  (N= 100% of population)
- Sampling may be used - a sample size should look at 5% of the population or 30 reviews, whichever # is larger
  (n= sample of the population)

How Do You Measure Your Performance??



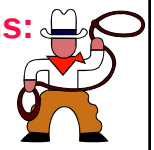
- **baseline** - indicates the present level of performance
- **benchmark**- the desired level of performance
- **goal**- your target expected result

More on Benchmarks...



- Use literature search and professional organizations to identify state-of-the-art performance (Evidence-Based Practice)
- Examples:
  - Michigan Hospital Association (MHA)
  - CDC
  - Nursing Journals and University Databases (Clinical Trials)
  - MRMC Nursing Research Department

Analysis and Action Plans:



- Key to improving performance
- Examine data for trends
- Ask **WHY**!!
- Utilize PDCA process to re-evaluate data
- Document action clearly and specifically

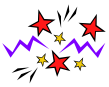
What is Expected?

What is Required By Nursing?

Quality Control monitors patient safety for all appropriate areas:

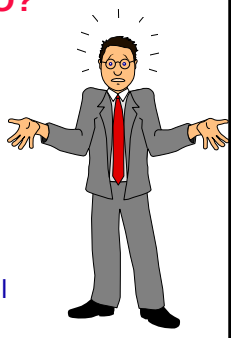
- **National Patient Safety Goals**
  - Patient Identification
  - Surgical/Procedure Site
  - Patient Falls
  - Hand Hygiene
  - Labeling of Syringes
  - Critical Test Results
  - SBAR
  - Site Verification/Time Out

Quality Control Monitors performed by other departments:



- **Other Quality Monitors**
  - Unacceptable Abbreviations
  - Medication Reconciliation
  - Anticoagulation
  - Suicide Precautions
  - IV site labeling
  - Verbal Orders

Where DO Your Quality Reports GO?



- **Reported monthly**
- **Reviewed by**
  - Department Manager/Director
  - Vice President Group
  - Nursing Quality Council

Quality Reports are reviewed by

- McLaren Flint Board
- Medical Executive Council (MEC)
- Performance Improvement Council (PIC)

Special Event Monitoring

- Connected with special occurrence follow up and investigation
- Special Occurrence/Sentinel Event = Serious harm or death to a patient while under the care of the medical center
- You may be asked to participate in a *root cause analysis* to establish what happened and how to prevent it from happening again.

What is The Joint Commission?

- The Joint Commission "accredits" health care organizations, such as hospitals.
- We visit organizations to make sure they meet our standards of care. Organizations that meet our standards are accredited for three years. After three years, we go back to the organization to make sure it still meets our standards.
- What do you need to know before making a complaint?
- The Joint Commission cannot help with all complaints. We do not:
- • Take complaints about organizations that we do not accredit.
- • Deal with billing, insurance or employment problems. These are not covered by our standards.
- The Joint Commission cannot find out what went wrong with a patient's care.
- • We will not be able to tell you if a patient's care was poor.
- • We cannot determine wrong doing.
- • We do not settle differences between a patient and an organization.
- What can you do about complaints that The Joint Commission cannot help with?
- • You may want to talk to the organization about your concern.
- • Your state's department of health may be able to help.
- What information do you need to include in the complaint?
- • The name and address of the organization.
- • Tell us about your concern in one or two pages.
- • Give us your name, address or e-mail address if you would like follow-up information sent to you.

Do you have a complaint about a health care organization?

Online:
http://www.jointcommission.org/report_a_complaint.aspx
E-mail:
complaint@jointcommission.org
Fax: 630-792-5636
Mail: Office of Quality Monitoring
The Joint Commission
One Renaissance Boulevard
Oakbrook Terrace, Illinois 60181
Phone: 1-800-994-6610

Final Expectations:

- Each department is responsible for maintaining a quality notebook that includes:
  - Monthly Worksheets
  - Quarterly Reports
- Action plans complete and concise!!

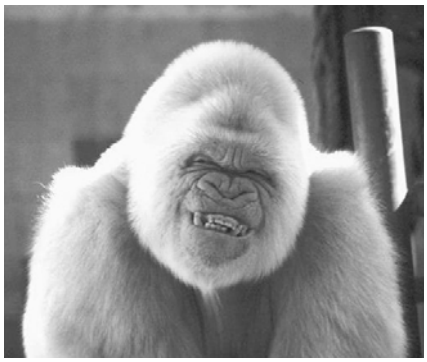
Who Does the Monitors?

- **Quality Representative**
  - Works with manager to determine what is best for their department.
  - Involve staff closest to the process you are monitoring.
  - You are not expected to do this alone!
  - Turn quality reports into your manager.

Staff Education

It is a **requirement** that staff are educated on performance improvement and quality annually.

Quality is Infectious!



Scope of Practice

Nursing Scope of Practice

Mclaren Education Department

Introduction

- Nurses are the largest licensed health professional group in Michigan
- Nearly 170,000 Licensed nurses in the state.
- Nursing practice today requires increased scientific knowledge, clinical decision-making competencies, and patient care approaches that support new learning (MDCH-TFNP, 2012).

What does it take to be a RN?

Licensure

- Public Health code act 368 of 1978 requires nurse to take exam and be licensed
- Michigan requires 21 health professionals to be licensed to protect the safety of people here.
- Since 1909 Michigan has licensed Nurses (Public Act 319)

Education

- Must either have Associates degree in nursing (ADN) program or Bachelor of Science Degree in Nursing (BSN) to start then may receive Masters in nursing (MSN)
- Must engage in lifelong learning to entail re-licensure and recertification per individual state guidelines.

Other Nursing Professionals

Licensed Practical Nurse (LPN)	Advanced Practice Nurse (APN)
Allowed to practice nursing but with less comprehensive knowledge and skill than what is required by RN and must perform under supervision of RN. LPN'S may not delegate tasks to other licensed or non licensed health professionals (MDCH-TFNP)	RN's who have acquired advanced training beyond initial licensure. Prepared at Graduate or Doctoral level Nurse Anesthetists Nurse Midwives Nurse Practitioners

Nursing Practice

- A RN is licensed to function in the practice of nursing.
- Who's scope of practice includes the teaching, direction, and supervision of less skilled staff who perform nursing activities.

"Practice of Nursing"

- The Michigan public health code Act 368 of 1978
- "Means the systematic application of substantial specialized knowledge and skill, derived from the biological , physical, and behavioral sciences, to care, treat, counsel, and health teaching of individuals who are experiencing changes in the normal health processes or who require assistance in the maintenance of health and the prevention or management of illness, injury, or disability"

Nurse Practice Acts

- Nurse Practice Acts (NPA's) are laws in each state that define the scope of nursing practice
- NPA's protect the public health, safety, and welfare
- The State boards of nursing in each state set statutory laws to determine nurses competent to practice.

Standards of Professional Nursing Practice

- Assessment
- Diagnosis
- Outcomes Identification
- Planning
- Implementation
- Evaluation

Standards of Professional Performance

- Ethics
- Education
- Evidence-Based Practice and Research
- Quality of Practice
- Communication
- Leadership
- Collaboration
- Professional Practice Evaluation
- Resource Utilization
- Environmental Health

Nursing Delegation

- The Michigan Public Health Code (MPHC) defines delegation of healthcare tasks/activities/functions generically for all health professionals (MDCH-TFNP, 2012).
- Health care workers performing nursing functions must be under the direction of a Registered Nurse (RN).
- The public may be at risk if unsafe nursing delegation occurs.
- All aspects of nursing care of the patient delegated is still liable to the RN.

Rights of Delegation

1. The right task -one that is delegable for a specific patient
2. The right circumstances -the appropriate patient setting, available resources, and other relevant factors that are considered.
3. The right person - the right person is delegating the right task to the right person to be performed on the right person
4. The right direction/communication - clear, concise descriptions of the task, including its objective, limits, and expectations.
5. The right supervision -Appropriate monitoring, evaluation, interventions as needed, and feedback.

MDCH-TFNP, 2012

What can you do?

Do's

- Give Flu/ Pneumonia shot per hospital policy no doctor order needed because covered under protocol.
- Monitor and record patient assessments and vitals
- Inform doctors of problems and or managers
- Advocate for patients proper care and code status.
- Treat emergency problems per protocols.

Don't

- Diagnosis and treat medical conditions
- Perform surgical or invasive procedures
- Give medications without an order unless following ACLS guidelines in emergency.
- Perform any task not covered under hospital policy
- Suctioning chest tubes
- Advancing central lines
- Giving any medications before order obtained.

Specific examples

Patient has a Beta blocker due at 9am and B/P has been 90-100 systolic all night, heart rate has been in the 80's. There are no parameters to hold medication. Nurse holds medication without calling doctor.

Is this outside Scope of Nurses Practice?

Patient has order for Tylenol PRN for fever. Nurse decides to give patient 2 tabs for a headache.

Is this outside of PRN order and Scope of Practice?

More Examples

Patient admitted with an MI has episode of nausea and vomiting over night. Nurse gives Reglan and later Inapsine to relieve patient symptoms. These medication are on PRN orders for AMI admission.

Does this fall under Nurses Scope of practice?

Patient has AM labs drawn and potassium is low at 2.8. Nurse removes 20 meq from omni-cell and gives it IVPB to patient. Patient has Electrolyte replacement order set on their EMAR.

Does this fall under Nurses Scope of Practice?

Reference

Michigan Legislature Section 33.17201, Public Health Code Act 368, Retrieved 2013 from http://www.legislature.mi.gov/(S(qb2pt3qyOopofh45jkefoabr))/mileg.aspx?

Scope of Practice of Health Professionals in the State of Michigan, Retrieved 2013 from https://www.msms.org/Content/.../ScopeofPractice/ScopePracBosk.pdf

Nursing Scope and Standards of Practice, 2nd Edition. American Nurses Association, 2010. Nursesbooks.org, 23-29.

Blood Conservation

TRANSFUSION SAFETY FOR THE 21ST CENTURY

Toni Morris MSN, RN
Transfusion Safety Nurse Consultant
tmorris@bloodmanagement.com

THE STRATEGIC HEALTHCARE GROUP "TRIPLE AIM"

Strategic Healthcare Group

MDs & RNs devoted to blood management & transfusion safety

- Metrics, research & education - improve patient safety at the bedside

Partnered with McLaren Feb 2014

- MD education - CME lecture
  - April
  - August
- RN education – 3 lecture series
  1. Transfusion Safety in the 21st Century
  2. Myth Busters
  3. Nursing at the Heart of Transfusion Safety

OVERVIEW

Goal:

The purpose of this presentation is to introduce the learner to the basic principles of blood management and the inherent risks associated with transfusion therapy.

Objectives:

- Discuss the safe and efficient use of blood products based on current evidence.
- Define three major adverse events related to transfusion exposure.
- Understand that nurses must play an active role in transfusion safety along the continuum of care

Blood Management and Transfusion Safety

INTRODUCTION TO BLOOD MANAGEMENT

"Any treatment that is powerful enough to heal can also harm."

- Brent James, MD,
Chief Quality Officer, Intermountain Healthcare

"Patients should get all the care they need and none they don't; safely, efficiently and at low cost."

- Donald Berwick, MD, Former Administrator, Centers for Medicare and Medicaid Services

WHAT IS BLOOD MANAGEMENT?

Blood management is designed to[1]:

- Promote the *safe, optimal, efficient* use of blood products and blood related resources
- Establish proactive, evidence based strategies to reduce the risk of transfusion

[1] Boucher, Hannon. Pharmacotherapy 2007;27(10)

IS BLOOD UTILIZATION OPTIMAL?

Group Questions Appropriateness of Most Blood Transfusions

- April 23, 2009 -

"Allogeneic blood transfusion improves outcomes in only 11% of clinical scenarios for patients without trauma or active hemorrhage"

"an estimated 40% to 60% of transfusions are still done without a good indication"

Expert panel came to this conclusion based on review of 494 studies published over the last 13 years.

L-R seated: Donat Spahn, MD; Paul Marik, MD, FCCP, FCCM; L. Tim Goodnough, MD; Arlene Fink, MD, PhD; Howard Corwin, MD, FACP, FCCM, FCCP; Jeanne Callum, MD, FRCPC; Lena Napolitano, MD, FACS, FCCP, FCCM; Lynn Boshkov, MD; and Gavin Murphy, MD, FRCS. L-R standing: Jochen Erhard, MD; Kathleen Sazama, MD, JD; James Isbister, MD; Aryeh Shander, MD, FCCM, FCCP; William Ershler, MD; Neil Blumberg, MD; and Leftherios Vamvakas, MD, PhD.

TransMedRev.2011;25(3):232-246

WEIGHING BENEFITS VS. RISKS

Transfusion Safety and Efficacy is Being Reevaluated

- Blood transfusion remains a precious resource that has saved countless lives
- Emerging evidence is redefining transfusion's narrow therapeutic window
- The benefits of transfusion have generally been overestimated and the risks underestimated

Transfusion Benefits vs. Risks: **1998**

TRANSFUSION RELATED COMPLICATIONS

BLOOD IS A LIQUID TRANSPLANT

Transfusion Safety Checklist

Pre Transfusion
- Match donor and recipient
- ABO compatible graft

During Transfusion
- Monitor recipient for acute reaction

Post Transfusion
- Monitor for signs and symptoms of a delayed response /adverse reaction

TRANSFUSION RELATED ADVERSE EVENTS

- Misidentification (ABO Incompatibility)
  - Clerical error leads to hemolytic transfusion reaction
  - Incidence 1:14,000 transfusions
- Bacterial Contamination of Platelets
  - #1 risk of transfusion transmitted disease in the U.S. blood supply
  - Incidence 1:1500 transfusions
- Anaphylactic Reactions
  - Incidence 1:250,000 transfusions

Goodnough, CritCareMed 2003;31(12S)
Rana, Transfusion 2006;46

TRANSFUSION RELATED ADVERSE EVENTS

- Transfusion-Related Acute Lung Injury (TRALI)
  - Dyspnea, SOB
  - Hypoxia within 4-6 hours of transfusion
  - Mortality rate 5 – 20%
    - leading cause of transfusion related death
  - Incidence:
    - 1:500 Plasma
    - 1:1000 Platelets
    - 1:5000 RBC

- Transfusion-Associated Circulatory Overload (TACO)
  - Volume overload leads to CHF and pulmonary edema
  - Significant increases in length of stay and mortality rates
  - Incidence 1:100 transfusions

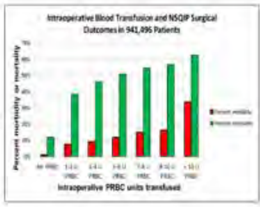
Goodnough, CritCareMed 2003;31(12S)
Rana, Transfusion 2006;46

TRANSFUSION RELATED IMMUNOMODULATION

Transfusions cause dose-dependent alterations in immune system function[1]

Down regulation of cellular immunity[2] leads to adverse effects

- Surgery – Increased postoperative infections and mortality[3,4,5]
- Critical Care[6] – Increased pneumonia and line sepsis
- Oncology – Increased cancer recurrence in some surgical oncology studies[7]



[1] Blumberg. Transfusion 2005;45(1)
[2] Triulzi. Transfusion 1992;32
[3] Carson. Transfusion 1999;39
[4] Ferraris. Arch Surg 2012;147
[5] Bernard. JAmCollSurg 2009;208
[6] Napolitano. CritCareMed 2009;37(12)
[7] Al-Refaie. Surgery 2012;15

WHAT'S IN THE BAG?

RBCs Change Shape During Storage[1]

Day 1 Day 21 Day 35

Stored blood is an imperfect substitute

- Sticky and inflexible (poor capillary flow)
- Nitric oxide scavenger (vasoconstriction)
- Pro-inflammatory and pro-thrombotic effects due to breakdown products that accumulate (Biological Response Mediators- BRMs)

Transfusions are associated with

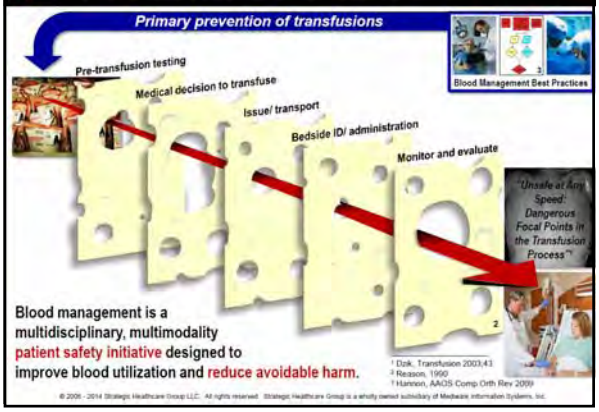
- Systemic inflammation
- Lung injury and pulmonary complications
- Renal injury and acute renal failure
- Myocardial infarction and DVTs
- Immunosuppression

TRANSFUSIONS ARE INHERENTLY HAZARDOUS

Blood is a liquid transplant!

Liquid Transplant | Organ Transplant

ROADMAP FOR TRANSFUSION SAFETY



Blood management is a multidisciplinary, multimodality patient safety initiative designed to improve blood utilization and reduce avoidable harm.

[1] Dzik, Transfusion 2003;43
[2] Reason, 1990
[3] Hannon, AAOS Comp Orth Rev 2009

SUMMARY

- Emerging evidence is redefining how blood transfusions should be utilized in patient care
- The benefits of transfusion have generally been overestimated and the risks have been underestimated
- Blood is a liquid transplant that is associated with increased rates of adverse events and complications
- Blood management promotes the safe, optimal, efficient use of blood products and blood related resources

STRATEGIC | The Leader in Blood Management Consulting, Education and Informatics Solutions

QUESTIONS?

Toni Morris MSN, RN
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Strategic Healthcare Group LLC
tmorris@bloodmanagement.com

McLAREN FLINT

NURSING PROCEDURE MANUAL

TITLE: PACKED RED CELLS

REVISED DATE: 8/14

EFFECTIVE DATE: 5/99

POLICY: All patients willing to receive blood will receive the transfusion in a safe and timely manner, with consideration of cultural, social, and religious beliefs.

PURPOSE: To restore blood loss from surgery, hemorrhage, or disease.

PERSONNEL: Hanging packed red cells is the responsibility of the RN or physician. The infusion of packed red cells may be discontinued by RN.

SUPPORTIVE DATA: Red blood cells (RBCs) contain the red cellular elements remaining after the removal of most of the plasma and original anticoagulant solution. Transfusion of packed red cells, from which 80% of the oxygen has been removed, restores only the oxygen carrying capacity of the blood.

EQUIPMENT:

1. Patent peripheral or central venous access
2. Pump
3. Y-Blood set
4. 250ml normal saline
5. Designated packed red cells (blood bank)
6. Vital sign machine with thermometer

1. Obtain physician's order for PRBC. Order type, cross, and number of units needed.	All packed red cells must be ordered by physician and must be run through Y- blood set. Blood bank may suggest warming of blood as indicated by laboratory testing.
2. Explain procedure to patient or family member.	
3. Informed consent must be obtained, by an RN or physician, prior to the administration of blood products. The surgical consent form covers blood administration through the surgical procedure, including the recovery of the patient.	Additional consent for blood products is needed after recovery period is complete per anesthesia.
4. Verify physician's order for transfusion and pre-medication, if ordered, utilizing the ***"Blood and Blood Component Transfusion Order"*** **sheet.**	
5. Baseline vitals must be obtained and documented **prior** to picking the unit up from the Blood Bank, to assure patient is hemodynamically stable and blood is not wasted. • The physician must be notified of abnormal parameters (elevated BP or temperature), **prior** to picking up the unit of blood and initiating transfusion. • The pre-infusion vital signs must be recorded on the "Transfusion Record" after picking up the unit of blood.	**Focus on Evidence:** "Changing from baseline vital signs during infusion will alert nurse to a potential transfusion reaction or adverse effect to therapy."[2]
6. Patient peripheral or venous access using a Y-blood set and 250ml normal saline must be established prior to giving pre-medications or sending for blood. To flush IV line, normal saline is recommended preceding and following all blood and blood products.	Solutions other than normal saline may result in red blood cells hemolysis or other complications. Simultaneous administration of any IV product through a blood line is contraindicated.

7. Designated packed red cells may be picked up by hospital personnel only, not volunteers. Blood bank must have patient's name, date of birth, and medical record number before blood can be released. The carrier and the blood bank employee must compare the blood unit for transfusion to the blood transfusion record. Instruct the carrier to immediately return to nursing service with blood product. Only one unit of packed red cells may be signed out for one patient, under routine circumstances.	Meds and IV fluids can be administered during a blood transfusion, if a separate lumen of a central line or a separate peripheral line is used. Blood may not be administered through a pulmonary artery catheter due to its small diameter.
8. After pre-medications (if ordered) have been given and packed red cells are obtained on unit, a two-person verification process is utilized to eliminate transfusion errors related to patient misidentification. The administering RN must verify the following data on the Laboratory Transfusion Record and on the label of the blood bag prior to administering the transfusion: donor number and outdate on Red Cross label, primary patient identifiers (patient name and birth date), and medical record number of recipient, and blood groups of donor and recipient. This verification must be done with one of the following licensed professionals: • RN • Physician, Resident, Medical Intern • Perfusionist	**Focus on Evidence:** "When using a two-person verification process, one individual conducting the identification verification is the qualified transfusionist who will administer the blood or blood component to the patient."[1]
9. In the patient's presence, the RN (who will administer the blood or blood component to the patient) and the above stated second licensed professional, must use the primary patient identifiers (patient name and birth date), and medical record number of	Identification procedures are verified by RN and witness signing the appropriate section on the transfusion Record. If there are discrepancies, blood must be immediately returned to the blood bank. If patient is unidentified in ER, then patient is typed and screened for blood, labs drawn, and other treatments with a pseudo name

recipient to validate that the information on the blood unit is identical with that on the patient's wrist band. If orange wrist band is on patient, make sure pseudo name and number match information on the blood unit.	and number. All blood the patient receives on this type and screen will come up with the pseudo name and number. When patient is identified with name and medical record number, all further tests will be done with patient's name and medical record number In order to obtain results of labs and tests done under pseudo number on admission, you must use the pseudo number; the pseudo remains the same for this admission.
10. The transfusion should be started as soon as possible after receiving the packed red cells on the unit.	Unused, unopened units of blood must be returned to blood bank within 15 minutes. Blood is **NEVER** to be stored in unit refrigerator and it is **NEVER** to be stored on ice, unless the unit left Blood Bank on ice.
11. Close both clamps on blood tubing. Spike normal saline bag and flush tubing, making sure solution level is covering blood filter. Close clamp.	
12. Before transfusion, the packed red cells should be thoroughly mixed by gently inverting the unit several times.	A pump may be used to infuse packed red cells and blood products. Blood should be approximately one inch from drip chamber to prevent damage to blood cells.
13. Spike the port with remaining Y-site on blood tubing, being careful not to puncture inside of bag.	
14. Open roller clamp. Allow packed red cells into the filtered drip chamber. The level of the packed red cells should be approximately one inch from the drip chamber to prevent damage to the packed red cells. Open flow control clamp on blood tubing and allow to flow through lower section of IV tubing.	**Focus on Evidence:** "Most transfusion reactions occur within the first 15 minutes of a transfusion. Infusing a small amount of blood component initially minimizes the volume of blood to which the patient is exposed, thereby minimizing the severity of a reaction."[2]
15. Infuse at no more than 100ml/hour for the first 15 minutes, with an RN in attendance.	**Focus on Evidence:** "Patients should be monitored 15 minutes after the start of therapy and at 15-30 minute intervals throughout the transfusion."[3 and 4]

16. Vital signs must be taken and recorded on "Transfusion Record" after the first 15 minutes, and every 30 minutes during transfusion until it is completed. Vitals must be documented 30 minutes post transfusion on the Blood Transfusion Record.	
17. Increase rate of infusion (after vital signs are taken at 15 minutes) so that infusion will be completed within 1 ½ to 2 hours unless otherwise indicated by physician's order or nurse's judgment.	If necessary and no blood reaction has been noted, a maximum of two units of packed red cells can be administered through the same tubing, provided the total time for both units does not exceed 4 hours. Run at **Keep Open** rate until next unit of blood is obtained from Lab.
18. Change blood tubing and 250cc bag of normal saline with each unit of blood if not infused within 2 hours. Each unit of PRBCs should be administered within 2 hours.	
19. If no reaction is noted, place empty blood bag and tubing in red plastic biohazard bag, tie shut, and deposit in lined biohazard receptacle on unit.	

DOCUMENTATION:

1. Completely fill out the "Transfusion Record" and place in patient chart. In the section "Post Transfusion Monitor", if no reaction is noted, check "No reaction." If a transfusion reaction is suspected, follow instructions and document in section I of the "*Suspected Transfusion Reaction Report*" on back of the "*Transfusion Record*."
2. On the Electronic Medical Record (EMR), the date, time, amount of normal saline initiated, amount, rate, should be documented. Document if new IV is started for PRBC or previous IV is interrupted.
3. Record volume of normal saline and blood product in the EMR I&O screen.
4. Vital signs and observations must be on the "*Transfusion Record*."

References:

National Patient Safety Goals 2011. NPSG.01.03.01 Eliminate transfusion errors related to patient misidentification. Accessed June 17, 2014. @ http://www.jointcommission.org/assets/1/6/2011_NPSGs_HAP.pdf

Perry and Potter. Mosby's Pocket Guide to Nursing Skills and Procedures, 7th Ed, 2011. Elsevier Mosby; pp 36-44.

American Red Cross. A Compendium of Transfusion Practice Guidelines.2nd Ed. 2013. Accessed June 17, 2014@ www.redcrossblood.org

Approved by: Dr. D.A.Wiese 8/19/2014

Blood and Blood Component Transfusion Order

PATIENT IDENTIFICATION

- **Use this order for all blood component transfusion orders**
- Check off at least one indication for each type of blood component order.
- *THE MINIMAL EFFECTIVE DOSE OF ALL BLOOD COMPONENTS SHOULD BE USED.*
- SINGLE UNIT transfusions of red cells are often effective.
- Compliance with transfusions guidelines will be monitored by the Transfusion Review Committee.
- Treatable causes of anemia should be ruled out first.

Instructions: 1. This order must be completed prior to transfusion in non-emergency situations. In emergent situations, Physicians may complete the order after stabilization of the clinical situation.
2. Indicate number and type of each blood component unit(s) required including indication for transfusion. A new order must be completed for each transfusion episode.

☐ **Blood Transfusion Consent signed** ☐ **Type & Cross prior to Transfusion** ☐ **Irradiated**

Blood Component	Indications for Transfusion (check all that apply or complete other)
☐ **Packed Red Blood Cells** *One unit of packed cells will increase Hgb by 1g / dL and Hct by 3%* **#Units requested_____** Most recent Hgb_____ Hct_____ Date_____	☐ Active bleeding *all efforts should be made to control active bleeding* o Blood loss greater than 750 mL o 1.5-2 L (not responding to volume resuscitation) ☐ Hgb less than 7g/dL / Hct less than 21% ☐ Hgb less than 8g/dL / Hct less than 24% in a patient with coronary artery disease **AND** unstable angina, acute myocardial infarction, or cardiogenic shock ☐ Hgb greater than 8g / dL / Hct greater than 24% (normovolemic) o Tachycardia and /or hypotension (not corrected by adequate volume replacement alone) o Acute respiratory failure o Inadequate cardiac output o Inadequate oxygenation (PaO_2 saturation less than 65%) ☐ Other_____
☐ **Platelets** *A single dose of apheresis platelets will increase the count by 25,000-35,000 / mm^3.* **Units requested** Pheresis Single donor _____ Most recent platelet count _____ Date_____	☐ Pre-transfusion Platelet count less than or equal to 10,000 / mm^3 without active bleeding ☐ Platelet count less than or equal to 50,000/mm^3 o Active Hemorrhage o Invasive procedure (recent, in-progress, planned) ☐ Platelet dysfunction, including patient on Plavix, aspirin, etc, undergoing invasive procedure (specify)_____ ☐ Other:_____
☐ **Fresh Frozen Plasma** *A dose of 10-15 mL / kg is usually adequate to correct a coagulopathy* **Units requested_____** Most recent studies: PT____ INR____ PTT____ Fibrinogen_____ Date_____	☐ Factor deficiency and specific concentrate not available ☐ Thrombotic thrombocytopenic purpura (TTP) ☐ Emergent reversal of Warfarin or other oral anticoagulant effect ☐ DIC ☐ Other:_____ • *This component must not be used for volume replacement.*
☐ **Cryoprecipitate** *1 pooled dose of Cryo raises the fibrinogen approximately 45 mg / dL.* ☐ 5 units pooled ☐ 10 units pooled ☐ Other_____ Last fibrinogen_____ Date_____	☐ Fibrinogen less than or equal to 100 mg / dL ☐ Documented Factor VIII deficiency ☐ Von Willebrand's disease (if specific products not available) ☐ DIC ☐ Other:_____

_____ _____ _____
Physician Signature Date (required) Time (required)

Name _____ Unit _____ Date_____

Blood Transfusion and Transfusion Reactions

All blood specimens collected for transfusion services MUST be witnessed by a second hospital employee (nursing services and/or laboratory services) IN THE PRESENCE OF THE PATIENT.

Review the procedure on-line and materials in your orientation book to answer the following questions:

1. What do you need before administering blood?
    a. _____
    b. _____
    c. _____

2. Who can pick up the unit of blood from the blood bank?
    a. _____

3. To eliminate transfusion errors related to patient misidentification, the RN who will administer the blood and what other person can witness the patient identifiers?
    a. _____

4. What do the above employees verify?
    a. _____
    b. _____
    c. _____

5. What is the RNs responsibility initially when the transfusion is started?
    a. _____
    b. _____

6. How often are vital signs taken?
    a. _____

7. List signs/symptoms of a blood transfusion reaction
    a. _____
    b. _____
    c. _____
    d. _____

8. What should you do for suspected blood transfusion reaction?
    a. _____
    b. _____
    c. _____
    d. _____

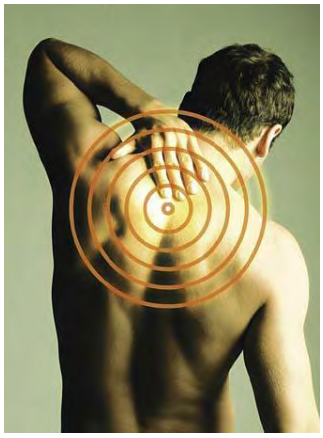
Pain in Older Population

Pain Response in Diverse and Older Populations

Purpose/Goal:
To provide participants with the knowledge of how diversity and aging can affect a person's response to pain.

Objectives:
1. Identify how cultural differences influence a patient's response to pain.
2. Recognize factors that influence the older adult's response to pain.

Directions for successful completion:
1. Review the program content
2. Complete the post assessment; a minimum score of 80% (8 correct) is required



Background and Significance

Pain is as an unpleasant sensory and emotional experience. It is the most common reason for seeking health care and it occurs as the result of many disorders, diagnostic tests and treatments. It disables and distresses more people than any single disease. Because nursing personnel spend more time with patients in pain than other health care providers do, they

need to understand the causes and consequences of pain, and the methods used to treat pain.

Although it is important to be alert to patients who report pain, it is equally important to be alert to patients who deny pain. Nursing personnel may suspect a patient is experiencing pain because of their disease or following a normally painful procedure. Caregivers should explore with the patient the reason for suspecting pain, such as grimacing when the patient moves or avoiding movement all together. It may also be helpful to explore why the patient may be denying that he or she is in pain.

Several factors, including past experiences with pain, anxiety, culture, age, gender, genetics and expectations about pain relief, influence a person's response to pain. These factors may increase or decrease perception of pain, increase or decrease tolerance for pain, and affect responses to pain. This module will address two of these factors, by exploring pain in the older population and in diverse cultures.

Transcultural Differences in Response to Pain

Individuals and cultural groups vary in their responses to pain. How people react to pain is influenced by their perception of pain. Early in childhood, people learn from those around them what responses to pain are acceptable or unacceptable. For example, a child may learn that a sports injury is not expected to hurt as much as a comparable injury caused by a motor vehicle crash. The child also learns what stimuli are expected to be painful and what behavioral responses are acceptable. These beliefs vary from one culture to another; therefore, people from different cultures who experience the same intensity of pain may not report it or respond to it in the same ways.

Two broad categories of responses to pain are:

Stoic: less expressive verbally and nonverbally, and rarely complain

Some reasons for a stoic response to pain include

1. Denial of pain
2. A desire to be the perfect patient
3. Avoiding worrying the family
4. Fear of addiction
5. Avoiding loss of control
6. Fear of overdose and side effects from pain medications

7. Paying a price for past sins and future joys
8. Acceptance of the pain

Emotional: quite vocal and express pain loudly

Some reasons for an emotional response to pain include

1. Fear of the pain
2. A desire for help and fear of not receiving it
3. Anger
4. Grief over loss of role and dignity
5. Exorcism of the pain through the act of crying out
6. Experiencing great pain

In relation to gender, men generally demonstrate greater stoicism than women; however, research indicates that stoicism decreases with increasing age.

Mexican Americans come from several diverse subcultural groups, including Hispanics, Puerto Ricans, Spanish Americans, Latin Americans, Latinos, and Chicanos. These different Mexican American subcultures tend to have their own sets of pain-related values, beliefs and practices. They may:

- View pain as a necessary part of life and as an indicator of the seriousness of an illness. They believe that enduring sickness, including pain, is a sign of strength. Men often tolerate pain until it becomes unbearable.
- Deny or avoid dealing with pain, but they may exhibit a high anxiety level.
- Tend not to verbalize complaints of pain.

Asian Americans originate from several highly diverse subcultures. In many Asian subcultural groups, pain is considered a serious symptom of illness for which care is sought. Acupuncture is a popular treatment for many health problems, including pain. Asians generally are quiet in voice and manner when in pain.

- Chinese culture values silence. Women experiencing the pain of childbirth typically believe they will dishonor themselves and their families by a loud or wild response to pain.
- Japanese Americans regard pain as an integral part of illness and traditionally exhibit a stoic attitude toward it. Some feel that it is disgraceful to express pain

verbally, even when their perception of the pain is intense, and may refuse pain medication when offered.

- Filipino Americans tend to view pain as "God's will for my life" and believe that neither the patient nor the healthcare worker should interfere with God's plan. Some believe that illness may be attributed to a punishment from God and it would not be appropriate to interfere. Refusal of pain medication may be grounded in deep religious beliefs and should be respected.

Black Americans, depending on their cultural background, may deny or avoid dealing with pain until it is unbearable and then seek emergency care. Others, may exhibit a stoic response to pain in order to be a "perfect patient", or feel that expressing pain poses a threat to their self-esteem and that denying pain will be more acceptable to their caregivers. Black Americans with strong religious beliefs may believe that life on the earth (with all of its pain and suffering) is bearable only because there will be happiness and lack of pain after death.

White, Anglo-Saxon, Americans, compromise many diverse subcultural groups from many countries. They generally regard pain as a symptom of illness or injury. Evidence suggests that whites exhibit a moderate level of pain tolerance, express pain behavior, and are more likely to seek pain relief. The majority will seek professional attention when their symptoms interfere with their job or their personal life.

Native Americans are from an estimated 300 Indian nations and reside mostly in the western part of the United States. Each Native American community has its own distinctive characteristic style of dealing with pain. However, in general, Native Americans are quiet in voice and demeanor, and traditionally exhibit a stoic attitude and tolerate a high level of pain. Some patients may not seek pain relief and may tolerate pain until they are physically disabled.

Awareness of differences is critically important when assessing, teaching and counseling patients from diverse cultures who are experiencing pain. To involve the patient and family in planning acceptable pain control strategies, you can:

- Listen to their views about pain and its control.
- Respect mentally competent patients' choices regarding pain control.
- Be available to the patient who is experiencing pain; sitting with them may decrease their anxiety level as well as the pain level.
- Provide information about pain control in a clear manner, repeating important information.
- Provide information graphically to help reduce language problems; for example use a line drawing of the body when discussing specific areas of pain or discomfort. An interpreter or family member can be consulted to establish a method for evaluating pain as well as a language conversion chart.
- Secure a clergy member or traditional healer for the patient if requested, as different cultural groups receive comfort from spiritual sources.
- Listen to your patients' descriptions of their pain and the degree of pain relief.
- Seek the support of health team members to assist you in exploring culture-specific pain management strategies.

Older Patient Differences in Response to Pain

Pain is the most common symptom for which older adults, typically defined as people aged 65 and older, seek medical treatment. The rate of persistent pain ranges from 24% to 50% in older adults, and generally increases with increasing age. Older adults are set to overwhelm the healthcare system. According to the latest United States Census Study, this group represents the fastest growing segment of the total population. Understanding the challenges and unique needs of older adults with pain will be necessary to deliver effective healthcare in the years ahead.

Pain assessment in the older adult may be complicated by several factors. The first of these involves a misconception that pain is a natural or expected consequence of aging. Elderly patients may be reluctant to report pain for a variety of reasons. Many elderly people are fearful of addiction and, as a result, do

not report that they are in pain or ask for medication to relieve pain. Others fail to seek care because they fear that the pain may indicate serious illness or that pain relief will be associated with a loss of independence. While denying the presence of *pain*, many older adults will acknowledge discomfort, hurting or aching.

Sensory and cognitive (thought process) impairment, (e.g., delirium, dementia, or speech disorders), common among frail older people, make communication more difficult and may further hinder the pain assessment process. Research has revealed that a large number of nursing home residents reported being in pain daily. This pain is often described as excruciating and often persists unrelieved without treatment. Unrelieved pain contributes to many problems among the older population. Depression, anxiety, decreased socialization, sleep disturbance, impaired ambulation, and increased healthcare utilization and costs have all been found to be associated with the presence of pain in older people.

Older patients must receive adequate pain relief after surgery or trauma. When an older person becomes confused after surgery or trauma, the confusion is often blamed on medications, which are then discontinued. However, confusion in the elderly may be the result of untreated and unrelieved pain. In some cases, postoperative confusion clears once the pain is relieved. Judgments about pain and the effectiveness of treatment should be based on the patient's reports of pain and pain relief rather than on age.

Pain management at the end of life differs little from general pain management. Patients still require pain assessment and good pain management, even though assessment may be difficult to conduct due to confusion, delirium, or unconsciousness. Caregivers should observe for signs of restlessness or facial expressions as an indicator of pain. The patient should be monitored for respiratory depression as result of overmedication; although a respiratory rate of 6 per minute or greater is usually adequate. Comfort should be a priority in the case of a person who clearly is at the end of life, where cure is no longer the goal.

Awareness of differences is critically important when assessing, teaching and counseling older patients who are experiencing pain. To involve the patient and family in planning acceptable pain control strategies, you can:

- Use appropriate pain scales when assessing patients who are cognitively impaired and have difficulty responding to a scale; as an example, the "faces" scale may be more beneficial.
- Monitor response to pain medication, as the elderly have a slower metabolism and a greater ratio of body fat to muscle mass than younger people do, so small doses may be sufficient to relieve pain and these doses may last longer.
- Recognize that delirium and confusion can result from untreated pain.
- Evaluate reports of pain by patient's family or caregivers
- Ask family or caregivers if they have observed any changes in behavior
- Encourage regular physical activity; research indicates that it reduces pain and enhances independence and activities of daily living.
- Offer alternative treatments, such as heat, cold or relaxation techniques.
- Promote comfort by repositioning and massage.

Evaluating Pain Management Strategies

After interventions have had a chance to work, the nursing staff needs to ask the patient to rate the intensity of pain. This reassessment needs to be repeated at appropriate intervals after the intervention and compared to the previous rating. These reassessments indicate the effectiveness of the pain relief intervention and provide a basis for continuing or modifying the plan of care.

It takes ***all*** members of the nursing team to help identify and treat the potential causes of patients' pain. Communicating effectively with older patients or those from diverse cultures requires an understanding of why patients and their families react as they do to

pain. A lack of sensitivity concerning these issues can lead to poor communication, misinterpretation of symptoms, ineffective pain management and unsatisfied customers.

Patients who receive effective pain management will maintain their dignity, functional capacity and overall quality of life.

References:

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McLaren Flint

Pain Response in Diverse and Older Populations Post Assessment

Name:_____Last 4 digits of SS#:_____Unit:_____Date:_____

Directions:
1. Review the program content and answer the post assessment questions

1. Factors that influence a person's experience with pain include:
    a. Culture
    b. Gender
    c. Age
    d. All of the above

2. Some reasons for an emotional response to pain include:
    a. Paying a price for past sins
    b. Grief over loss of role and dignity
    c. Fear
    d. Both B & C

3. All the following cultural factor(s) need to be considered in caring for an Asian American patient, except:
    a. Generally stoic when in pain to prevent dishonor
    b. Likely to accept pain relief when offered
    c. May believe that pain is part of God's plan
    d. Regards pain as integral part of illness

Case Study

A 65-year-old Mexican American woman is admitted to the hospital with advanced cancer of the left breast. She speaks little English, and three of her adult children are with her. Her health history indicates that she initially refused surgery after noticing a lump in her breast, because she believes that the breast is where the soul resides, but she finally consents to surgery. Following surgery, you walk into her room, and notice that she is moaning and rocking back and forth in bed. But when you ask if she is having pain, she shakes her head "no".

4. What cultural factor(s) need to be considered in caring for this woman?

    a. She may believe that enduring pain is a sign of strength
    b. Rocking in bed may be a sign of her anxiety
    c. She may not feel comfortable complaining about pain
    d. All of the above

5. In an effort to plan acceptable pain control for this patient, the caregivers can:

    a. Offer comfort from spiritual sources
    b. Ignore her pain, because she probably views pain as necessary
    c. Ask her children to assist in developing a method to assess their mother's pain and to provide pain control information
    d. Both A & C

6. The rate of persistent pain in the older adult ranges from:
    a. 40% to 50%
    b. 20% to 40%
    c. 24% to 50%
    d. 60% to 80%

7. Pain assessment in the older adult may be complicated by:
    a. Fear of medication addiction
    b. Fear of loss of independence
    c. Not defining discomfort or aching as pain
    d. All of the above

8. Unrelieved pain, in the older adult, can cause all of the following, <u>except</u>:
    a. Increased ambulation
    b. Confusion
    c. Depression
    d. Sleep disturbances

<u>Case Study</u>

Mrs. Lewis, a 75-year-old female with moderate cognitive impairment associated with Alzheimer's disease, was recently diagnosed with degenerative bone disease. Her daughter brought Mrs. Lewis to the hospital after she fell and fracture her right hip.

9. Which of the following may help to identify pain in a cognitively-impaired patient with limited ability to verbally express discomfort?
    a. Facial expressions
    b. Reports of pain by patient's family or caregivers
    c. Changes in behavior, such as increased confusion
    d. All of the above

Three days post op, Mrs. Lewis cries out when you assist her into a chair. While sitting in the chair, you notice that she keeps her eyes closed and is very fidgety. Her daughter notifies you that her mother is refusing to eat or drink and seems more irritable than usual.

10. In an effort to plan acceptable pain control for this patient, the caregivers can:
    a. Monitor response to pain medication
    b. Provide pain control prior to getting patient up
    c. Stop getting patient up in chair
    d. Both A & B

McLaren Flint Continuing Nursing Education Unit
2013-2016 Continuing Education Activity Documentation

Evaluation Form

Title: Pain Response in Diverse and Older Populations

Date: _____

Please assist us in evaluating the educational activity.

	Yes	No
Were the following objectives met?		
1. Identify how cultural differences influence a patient's response to pain.		
2. Recognize factors that influence the older adults' response to pain.		
Is the content of this program useful to you in your professional practice?		

How long did it take you to complete this independent study? _____

Please give an example of what you will do differently in your practice as a result of participating in this program.

What other topics for educational activities would you like offered in the future?

Thank you for your participation!!!!

Paper MAR and Downtime process

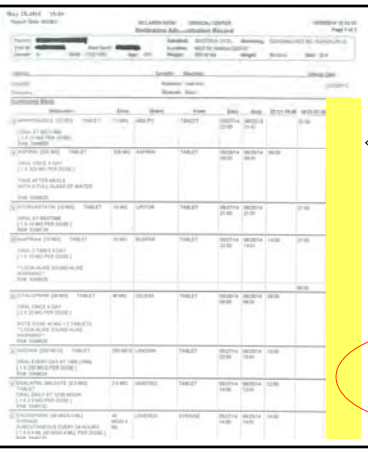
McLaren

FLINT

Downtime Plan for a Clinical User

User Guide

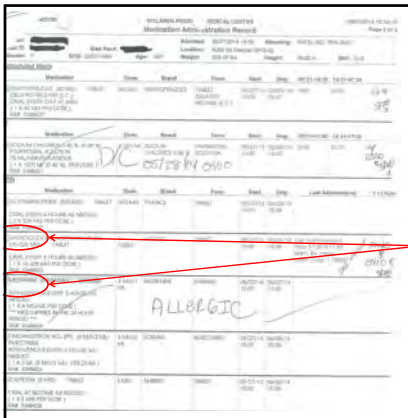
In the event of a downtime, scheduled or unscheduled (after overhead page), pharmacy will print downtime MAR for all patients that are currently admitted to the nursing floors



Use this highlighted area to chart administration of medications given beyond the times displayed in the EMAR using the following format:

Time, Date, Initials

0715 5/29/14 AM



Scheduled downtime MAR

All medication orders and changes should be reflected on the paper EMAR. Medications that are discontinued should be indicated on the MAR.

Pay close attention to the letters to the left side of the medication. This indicated the status of the medication.

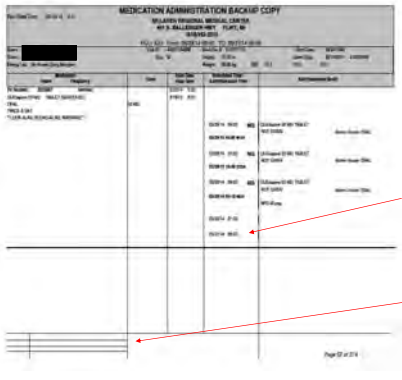
A- Administer

U- Unverified

D- Discontinued

Any medication ordered after the initiation of downtime will be handwritten on a blank MAR. These are available in the downtime boxes on each unit. If additional downtime MAR's are need they can be printed from "Print on Demand" on the intranet.

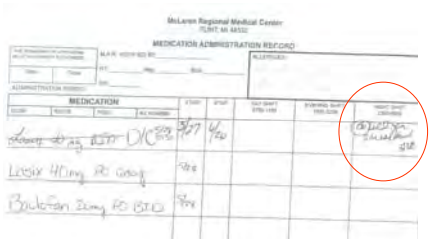
All patients who are admitted after the start of downtime will have a handwritten MAR reflecting all ordered medications.



Unscheduled Downtime MAR

Write your initials next to the administration times when the mediation has been given.

Sign your name on the bottom left hand side


McLaren Regional Medical Center
FLINT, MI 48532
MEDICATION ADMINISTRATION RECORD
MEDICATION

Medications that are held should have the time written and circled and indicate the reason it was not given. The “Not Given” reason should be written out.

An announcement will be made via the overhead paging system to indicate when to revert back to the computer charting. Refrain from entering any system that has not been cleared by IT, this could effect the upgrade, interrupt repairs, and prolong downtime.

At the end of downtime all MARs should be copied with the original going into the patients chart and the copy, stapled, collected and taken to pharmacy for charging purposes.

TITLE: DOWNTIME NURSING DOCUMENTATION
REVISED DATE: 3/07, 10/09, 6/11, 10/12
EFFECTIVE DATE: 01/06

Purpose:
Ensure a consistent method and procedure for patient clinical documentation in the event of system planned or unplanned downtime.

Supportive Data / Scope:
All personnel who utilize the electronic clinical record for viewing or entering clinical patient data will utilize paper forms during system downtime.

Equipment List:
Electronic documentation system and paper downtime forms. (Attached are: "Nursing Admission History Form", "Assessments / Interventions" Form, and the "Interdisciplinary Teaching Record".)

Content:

I. Downtime Announcements

Steps	Key Points
1. Scheduled computer downtime will be announced on email, via a memo to each department, and via voicemail forty-eight (48) hrs prior	• Downtime announcements will follow Information Services policy and procedure. • The time the system will be down and length of the downtime will be included in the announcements.
2. In the event of unscheduled downtime, an overhead announcement will be made that the system is down.	• If the system is down and notification has not been made, contact the IS Help Desk to notify them of the downtime. • Appropriate steps will be made to notify remaining users.
3. When the system comes back up, an overhead announcement will be made.	

II. Downtime Charting

A. Planned / Unplanned Downtime Charting

Steps	Key Points
1. System is brought back on line.	
2. The downtime forms are kept with the permanent chart.	

Steps	Key Points
3. Assessments, Care Plans and Flow Sheets • Documentation does not need to be additionally entered into the EMR, other than I & O and vital signs if the downtime period is equal to or less than 8 hours. If the downtime is greater than 8 hours, the paper chart will stand alone. 4. Medication Administration Documentation • In the event of a Unplanned Downtime, Pharmacy will print the most current backed up MARs immediately for ICU, CCU, PCU, SCU and 2C. If the downtime continues for up to 1 hour, Pharmacy will print the MAR's for the remaining units. • At the conclusion of the downtime, the paper MAR's will become a permanent part of the medical record. A copy of each MAR will need to be made and sent to the pharmacy and the original MAR will be placed on the paper record. Medications that were administered during down time will be charted on the paper copy ONLY and will not be charted into the electronic medication administration record (eMAR).	

10/25/2012-Approved by Diane Kallas, VPN

Chest Tubes

Nursing Interventions for the Patient with a Chest Tube

- Set-up
- Assessment of the Patient
  - Respiratory
  - Chest tube insertion site
  - Chest drainage system
    - Drainage
    - Fluctuation
    - Air Leak
    - Suction
    - Sampling Patient drainage

Troubleshooting Chest Drainage System

- When should chest tube be clamped?
- What do you do when patient pulls out his chest tube?
- What do you do if tubing becomes disconnected between chest tube and drainage system?
- What do you do if no drainage in a patient previously had or expecting drainage?
- What do you do if collection chambers are full?
- Physician ordered -20 cm H20 suction, bellow expansion is less than ▲mark, what do you do?
- What do you do for bubbling in water seal chamber?

Chest Tube with Closed Chest Drainage System
(Turn paper over for answers OR refer to procedure)

Demonstrate set-up for chest drainage system at -20cmH20 of suction

- Simulate filling water seal to 2cm line
- Connect to suction—How high must suction be at to obtain -20cmH20?

Maintenance

- Observe fluctuating during respirations
- Review output markings from drainage
- Where do you obtain a sample from?
- How would you change out system if chambers were full?
- When should chest tube be clamped?

Troubleshooting

- Physician ordered -20cm H20 suction, bellow expansion is less than ▲ mark, what do you do?
- Where would an air leak show?
- What should you do for an air leak?
- What do you do when a patient pulls out his chest tube?
- What do you do if tubing becomes disconnected between chest tube and drainage system?

Answers

- How high must suction be at to obtain -20cmH20?
  Greater than 80 mmHg and see bellows expand to ▲mark. If not on mark increase suction regulator

Maintenance

- Where do you obtain a sample from?
  Needless luer port on patient tube connector
- How would you change out system if chambers were full?
  Prepare new drainage system by filling water seal to 2cm line, clamp chest drainage system, moving foot stand, discarding drainage tube if able, connect new drainage system to current patient drainage tube, unclamp patient drainage tube
- When should chest tube be clamped?
  Only with physician order
  Temporarily when changing out drainage system

Troubleshooting

- Physician ordered -20cm H20 suction, bellow expansion is less than ▲ mark, what do you do?
  Increase suction regulator above 80 mmHg until bellow are at ▲ mark
- Where would an air leak show?
  Bubbling in water seal chamber
- What should you do for an air leak?
  Assess patient –respiratory status, crepitus, dressing, chest tube connections, notify physician
- What do you do when a patient pulls out his chest tube?
  Assess patient—respiratory status, no air leak—apply dressing, air leak—apply loose dressing and release periodically, notify physician
- What do you do if tubing becomes disconnected between chest tube and drainage system?
  To prevent a tension pnemothorax, submerge chest tube 1-2 inches of bottle of sterile saline or sterile water. It will act as a water seal until you can replace the drainage system.

CAUTI CLABSI MDRO

Heath Care Acquired Infections (HAI)

(The gifts that keep on giving)

Healthcare Acquired Infections

- In the United States, it is estimated that approximately 1 out of every 25 hospitalized patients will contract a healthcare-associated infection (HAI). There are an estimated 722,000 infections in U.S. acute care hospitals annually. Additionally, about 75,000 hospital patients with HAIs died during their hospitalizations according to a recent prevalence study. More than half of all HAIs occurred outside of the intensive care unit.

HAIs

Risk factors:

- Use of indwelling medical devices such as bloodstream, endotracheal, and urinary catheters
- Surgical procedures
- Injections
- Contamination of the health care environment
- Transmission of communicable diseases between patients and healthcare workers
- Overuse or improper use of antibiotics

HAIs

The most common types of infections in U.S.

- **Pneumonia** (22%, 157,500 estimated infections)
  - Including ventilator and non-ventilator associated
- **Surgical site infections** (22%, 157,500 estimated infections)
  - Multi Drug Resistant Organisms (MDRO)
  - Regular staph
- **Gastrointestinal infections** (17%, 123,100 estimated infections)
  - C-diff and other foes
- **Urinary tract infections** (14%, 93,300 estimated infections)
  - CAUI (Catheter Associated Urinary Tract Infection)
- **Primary bloodstream infections** (11%, 71,900 estimated infections)
  - CLABSI (Central Line Associated Blood Stream Infections

Pneumonia

- **Respiratory or lung infections** (such as pneumonia) can be healthcare-associated. Ventilator-associated pneumonia is a type of lung infection that occurs in a person who has been on a ventilator. Germs can enter the air way via the ventilator and get into the patient's lungs, causing illness.
- **Risk Factors**
  - Age
  - Underlying Medical Conditions
  - Duration of intubation
- **Nursing Interventions**
  - Meticulous hand hygiene Meticulous hand hygiene
  - Cleaning multi-patient use items between each patient i.e. stethoscopes
  - Using single use items for those who are needing isolation
  - Limiting Access and providers for those who are infectious

Surgical Site Infections

- **Surgical site infections** (SSIs) occur after surgery in the part of the body where the surgery took place. These infections may involve only the skin, or may be more serious and involve tissue under the skin or organs. SSIs sometimes take days or months after surgery to develop so it is important to track patients after discharge for a period of time to assure that no infection has occurred.
- **Risk Factors**
  - Age
  - Underlying Medical Conditions
  - Extent and duration of the procedure
- **Nursing Interventions Include**
  - Meticulous hand hygiene
  - Cleaning multi-patient use items between each patient i.e. stethoscopes
  - Proper pre surgical prep
  - Appropriate use of Antibiotics

Gastrointestinal Infections

- **Clostridium difficile** (C. diff) is an anaerobic, gram-positive, spore-forming bacillus. When an antibiotic is introduced and the normal flora of the intestinal tract is disrupted this can sometimes enable C. diff to attach to the mucosa of the colon and sets the stage for toxin producing and resultant mucosal disease. Toxin-producing strains of C. diff can cause illness ranging from mild or moderate diarrhea to pseudomembranous colitis, which can lead to toxic dilation of the colon (megacolon), sepsis, and death. C. diff produces spores that can persist in the environment for many months and are highly resistant to cleaning and disinfection measures. Asymptomatically colonized patients (including, in many cases, those successfully treated for C. diff) continue to shed spores. (APIC. 2008)

Gastrointestinal Infections

- **Risk Factors**
  - Age
  - Underlying Medical Conditions
  - Recent or current antibiotics especially quinolones; Levaquin, Cipro
- **Nursing Interventions Include**
  - Meticulous hand hygiene with soap and water, alcohol based cleaners just spreads the spores around.
  - Cleaning multi-patient use items between each patient i.e. stethoscopes with a bleach based cleaner.
  - Appropriate use of Antibiotics
  - Isolation when indicated

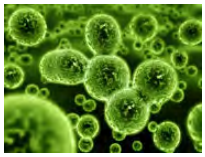
Urinary Tract Infections (UTI)

Urinary tract infection (UTI) is an infection involving any part of the urinary system, including urethra, bladder, ureters, and kidney. UTIs are the most common type of healthcare-associated infection reported to the National Healthcare Safety Network (NHSN).

•Among UTIs acquired in the hospital, approximately 75% are associated with a urinary catheter.

Urinary Tract Infections (UTI)

- The most important risk factor for developing a catheter-associated UTI (CAUTI) is prolonged use of the urinary catheter. Therefore, catheters should only be used for appropriate indications and should be removed as soon as they are no longer needed.
- Use a 4 step process to reduce the use of Catheters
  - Step 1: Avoid unnecessary Urinary Catheters
  - Step 2: Insert urinary catheters using aseptic technique
  - Step 3: Maintain Urinary catheter
  - Step 4: Review Urinary Catheter Necessity Daily



Step 1: Avoid unnecessary Urinary Catheters

Review each patient for appropriate catheter insertion. If they do not meet criteria do not insert a catheter.

Acceptable reasons for insertion

•Urinary retention/ obstruction

•Perioperative (remove within 48 hours) or longer if there is a written order

•Perineal/sacral wound where incontinence leads to unscheduled dressing changes

•End of life as a comfort measure; Hospice or DNR #3

•Immobile where turning for use of a bedpan is contraindicated

•Chronic indwelling catheter as indicated by a Physician

•Accurate I/O in critical care where hourly output effects plan of care

Unacceptable reasons for insertion

•Accurate I/O outside the ICU

•Incontinence without sores

•Prolonged post-op use without a Physician's order

•Immobile where the patient is unable to get out of bed and ambulate

•Nurse or Patient convenience

Step 2: Insert urinary catheters using aseptic technique

Document :

- Patient education
- Appropriate hand hygiene (pre-insertion)
- Catheter insertion consistent with sterile technique
- Use of as small a catheter as possible that is consistent with proper drainage

Check off/Validation of skills

- Any staff member who places urinary catheters will be evaluated for proper technique and validation will be updated regularly

Step 3: Maintain Urinary catheter

- Keep catheter properly secured
- Keep collection bag below the level of the bladder at all times
- Hang the bag off bed or chair. Collection bag should not be on the floor.
- Ensure urine flow is unobstructed at all times
- Empty the collection bag regularly, use a separate collection container for each patient. Avoid allowing the drainage spigot to touch collecting container or floor.

Step 4: Review Urinary Catheter Necessity Daily

- After all other means have been attempted and a Foley catheter is inserted the focus must be to remove it as soon as medically indicated.
- If the Foley catheter is no longer indicated it must be removed.

Primary Bloodstream Infections (BSI)

- **C**entral **L**ine **A**ssociated **B**lood**s**tream **I**nfection
  - Defined by the CDC as, "a primary bloodstream infection (that is, there is no apparent infection at another site) that develops in a patient with a central line in place within the 48 hour period before onset of the bloodstream infection that is not related to another site. Culturing the catheter tip or peripheral blood is not a criterion for CLABSI."

Primary Bloodstream Infections (BSI)

- Hand hygiene
- Maximal barrier precautions upon insertion
- Chlorhexidine skin antisepsis
- Optimal catheter site selection, with avoidance of femoral vein (in adults)
- Daily review of line necessity with prompt removal of unnecessary lines
- Other considerations
  - Some other important points
    - Maintain sterile dressing
    - Safely dispose of sharps used during insertion
    - Personnel education about CLABSI prevention
    - CVC carts that contain all necessary supplies readily available
    - Checklist to ensure adherence to policy
    - Feedback to staff regarding CLABSI rates in house

McLaren Flint

CENTRAL LINE INSERTION CHECKLIST

NOTE: THIS FORM IS NOT TO BE USED FOR INSERTION OF ARTERIAL LINES

DO NOT INSERT CATHETERS INTO THE FEMORAL VEIN UNLESS OTHER SITES ARE UNAVAILABLE

Please fax completed form to Infection Control Department 342-2148, leave original on chart until discharge at discharge provide form to nurse manager of unit

Multi Drug Resistant Organisms MDRO

Unfortunately many of the previous HAIs can be complicated by the introduction of an MDRO. Instead of just an invasive organism we have an invasive organism that is difficult to treat.

Types of MDROs

•MRSA (Methocillian resistant staphaurious
•VRE (Vancomycin resistant entrococci)
•C-diff
•ESBL (Extended spectrum beta-lactamase producers
•The unknown??

MDRO

- Multidrug-resistant organisms are bacteria that have become resistant to certain antibiotics, and these antibiotics can no longer be used to control or kill the bacteria. Bacteria that resist treatment with more than one antibiotic, or their historic first line treatment, are called multidrug-resistant organisms (MDROs for short). Multidrug-resistant organisms are found mainly in hospitals and long-term care facilities. They often affect people who are older or very ill.

MDRO

Risk Factors

•An existing severe illness
•An underlying disease or condition such as diabetes, chronic kidney disease, or skin lesions
•Previous prolonged use of antibiotics
•Invasive procedures, such as dialysis, and the use of medical devices
  – Urinary catheters
  – Central lines or dialysis catheters
  – Tracheostomy
•Repeated contact with the healthcare system such as numerous admissions to the hospital or regular dialysis visits
•A long stay in the hospital
•Previous colonization with a MDRO
•The elderly or immune-suppressed

MDROs

Nursing Interventions

- Prevention of Infections through removal of medical devices and decreased length of stay.
- Education of staff, patients, and family members.
- Judicious use of antimicrobial agents
- MDRO surveillance, also used judiciously
- Infection Control Precautions, proper isolation, hand hygiene, and environmental cleanliness.
- Decolonization

Protect your patients, yourself, and your family through the use of good Infection control practices; hand hygiene and following isolation policies.

Isolation

Gloves alone does not meet the requirements for contact precautions. If you will be in “contact” with the patient you must wear gown and gloves.

Isolation

Gown are single use items, discard after each use. DO NOT hang them on the door. Consider a salad bar, with plates being single use.

High Risk, High Alert Medications

McLaren FLINT		Policy Title: High Risk / High Alert Medications	
Section:	Effective Date: 7/4/04 Review Dates: 9/15 Revised:4/05, 5/06, 6/08, 12/10, 9/11, 9/13	Oversight Level: Level 2	Policy No: MM-103
McLaren Flint Business Unit: Medication Management		Interpretation: Director of Pharmacy; Pharmacy and Therapeutics Committee	

Objectives: To define high-alert and high-risk medications used in the medical center.

To establish a standard for identifying medications which may pose a risk to patients and for identifying mechanisms to reduce or eliminate the risk of such medications

To ensure qualified individuals are trained in professional standards and techniques to identify high risk medication and reduce or eliminate the risk of storing, selecting, preparing and administering, and monitoring these medications.

Scope: Physician, Nursing Staff, Pharmacist, Pharmacy Technicians

Policy: Medication management processes are reviewed regularly to promote safe use of medication.

Definition:

1.High Alert Medication: medications that are most likely to cause significant harm to the patient, even when used as intended.

1.(a) Look Alike-Sound Alike: Medications that have the potential for confusion due to look-alike or sound-alike names or packaging, thus creating a risky medication management situation (Refer to policy MM-132)

2.High Risk Medication: Medications that bear the heightened risk of causing significant patient harm when they are used in error. Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to patients.

Provisions:

I. **Designation of High Risk Status**

The Pharmacy and Therapeutics (P&T) Committee will develop and maintain a listing of medications designated as "High Risk." Additions and deletions to the list will be approved by the P&T Committee based on the following:

i. Reports of medication errors in the literature

ii. Reports of medication errors at Mclaren Flint

iii. Agents with narrow therapeutic window or significant toxicity

iv. New medications added to Formulary

II. **Special Handling of High Risk Medications**

Safeguards that will be in place as designated by P&T committee to prevent errors may include the following:

A. Prescribing

i. Standardized ordering and/or restricted prescribing to qualified or

credentialed specialists may be required.

ii. Prohibited abbreviations may not be used.

B. Dispensing

i. Standardized ordering and/or restricted prescribing to qualified or credentialed specialists may be required.

ii. Based on usage and availability, pre-mixed solutions will be used. Examples include dopamine, lidocaine, oxytocin, diltiazem, heparin, magnesium sulfate.

iii. Tallman lettering will be used when appropriate per Safe Handling of Look Alike, Sound Alike Medications (McLaren Policy MM-132).

C. Administration by qualified healthcare professionals as directed by physician order

D. Monitoring

i. Appropriate laboratory tests, physical assessments, and/or diagnostics may be required to or after administration of high alert medications.

E. Medication Storage

i. High alert medication are stored in Omnicell and labeled as high risk/high alert to reduce risk of error and patient harm.

ii. Avoid storing look-alike, sound-alike drugs next to each other.

iii. Utilize auxiliary labels to help differentiate between drugs depending on medication (examples, neuromuscular blocker, look alike/sound alike)

F. Compliance

i. Monthly floor inspections of medication rooms/areas are conducted.

ii. National publications are routinely reviewed by potential additions to the list.

iii. The P&T Committee will approve medications added to the high alert medication listing at least yearly and as needed.

Administrative Responsibility:	Directors of Nursing and Director of Pharmacy
Exception Provisions:	None
References or Appendices:	Institute for Healthcare Improvement. How-to Guide: Prevent Harm from High-Alert Medications. ISMP. List of High-Alert Medications. Available at http://www.ismp.org/Tools/institutionalhighAlert.asp (September 6, 2013). 42 CFR 482.24 Condition of Participation: Pharmaceutical Services Medication Prescribing (MM-130) Safe Handling of Look-Alike Sound-Alike Medications (MM-132) Standardized Concentrations for Continuous IV Infusions for Adult Patients (MM-126, Appendix B)

APPROVAL:

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Diane Kallas
Vice President of Nursing Services

Appendix

High Risk Medications

Medication or Medication Class	Safeguards
Chemotherapy	1. Chemotherapy orders must be written and authenticated (signed) by the attending Oncologist or Hematologist. 2. All body surface area calculations associated with chemotherapy orders must be co-signed by a chemotherapy-certified registered nurse, or a physician, prior to being sent to the pharmacy. 3. Verbal orders for chemotherapy are not accepted. 4. Double checked by pharmacist and nursing.
Concentrated electrolytes	1. Storage restricted to pharmacy 2. Use commercially available (standard) concentration when possible 3. Must be diluted to prescribed concentration prior to dispensing
Dexmedetomidine	1. Use restricted to ED and critical care 2. Prepared by pharmacy 3. Standardized concentration
Heparin IV	1. Pharmacy dosing service available 2. Standardized concentration 3. Standardized monitoring protocol
Insulin	1. Standardized concentration of 100 units/100ml 2. Abbreviation “u” not allowed when writing medication order
Nesiritide (IV)	Standard dilution and prepared in pharmacy
Neuromuscular Blocking Agents	For use in ED, OR, or critical care for management of mechanically ventilated patients with appropriate sedation/pain control
PCA, Epidural	1. Standardized concentration 2. Prepared by pharmacy 3. Administered by dedicated pump

Magnesium Sulfate IV	1. Standard concentration for patients in OB, prepared in pharmacy (20 GM/500 mL) 2. Premixed Magnesium Sulfate IV (1GM, 2 GM and 4GM)
Oxytocin, IV	Premixed concentration
Propofol	1. Removal from automatic dispensing cabinets requires an order by the physician 2. Use of propofol for emergent intubations outside of the OR, Endoscopy or cardiac services will be limited to the responding anesthesiologist.
Sodium Chloride (Greater than 0.9% IV)	1. Prohibited as floor stock Sodium Chloride 3%: a. Must be reassessed and reordered every 24hr b. Check serum sodium and neurologicals Q1h c. Indicated only in patients who are both severely symptomatic and have sodium concentrations less than 120 mEq/L (120 mmol/L). Must be administered through a large vein or a central line.

McLaren FLINT	**Policy Title: Anticoagulation Policy**	
Effective Date: 10/13, 11/14 **Review Dates: 10/16** **Revised: 10/14**	**Oversight Level:** **Level 2**	**Policy No: MM-140**
McLaren Flint Business Unit: Medication Management	**Functional Responsibility for the Policy:** **Director of Pharmaceutical Services**	

Objective: To define the McLaren Flint anticoagulation protocol for the management of heparin and argatroban infusions and to establish guidelines for oral anticoagulation medications.

Scope: Physicians, nurses, and pharmacists

Policy: For inpatients prescribed IV anticoagulation therapy, an interdisciplinary management of care will occur. This will ensure that communication among caregivers regarding dosing, monitoring, and adverse events will be achieved.

I. Team Members and Roles

A. Pharmacy and Therapeutics Committee-provides medical oversight for program

B. Prescribing Physician

1. Initiates patient order for anticoagulation
2. Delegates management of patient to Pharmacy by indicating "Pharmacy Dosing Service"

C. Pharmacist

1. Summarizes plan of care for patient using IV anticoagulation
2. Develops and coordinates plan of care for patient (only if physician delegated)
3. Oversees daily management of patient until IV anticoagulation is discontinued (only if physician delegated with Heparin or automatic inclusion of pharmacy dosing service with Argatroban)
4. Monitors daily lab values and documents/recommends change in therapy (use Anticoagulation Tracking Sheet)

D. Nurse

1. Coordinates patient education on anticoagulation
2. Ensures medication administration and documentation
3. Oversees daily management of patient until IV Heparin is discontinued
4. Communicates any relevant patient care updates (bleeding, intermittent heparin infusion discontinuation, etc) to the pharmacist to optimize pharmacy-driven IV anticoagulation care

II. Plan of Care Formulation

A. Upon receipt of physician order for IV anticoagulation, the pharmacist performs initial assessment of patient.

B. Elements of plan include the following:

1. Patient Factors (age, weight)
2. Baseline labs specific to anticoagulation protocol
3. Indication for anticoagulant
4. Significant drug interactions

C. Assessment and Plan

1. Select protocol for care
2. Establish starting dose

3. Establish monitoring therapy goal
4. Order appropriate labs
5. Documentation of plan on anticoagulation tracking sheet for pharmacists or electronic medical record for nursing.

Provisions: **I. Adult Heparin Infusion**

This protocol reflects current evidence based clinical practice. It is not a substitute for appropriate clinical evaluation and does not supersede clinical judgment.

Initiating Heparin therapy:

→Extreme Caution: ***Do not start in patients who have had tPA, for ischemic stroke, within 24 hours.***

1. Obtain baseline PT/INR, aPTT, CBC and Serum Creatinine if not done within 24 hours prior to initiation of therapy.
2. Discontinue all Intramuscular injections and parenteral anticoagulation.

Exclusion Criteria:

1. Do not initiate on patient with epidural catheter.
2. Do not initiate on patient with platelets <50,000 or PTT>79 seconds.
3. Do not initiate on patients with suspected or proven Desseminated Intravascular Coagulation (DIC), Thrombotic Thrombocytopenic Purpura (TTP) or Heparin Induced Thrombocytopenia (HIT).

Dosing:

1. Heparin will *not* be held in the event there are no baseline labs. Pharmacist may order baseline labs if physician has not already done so.
2. Dosing is based on Actual Body Weight.
3. Round all bolus doses to the nearest 500 units, and infusion rates to the nearest 50 units/hr.
4. If patients have a therapeutic INR >2.0 OR an elevated aPTT >31 seconds, decrease the initial infusion rate by 30% but continue with the bolus dose as indicated in the protocol.

INDICATION	WEIGHT	BOLUS DOSE	INITIAL INFUSION RATE	NOTES
Deep Venous Thrombosis (DVT) Pulmonary Embolism (PE) Arterial Embolism	< 125kg	80 units/kg IV	18 units/kg/hour	
Deep Venous Thrombosis (DVT) *Pulmonary Embolism (PE)* *Arterial Embolism*	*> 125kg*	*10,000 units IV*	*2250 units/hr*	*1. Maximum Bolus Dose = 10,000 units* *2. Maximum initial rate = 2250 units/hr*
Acute Coronary Syndrome (ACS) Atrial Fibrillation	< 83kg	60 units/kg IV	12 units/kg/hr	
Acute Coronary Syndrome (ACS) *Atrial Fibrillation*	*> 83kg*	*5,000 units IV*	*1000 units/hr*	*1. Maximum Bolus Dose = 5,000 units* *2. Maximum initial rate = 1000 units/hr*
Acute Coronary Syndrome (ACS) Atrial Fibrillation AFTER Thrombolytics	< 66kg	60 units/kg IV	12 units/kg/hr	

Acute Coronary Syndrome (ACS) Atrial Fibrillation AFTER Thrombolytics	*67-83 kg*	*4,000 units IV*	*12 units/kg/hr*	*Maximum Bolus Dose = 4,000 units Maximum initial rate= 1000 units/hr*
Acute Coronary Syndrome (ACS) Atrial Fibrillation AFTER Thrombolytics	>83 kg	4,000 units IV	1000 units/hr	*1. Maximum Bolus Dose = 4,000 units. 2. Maximum initial rate = 1000 units/hr*

Monitoring:

1. Obtain CBC daily and PTT daily following dose changes.

2. Obtain PTT 6 hours after initiation of Heparin and after any subsequent changes until therapeutic for two consecutive aPTT, then every AM.

3. Monitor platelets. Notify physician if platelets decrease by ≥ 30% from baseline and evaluate for HIT.

4. Monitor for bleeding. Notify physician immediately if bleeding occurs or if two consecutive PTT results in levels greater than 120 seconds.

5. Use the following Nomograms for adjusting Heparin infusion rates by using **Actual Body Weight** (see maximum bolus dose amounts as indicated in the 'Dosing' section:

A) STANDARD BLEEDING RISK PATIENTS: *Goal aPTT 50-70 seconds*

PTT	Rebolus or Hold	Rate Adjustment	Recheck PTT
≤ 35	Bolus: 80units/kg	↑ 4 units/kg/hr	6 hrs
36-49	Bolus: 40units/kg	↑ 2 units/kg/hr	6 hrs
GOAL 50-70	**NONE**	**NONE**	**6 hrs –OR- in AM if 2 consecutive aPTT**
71-90	NONE	↓ 2 units/kg/hr	6 hrs
> 90	HOLD 60 minutes	↓ 3 units/kg/hr	6 hrs

B) HIGHER BLEEDING RISK PATIENTS (hepatic dysfunction, elderly Age>65, post-thrombolytic/GP IIb/IIIa inhibitor therapy): *Goal aPTT 50-70 seconds*

PTT	Rebolus or Hold	Rate Adjustment	Recheck PTT
≤ 35	Bolus: 2000 units	↑ 2 units/kg/hr	6 hrs
36-49	NONE	↑ 2 units/kg/hr	6 hrs
GOAL 50-70	**NONE**	**NONE**	**6 hrs –OR- in AM if 2 consecutive aPTT**
71-90	NONE	↓ 2 units/kg/hr	6 hrs
> 90	HOLD 60 minutes	↓ 3 units/kg/hr	6 hrs

C) CUSTOMIZED PHYSICIAN-DRIVEN aPTT RANGE: *Goal aPTT determined by physician*

PTT	Rebolus or Hold	Rate Adjustment	Recheck PTT
≥ 15 sec below treatment range	Bolus: 80 units/kg	↑ 1 units/kg/hr	6 hrs
Between 1- 14 sec below treatment range	NONE	↑ 2 units/kg/hr	6 hrs
GOAL RANGE	**NONE**	**NONE**	**6 hrs -OR- in AM if 2 consecutive aPTT**
>1 but ≤ 19 sec above treatment range	NONE	↓ 1 units/kg/hr	6 hrs
> 20 sec above treatment range	HOLD 60 minutes	↓ 3 units/kg/hr	6 hrs

Bridging Therapy: ***Concurrent use of Heparin and Warfarin.***

1. For those with active clot or high risk for clotting, a five day overlap of both drugs is recommended.

2. Achieve therapeutic INR ≥ 2 days prior to stopping the Heparin.

Reversal of Heparin Anticoagulation:

1. Slow intravenous injection of Protamine 1% solution.

2. Dose: 1mg Protamine for every 100 units of heparin administered over the last 4 hours.

Perioperative Management of Heparin:

1. Recommend for physician to discontinue Heparin 6hrs prior to surgery

2. Physician may reorder Heparin 12 hours after surgery (if there is no evidence of bleeding)

II. Pharmacy Dosing Service - Adult Argatroban Infusion for Known or Suspected Heparin-Induced Thrombocytopenia (HIT)

Initiating Argatroban therapy:

→Extreme Caution: ***Do not start in patients who have had tPA, for ischemic stroke, within 24 hours.***

1. Obtain STAT baseline PT/INR, aPTT, CBC and liver function tests if not done within 24 hours prior to initiation of therapy.
2. Discontinue all Intramuscular injections and parenteral anticoagulation (heparin, low molecular-weight heparin, thrombin inhibitors).

Dosing:

1. Begin Argatroban as a continuous infusion with an initial dose of 1-2 mcg/kg/min with a maximum of 10 mcg/kg/min.
2. Use adjusted Argatroban dose of 0.5 mcg/kg/min for patients with moderate hepatic insufficiency (calculate Child-Pugh Score).
3. For patients with heart failure, multi-organ system failure, post-cardiac surgery, severe anasarca (severe generalized edema), use an adjusted Argatroban dose of 1 mcg/kg/min.
4. The target PTT for argatroban is 45-90 seconds unless otherwise specified by the physician.

	Argatroban Initial Infusion Rate (Standard Concentration of Infusion= 250mg/250 mL)					
	Standard Dosing		**Adjusted Dosing-cardiac failure, multi-organ failure, post-cardiac surgery, severe anasarca**		**Moderate Hepatic Impairment**	
Patient weight	2 mcg/kg/min (mcg/min)	Infusion Rate (mL/hr)	1 mcg/kg/min (mcg/min)	Infusion Rate (mL/hr)	0.5 mcg/kg/min (mcg/min)	Infusion Rate (mL/hr)
Up to 50kg	100	6	50	3	25	1.5
51-60kg	120	7.2	60	3.6	30	1.8
61-70kg	140	8.4	70	4.2	35	2.1
71-80kg	160	9.6	80	4.8	40	2.4
81-90kg	180	10.8	90	5.4	45	2.7
91-100kg	200	12	100	6	50	3
101-110kg	220	13.2	110	6.6	55	3.3
111-120kg	240	14.4	120	7.2	60	3.6
121-130kg	260	15.6	130	7.8	65	3.9
131-140kg	280	16.8	140	8.4	70	4.2

Monitoring:

1. Determine aPTT 2 hours after initiation of infusion and/or dosage adjustment to confirm achievement of a target aPTT (not to exceed 100 seconds).
2. An aPTT will be checked 2 hours after any rate change. Once two consecutive aPTTs are in range, may decrease the frequency to every 12 hours.
3. If two consecutive aPTTs are greater than 120 seconds OR for any bleeding, hold infusion and notify physician immediately.
4. If co-administration with warfarin, monitor INR daily.
5. Utilize Table 2 below for protocol-driven rate changes:

aPTT value	Time to hold	Normal Dosing Adjustment	Adjusted Dose or Hepatic Impairment	Repeat aPTT
Less than 45 seconds	None	Increase by 0.5mcg/kg/min	Increase by 0.25mcg/kg/min	2 hours
45-90 seconds	None	None	None	2 hours –OR- if two consecutive aPTT in range, may check q12h
91-100 seconds	1 hour	Decrease rate by 0.25 mcg/kg/min	Decrease rate by 0.25 mcg/kg/min	2 hours
Over 100 seconds	1 hour	Decrease rate by 0.5mcg/kg/min	Decrease rate by 0.5mcg/kg/min	STAT aPTT 1 hour after stopping; may restart infusion at adjusted rate once aPTT less than 90 seconds.

6. Reference the following Table 3 for calculations on dosage adjustments:

	Amount to Increase or Decrease Initial Infusion Rate			
Patient weight	0.25mcg/kg/min (mcg/min)	Infusion Rate	0.5mcg/kg/min (mcg/min)	Infusion Rate
Up to 50kg	12.5	0.8ml/hr	25	1.5ml/hr
51-60kg	15	0.9ml/hr	30	1.8ml/hr
61-70kg	17.5	1.1ml/hr	35	2.1ml/hr
71-80kg	20	1.2ml/hr	40	2.4ml/hr
81-90kg	22.5	1.4ml/hr	45	2.7ml/hr
91-100kg	25	1.5ml/hr	50	3ml/hr
101-110kg	27.5	1.7ml/hr	55	3.3ml/hr
111-120kg	30	1.8ml/hr	60	3.6ml/hr
121-130kg	32.5	2ml/hr	65	3.9ml/hr
131-140kg	35	2.1ml/hr	70	4.2ml/hr

Warfarin Initiation during Argatroban Therapy

Once the decision is made to initiate oral anticoagulant therapy, recognize the potential for combined effects on INR with co-administration of Argatroban and warfarin. A loading dose of warfarin should not be used. Initiate therapy using the expected daily dose of warfarin. To avoid prothrombotic effects and to ensure continuous anticoagulation when initiating warfarin, it is suggested that Argatroban and warfarin therapy be overlapped. Warfarin may be initiated once the patient's platelet count has recovered to 100,000 or higher.

- **Co-Administration of Warfarin and Argatroban at Doses Up to 2 mcg/kg/min**

Use of Argatroban with warfarin results in prolongation of INR beyond that produced by warfarin alone. INR should be measured daily while Argatroban and warfarin are co-administered. In general, with doses of Argatroban up to 2 mcg/kg/min, Argatroban can be discontinued when the INR is >4 on combined therapy. After Argatroban is discontinued, repeat the INR measurement in 4 to 6 hours. If the repeat INR is below the desired therapeutic range, resume the infusion of Argatroban and repeat the procedure daily until the desired therapeutic range on warfarin alone is reached.

- **Co-Administration of Warfarin and Argatroban at Doses Greater than 2 mcg/kg/min**

For doses greater than 2 mcg/kg/min, the relationship of INR between warfarin alone to the INR on warfarin plus Argatroban is less predictable. In this case, in order to predict the INR on warfarin alone, temporarily reduce the dose of Argatroban to a dose of 2 mcg/kg/min. Repeat the INR on Argatroban and warfarin 4 to 6 hours after reduction of the Argatroban dose and follow the process outlined above for administering Argatroban at doses up to 2 mcg/kg/min.

III. Oral Anticoagulants

1. Before initiating oral anticoagulant therapy (warfarin, dabigatran, rivaroxaban, etc) assess the patient's baseline coagulation status. Recommend to the physician that baseline PT/INR, aPTT, CBC and Serum Creatinine is obtained if not previously available within 24 hours prior to initiation of therapy.

2. For all patients receiving warfarin therapy, use a current International Normalized Ratio (INR) to recommend any adjustments in this therapy. Alert physicians of potential food and drug interactions.

3. Provide education regarding anticoagulant therapy to prescribers and healthcare staff. Recommend that patient/family education includes the following:
    - The importance of follow-up monitoring
    - Compliance
    - Drug-food interactions
    - The potential for adverse drug reactions and interactions

Administrative Responsibility: Director of Pharmaceutical Services and Chairman of the Pharmacy and Therapeutics Committee

Exception Provisions: None

References or Appendices: Attachment A – Heparin Protocol
Attachment B – Anticoagulant Tracking Sheet

1. Garcia DA et al (2012). Parenteral Anticoagulants. Antithrombotic therapy and Prevention of Thrombosis, 9th ed: *American College of Chest Physicians Evidence Based Clinical Practice Guidelines*, e24S-e43S
2. Nutescu, E. (2007). Heparin, Low Molecular Weight Heparin, and Fondaparinux. In *Managing Anticoagulation Patients in the Hospital: The Inpatient Anticoagulation Service* (pp. 177-196). Bethesda: American Society of Health-System Pharmacists

3. Umscheid, CA, Agarwal R, Gibson G. *Weight-based low-molecular-weight heparin versus height-based intravenous unfractionated heparin*. Ann Intern Med. 2007 Sep 18;147(6):433-4.

4. The Joint Commission- National Patient Safety Goals Effective January 1, 2013. Hospital Accreditation Program. http://www.jointcommission.org/assets/1/18/NPSG_Chapter_Jan2013_HAP.pdf. Accessed April 2, 2013.

APPROVAL:

_____

Donald Kooy
President and CEO

MM-140 Attachment A - Heparin Protocol Information Sheet based on Anticoagulation Policy

Heparin is designated as a High Alert Medication (HAM) at McLaren Flint. Heparin is administered at a standard concentration of 25,000 units/ 250 ml D5W (100 Units/ ml), and has a standardize dosing nomogram.

Laboratory Orders

1. Baseline PT/INR, aPTT, CBC, and serum creatinine if not obtained within 24 hrs prior to initiation of therapy
2. Obtain CBC daily and aPTT daily following dose changes
3. Obtain aPTT 6 hours after initiation of Heparin **and** after any subsequent changes until therapeutic for two consecutive aPTT, then every AM.
4. Monitor platelets. Notify physician if platelets decrease by ≥ 30% from baseline and evaluate for HIT.
5. Monitor for bleeding. Notify physician immediately if bleeding occurs or if two consecutive PTT results in levels greater than 120 seconds

Initial Dosing

1. Heparin will *not* be held in the event there are no baseline labs.
2. Dosing is based on **Actual Body Weight.**
3. Round all bolus doses to the nearest 500 units, and infusion rates to the nearest 50 units/hr.
4. If patients have a therapeutic INR >2.0 OR an elevated aPTT >31 seconds, decrease the initial infusion rate by 30% but continue with the bolus dose as indicated in the protocol

Dosing Nomogram: Initiation of Therapy

INDICATION	WEIGHT	BOLUS DOSE	INITIAL INFUSION RATE	NOTES
Deep Venous Thrombosis (DVT) Pulmonary Embolism (PE) Arterial Embolism	< 125kg	80 units/kg IV	18 units/kg/hour	
Deep Venous Thrombosis (DVT) *Pulmonary Embolism (PE)* *Arterial Embolism*	*> 125kg*	*10,000 units IV*	*2250 units/hr*	*1. Maximum Bolus Dose = 10,000 units* *2. Maximum initial rate = 2250 units/hr*
Acute Coronary Syndrome (ACS) Atrial Fibrillation	< 83kg	60 units/kg IV	12 units/kg/hr	
Acute Coronary Syndrome (ACS) *Atrial Fibrillation*	*> 83kg*	*5,000 units IV*	*1000 units/hr*	*1. Maximum Bolus Dose = 5,000 units* *2. Maximum initial rate = 1000 units/hr*
Acute Coronary Syndrome (ACS) Atrial Fibrillation AFTER Thrombolytics	< 66kg	60 units/kg IV	12 units/kg/hr	
Acute Coronary Syndrome (ACS) *Atrial Fibrillation* *AFTER Thrombolytics*	*67-83 kg*	*4,000 units IV*	*12 units/kg/hr*	*Maximum Bolus Dose = 4,000 units* *Maximum initial rate= 1000 units/hr*
Acute Coronary Syndrome (ACS) Atrial Fibrillation AFTER Thrombolytics	>83 kg	4,000 units IV	1000 units/hr	*1. Maximum Bolus Dose = 4,000 units.* *2. Maximum initial rate = 1000 units/hr*

Heparin Adjustments based on aPTT Results

1. **Standard Bleeding Risk Patients: *Goal aPTT 50-70 seconds***

PTT	Rebolus or Hold	Rate Adjustment	Recheck PTT
≤ 35	Bolus: 80units/kg	↑ 4 units/kg/hr	6 hrs
36-49	Bolus: 40units/kg	↑ 2 units/kg/hr	6 hrs
GOAL 50-70	**NONE**	**NONE**	**6 hrs –OR- in AM if 2 consecutive aPTT**
71-90	NONE	↓ 2 units/kg/hr	6 hrs
> 90	HOLD 60 minutes	↓ 3 units/kg/hr	6 hrs

2. **Higher Bleeding Risk Patients (hepatic dysfunction, elderly Age>65, post-thrombolytic/GP IIb/IIIa inhibitor therapy): *Goal aPTT 50-70 seconds***

PTT	Rebolus or Hold	Rate Adjustment	Recheck PTT
≤ 35	Bolus: 2000 units	↑ 2 units/kg/hr	6 hrs
36-49	NONE	↑ 2 units/kg/hr	6 hrs
GOAL 50-70	**NONE**	**NONE**	**6 hrs –OR- in AM if 2 consecutive aPTT**
71-90	NONE	↓ 2 units/kg/hr	6 hrs
> 90	HOLD 60 minutes	↓ 3 units/kg/hr	6 hrs

3. **Customized Physician-driven aPTT range: *Goal aPTT determined by physician***

PTT	Rebolus or Hold	Rate Adjustment	Recheck PTT
≥ 15 sec below treatment range	Bolus: 80 units/kg	↑ 1 units/kg/hr	6 hrs
Between 1- 14 sec below treatment range	NONE	↑ 2 units/kg/hr	6 hrs
GOAL RANGE	**NONE**	**NONE**	**6 hrs -OR- in AM if 2 consecutive aPTT**
>1 but ≤ 19 sec above treatment range	NONE	↓ 1 units/kg/hr	6 hrs
> 20 sec above treatment range	HOLD 60 minutes	↓ 3 units/kg/hr	6 hrs

Skills & Learning Modules

Blood Glucose Monitoring

MCLAREN FLINT

NURSING PROCEDURE MANUAL

TITLE: Blood Glucose Monitoring

REVIEW DATE: 11/2012

EFFECTIVE DATE: 5/04

Policy Statement: A bedside glucose test using a glucose meter will be used when a physician orders blood sugar levels via capillary whole blood obtained from a finger stick. A barcode document should be generated and used for each patient being monitored.

A RN, FN, LPN, graduate practical nurse, student nurse technician, NA, MT, ERT, or psychiatric attendant may perform the blood sugar test and quality control checks.

Quality control checks will be performed every 24 hours.

Problems with the equipment will be reported directly to the lab at 22729.

PURPOSE: To determine blood glucose levels at the bedside.

PERSONNEL: RNs, LPNs, NTs, NAIIs, MTs, psychiatric attendants, ERTs, student nurses and their instructors and other appropriate personnel.

EQUIPMENT:

Glucose tray contents:

1. Glucometer system
2. Glucose strips
3. Lancets
4. Glucose control solutions (high and low)
5. Gauze
6. Quick reference guide
7. Gloves

STEPS	KEY POINTS
QUALITY ASSURANCE (QC) 1. A quality control check using both the high and low glucose control solutions must be done every 24 hours. a. Gently mix control solutions before using (DO NOT SHAKE). b. If not within range, repeat the quality check. c. If not within range a second time, call lab (22729) or Nova Help line(800-000-0000). PROCEDURE: 1. Verify physician order for bedside glucose testing. 2. Take glucometer and necessary equipment to bedside. 3. Press power ON button. 4. Scan your 6-digit Operator ID. 5. Select Patient Test. 6. Scan the patient barcode and press the forward arrow button. In a code or emergent situation: Enter all '0's for patient ID.	For instructions, see Owner's Manual in glucometer tray. See Blood-borne Pathogen Policy, Infection Control Manual. Health care personnel must be cautious to prevent contamination of self as well as cross contamination to patients and staff. Verify correct patient with 2 identifiers. **Downtime slip must be sent to Lab when '0's are entered for tracking purposes.** Follow Owner's Manual for use of memory mode if needed to recall result.

7. Scan barcode on test strip vial. If a new bottle of strips is opened need to perform QC before proceeding to patient test.	
8. Remove **<u>one</u>** test strip from the vial and return the cap on the vial **<u>immediately</u>**.	Humidity makes the test strips inaccurate, so strips should not be used if they are out of the container longer than 3 minutes. NOTE: Insert strip before applying specimen (or control solutions).
9. When the insert strip screen appears on the meter display, gently insert the test strip with the target area or the test strip window facing up. Insert appropriate end into monitor.	To remove surface bacteria and increase capillary dilatation. DO NOT USE ALCOHOL AS IT WILL ALTER TEST RESULTS.
10. Put on gloves and cleanse area to be used with mild soap and water.	**Glucometer should be held or positioned horizontally while obtaining sample and until strip is removed.** This prevents blood/fluid from entering monitor and damaging the machine.
11. When the apply sample message appears on the meter display, obtain a blood sample. You no longer need to wipe away the first drop, however, it is recommended. Touch and hold drop of blood to the edge of the target area. The blood is drawn into the test strip automatically.	In critical care areas, arterial, venous or plasma samples may be used for testing. Be sure the monitor is turned off and undocked from the base unit before performing any preventative maintenance procedures.
12. The test result will appear in 6 seconds.	**Clean** the outside of the monitor with a soft cloth slightly dampened with warm, soapy water, or a Discide wipe between each patient use. Never spray solution directly on the instrument.
13. Enter comments if necessary. Then press the accept button to record the test results and coded comments. Return to the Main Menu screen to run the next test	**Extra precautions** are necessary for isolation rooms, refer to Infection Control policy IC424. **Gloves** should be worn when performing any preventive maintenance procedure. .

14. Remove test strip and discard it according to infection control policies.	This will transfer results directly to the HIS.
15. Press the power off button to turn the meter off and to conserve the battery if the meter is no longer needed for patient testing.	
16. Place meter in docking station when testing complete.	Document clinical assessment and interventions.
17. Document blood sugar as appropriate.	
Extreme Result – ACTION PLAN:	
1. All results greater than 400 mg/dl or less than 50 mg/dl can be verified by glucometer re-check or laboratory serum glucose.	
2. Hypoglycemia – If blood sugar is less than 50 mg/dl; or less than 70 mg/dl <u>and</u> patient is symptomatic, nursing interventions are as follows:	Symptoms of hypoglycemia may include altered consciousness, tachycardia and/or diaphoresis.
<u>Conscious</u> a. Give 4 oz. orange juice or 1 tube glucose gel (Insta glucose) orally (found in omni cell) b. Repeat blood glucose in 15 minutes *If blood sugar still less than 70 mg/dl, notify physician *If blood sugar now greater than 70 mg/dl, follow with a protein rich snack	

Unresponsive a. Give 25 grams (1 amp) 50% dextrose IV push and notify physician b. Obtain lab glucose STAT **3. HYPERGLYCEMIA –** Blood sugar greater than 400 mg/dl a. Validate by Laboratory serum glucose. b. Notify physician of results for orders.	Symptoms of Hyperglycemia may include extreme thirst, frequent urination, dry skin, hunger, blurred vision and/or drowsiness.

Documentation:

Record any signs, symptoms, and interventions, including time physician called, for high/low blood glucose levels in the electronic record.

Downtime Procedures:

1. If the glucometer barcode form is not available for downtime purposes, the glucometer may be used with hand entry of the 11 digit financial number. It will store results during the entire patient stay for reviewing and it will download to the interface when the system comes back up.

2. Follow current documentation system for downtimes:

-Complete misc. lab slip with blood glucose information and route to the lab.

-Document blood glucose in flow sheet.

REFERENCES

Brunner & Soddarth. *Textbook of Med/Surg Nursing, 11th ed*, Vol 2, 2008, Lippincott, Williams & Wilkins, pp.2156-2158

Negri, John. Section manager at McLaren Flint Laboratory. 11/2012.

McLaren Flint

Performance Criteria for Validation of Competency in Bedside Blood Glucose Monitoring (Nova Stat)

Print Name _____Unit _____Badge #_____

Critical Elements
Gather equipment:
Quality Controls:
Demonstrate:
Turn meter on
Scan operator ID bar code
Proceed to quality control
Scan test strip
Select level 1 or 3 control solution
Examine open date of control solution
Scan control solution lot number
With machine on table apply control solution in one motion to end of test strip
Complete Quality Control check
Simulated Patient Test:
Verbalize instruct/assist patient to wash hands (soap/H2O)
Scan patient identification band and accept
Verify test strip lot number
Insert test strip into meter
Discuss skin prep and methods to improve blood sample
Demonstrate use of Lancet device
Apply simulated blood sample to test strip, applying in one motion
Accept or reject blood sugar result
Demonstrate completion of process
Verbalize documentation procedure for glucose results

1. True or False; Remove one test strip from the test strip vial and return the cap on the vial immediately. Insert the test strip into the machine securely.
_____

2. All results greater than _____mg/dl or less than _____ mg/dl must be verified by laboratory serum glucose.

3. True or False: After each blood sugar results you must accept or reject the results for the results to transfer to the lab section of the patient chart? _____

Validated by: _____ Date: _____

Age-Specific Guidelines

Age Specific Guidelines: Neonate/Infant (Birth to 12 months)

Physical Characteristics	Motor/Sensory Adaptation	Cognitive	Psychosocial	Unit Specific Interventions (All Staff)
Gains height and weight rapidly (doubles in ht/wt by 3-6 months) Begins nasal breathing at 2-4 months Towards end of 1st year, primitive reflexes diminish, the posterior (2 months) and anterior (12-18 months) fontanels close Teething begins: by one year, about 8 teeth present * Oral activities are soothing Has poor temperature regulation Normal temperature: 98.6 Most primitive reflexes are replaced by purposeful movements by 6 months.	1 Month: tight hand grasp, can't support head, eyes follow midline. 2 Mon.: fist less tight, turn from side to back. 3 Mon.: eyes follow 180°, momentarily holds rattle, smiles, supports head when prone, no head lag. 4 Mon.: picks up objects, sits supported if propped, turns head to sounds. 5 Mon.: holds head steady, turns stomach to back, brings hand to mouth, grasps objects voluntarily with 2 hands. 6 Mon.: sits briefly with support, turns completely over, can release objects. 7 Mon.: bangs objects on surface, rolls over, bears own weight on feet. 8 Mon.: Begins pincher grasp, sits unsupported. 9 Mon.: crawls, pulls self to standing position, compares two objects. 10 Mon.: feeds self finger foods, stands holding on to objects, crawls/creeps. 11 Mon.: drops objects deliberately, walks holding onto support. 12 Mon.: turns pages in a book, begins walking alone, reaches, gives back objects, can sit down.	Manipulates objects in the environment. Totally dependent upon caregiver Recognizes bright objects and progresses to recognize familiar objects and persons Perceives self and parent as one Cries when uncomfortable, sleepy, or hungry Learns by imitation Towards the end of the first year, speaks 2 - 3 words, mimics sounds	Significant persons are the parents or primary caregivers Develops a sense of trust and security if needs are met consistently and with a degree of predictability. Fears unfamiliar situations Smiles and repeats actions that elicit response from others, for example, waves bye-bye, plays pat-a-cake, and peek-a-boo 7-8 months - fears strangers 9-10 months - separation anxiety Responds to environment through visual, auditory, tactile and taste senses. 	 Keep parent in baby's view if possible, involve parents in procedures Limit the number of strangers caring for the infant. Cuddle and hold the infant. Place on back or side position for sleep. Support the head when holding a newborn. Use distraction (pacifier, bottle, etc.) Protect the patient from exposure. Maintain temp at 36-37° Celsius. Ensure warmth - cover to protect the skin from coldness. Keep crib side rails up at all times, never leave a newborn unattended. Have bulb syringe available in case there is a need for suctioning. Make sure toys do not have small detachable parts. Use soft, calm voice. Speak to infant before, during, and after procedures. Encourage parents to participate in care, explain procedure to parents. If teaching procedures, permit parent/caregiver opportunity to return demonstrate. Give familiar objects to the infant.

Specific Interventions for Nursing Staff

Medication: Know proper dosages for infant medication administration.

VITAL SIGNS BY AGE			
AGE	RESP Rate/Min	PULSE Beats/Min	BLOOD PRESSURE (Systolic)
Birth to 1 Week	30 to 60	100 to 160	50 to 70 mmHg
1 t 6 weeks	30 to 60	100 to 160	70 to 95 mmHg
6 months	25 to 40	90 to 120	80 to 100 mmHg
1 year	20 to 30	90 to 120	80 to 100 mmHg

For IM meds, use vastus lateralis, if walking, use gluteal area.

Use oral meds whenever possible.

Always use IV pump for IV's. IV sites in order of perference: hand / forearm, foot, and scalp.

Take temps axillary under one year of age.

Age Specific Guidelines: Toddler (1 - 4 years of age)

Physical Characteristics	Motor/Sensory Adaptation	Cognitive	Psychosocial	Unit Specific Interventions (All Staff)
Anterior fontanel closes by 18 months Learning bladder and bowel control Abdomen protrudes Temporary teeth erupt; all 20 deciduous teeth by 2 1/2 to 3 years Physiologic systems mature Decreased appetite and growth Grows 2-2 1/2" per year Elimination: by 18 -36 mon. bowel control By 2-3 years, daytime bladder control often achieved Normal Temp. = 99F (+ or - 1 degree) Pulse = 105 (+ / - 35) B/P 80-100 mmHg systolic and 60-64 mmHg diastolic RR = 20-35 rate/min.	15 Months: walks well alone, stands without support, builds tower of 2 cubes. 18 Months: turns pages of book, runs clumsily, walks up stairs with help, builds tower of 3-4 cubes. 24 Months: feeds self with spoon, can hold cup with 1 hand, walks up and down stairs alone, vocabulary of 300 words. 3 Years: can speak in 3-4 word sentences and has a vocabulary of about 900 words. Development of manual dexterity Loves to experiment Goal directed behavior Fully formed sense of object permanence	Develops concepts by use of language Sees things only from own point of view Able to group similar items Has a short attention span Beginning memory Ties words to actions, can understand simple directions and requests Favorite word is "no" Unable to share toys, become distressed when asked to share because of poor defined sense of ownership Engages in parallel play. Plays alongside of, but not with, another child	Significant persons are parents Discovers ability to explore and manipulate environment Asserts independence and develops a sense of will, has temper tantrums Understands ownership "mine" Attached to security objects and toys Knows own gender and differences of gender Able to put toys away Plays simple games, enjoys being read to, plays alone	* Use firm direct approach * Use distraction techniques * Give one direction at a time * Emphasize those aspects that require the child's cooperation * Provide favorite, age specific foods * Speak and play with the toddler to reduce stress effectively * Allow child choices when possible * Allow for rest periods after eating based on home routines if possible * Skills may regress due to illness or hospitalization * Emphasize the importance of parent(s) staying with child * Follow home routines if possible * Set limits * Give permission to express feelings * Maintain safety at all times * Encourage parents to participate in care/ask for a return demonstration when teaching * Use age appropriate toys * Praise for good behavior * Keep crib side rails up at all times * Provide toys, including objects from the hospital environment for creative/imaginative play * Play and simple instructions can be used to teach and gain the trust of the toddler. It is important to repeat things often. **Specific Interventions for Nursing Staff** *Never lie to the child. If something is going to hurt, tell them. *Prepare child shortly before a procedure *Allow the toddler to "help" with procedures such as removing their dressing or gown *Explain to the toddler the need to not touch IV lines, but encourage the use of hands in plan activity

Age Specific Guidelines: School-Age (4-12 Years of Age)

Physical Characteristics

Baby fat becomes muscle tissue - erect posture (becomes thinner and taller)

Large muscle coordination remains far advanced over small muscle coordination

Older preschooler begins to loose baby teeth

Eruption of permanent teeth completely by age 12

Secondary sex characteristics begin

Growth is slow and regular

May experience "growing pains" because of stretching of long bones

May experience fatigue

Temp. = 98.6 (+ / - 1°)

Pulse 75 - 100 / min.

Resp. = 18 - 34 / min.

Blood Pressure: systolic 82 - 120, diastolic 50 - 80.

Motor/Sensory Adaptation

4 Years: Rides tricycle, goes upstairs on alternate feet, jumps with ease.
5 Years: laces shoes, can cut out pictures with scissors, catches a ball reliably.
6 Years: can tie shoes, can print name, skates and jumps rope, skips and hops well.
7 Years: can distinguish right from left, can swim and ride a bicycle.
8 Years: can write in cursive, movements are fluid, almost graceful.
9 - 12 Years: Can draw three-dimensional geometric figures, fully developed hand-eye coordination, timing and control of activities are well developed.

Cares for pets

Assists in household chores

Likes quiet as well as active games.

Cognitive

Pre-School:
*Major cognitive skill is conversation
*Explanations should be short and simple due to their attention span
*Able to classify objects, enjoys doing puzzles
*Very imaginative
*Understands numbers, can count
*Constructs sentences, question things "why"

School Age:
*Capable of logical operation with concrete things
*Starts to think abstractly and to reason, can handle and classify problems, able to test hypotheses
*Functions in the present
*Proud of school accomplishments
*Enjoys reading
*Starts to view things from different perspectives
*Increased attention span and cognitive skills
*Rule bound
*Comprehends and can tell time.

Psychosocial

Pre-School: Significant persons are parents, siblings, peers
*Increasing independence and beginning to assert self, likes to boast and tattle
*Masters new tasks and acquires new skills
*Behavior is modified by rewards and punishment
*Plays cooperatively, able to live by rules, capable of sharing
*May be physically aggressive
*Learns appropriate social manners
*By 5 years old, uses sentences, knows colors, numbers, and the alphabet.

School Age: Significant persons are peers, family, and teachers
*Prefers friends to family
*Works hard to be successful in what he/she does
*Belonging and gaining approval of peer group is important
*Behavior is controlled by expectations, regulations and anticipation of praise or blame
*Sports become very important
*Display signs of independence
*Explores neighborhood
*Uses phone
*Plays games with rules

Unit Specific Interventions (All Staff)

*Allow parents to remain with the child as much as possible
*Use doll/puppets for explanations when performing procedures for younger children
*Maintain safety at all times
*Provide rest periods
*Focus on one thing at a time
*Praise for good behavior
*Limit movement restriction
*Promote independence
*Continue school
*Relate to child's abilities
*Clearly define and reinforce behavior limits
*Remember that the school age child's greatest fear is loss of control
*Give permission to express feelings
*Encourage use of comforting objects (stuffed animal, blanket) and comforting behaviors
*Allow child to have some control, involve whenever possible

Specific Interventions for Nursing Staff

*Explain if a procedure will hurt
*Use visual aids; be concrete and specific
*Be specific about body areas or parts affected, give concrete information, correct misconceptions
*For the school age child, use correct medical terminology
*Medicate to prevent pain around the clock if needed
*Assess response after and prior to next dose
*Assess and manage pain (offer distractions, e.g. counting to 20).

Age Specific Guidelines: Adolescent (13 - 18 years of Age)

Physical Characteristics	Motor/Sensory Adaptation	Cognitive	Psychosocial	Unit Specific Interventions (All Staff)
Rapid growth of skeletal size, muscle mass, adipose tissue and skin.	Awkward in gross motor activity.	Increased ability to use abstract thought and logic.	Develop sexual identity. Often critical of own features and concerned with physical appearance. Compares self to peers.	Present explanations in logical manner and use visual aids. Use understandable terminology. Make eye contact and speak clearly.
By age 18, 99% of physical growth has occurred.	Fine motor skills are improving	Able to handle hypothetical situations or thought.	Belonging to peer group is important and valued; may criticize parents.	Supplement explanations with rationale, encourage questions regarding procedures, fears.
Maturation of the reproductive system: onset of menarche in girls and nocturnal emissions in males.	Easily fatigued.	Internal growth of self esteem.	Identity is threatened by hospitalization as adolescents are concerned about body changes and appearances.	Encourage communication of frustrations and ideas with open ended questions.
Normal vital signs: Heart rate: 60 - 90 Resp. rate: 12 - 16 SBP: 94 - 140 DBP: 62 – 88	May need more rest and sleep in early adolescence	Beginning development of occupational identity (what I want to be)	Think they are invincible and that bad things won't happen to them. Fear of pain.	Instruct away from peers, roommates and parents. Explanations should be thorough. Do not talk <u>about</u> the patient in front of them.
		Does not like to ask questions - feel they appear "Stupid"	Be alert for signs of depression (and potential suicide): withdrawal from peers; increased sleeping, decreased appetite; talk of suicide and giving away of possessions. May experiment with hazards: *drugs *alcohol *smoking	Be prepared for challenges Encourage interests/hobbies that can be pursued in the hospital. Encourage visits from family (siblings perhaps more than parents) and friends, as well as interaction with roommates. Providing Care: provide privacy and fear of embarrassment. Minimize physical exposure. Allow adolescent to maintain control, involve adolescent in decisionmaking process and care needs.

Age Specific Guidelines: Adult (18 - 65 years of Age)

Physical Characteristics	Common Health Problems	Cognitive	Psychosocial	Unit Specific Interventions
Growth of skeletal system continues until age 30. Muscular efficiency peaks between 20 - 30 years.	Suicidal tendencies, alcoholism, drug abuse, eating disorders, tobacco abuse may occur.	May be dual caretakers (i.e. parent and children)	Young Adult (to 40): *Ability to maintain self-control and a willingness to assume responsibility. *Develop a sensitivity to	Communication: Involve patient and family in patient's care and education.
Women see the most significant physical changes during pregnancy and lactation.	Major causes of death in the young adult: motor vehicle accidents, traumatic accidents, suicides and homicides.	Focus on time constrains and only want to learn what is practical for them.	others and are able to deal constructively with frustrations. *Strives for success and independence.	Explain procedure to patient. Ascertain patient understands instructions.
Brain cell development peaks during the early stages of adulthood, which increases understanding and problem solving abilities.	Stress and depression related to pressures of independence, college, competition in the workplace, marriage, childbearing, and social expectations.	Learning is influenced by the individuals environment, educational level, personal values, and perceptions, previous experiences and attitudes.	*Increased level of maturity. *Need for ability to cope with change. *Establishes a personal set of values and formulates a philosophy of life.	Allow and encourage communication with open ended questions.
Adjustment to menopause (females) and sexual dysfunction (males) as approaches middle adulthood.	Sexually transmitted diseases are concerns for the early adult.	Thinking and learning patterns are centered around problem solving.	*Continually adjusting to stress and satisfaction of daily life.	Address patients with respect and make eye contact.
Older Adult (over 40): *Bone mass begins to decrease. *Loss of skeletal height; calcium loss especially after menopause. *Decreased muscle strength and mass if not used, endurance begins to decline. *Visual changes occur, especially farsightedness. *Muscle and joints respond more slowly. *Decreased balance and coordination.	Major causes of death in the older adult: Cardiovascular diseases like heart attack and of stroke become the major cause of death. Among the top 5 causes of mortality are lung and breast cancer, and cirrhosis of the liver. Chronic respiratory disease and hypertension are also major health problems.	Adults tend to be more cooperative in the learning process if they are aware of the benefits Repetition is beneficial.	Older Adult (over 40): *Begins to express concerns for health. *Responsible for children and aging parents. *Recognizes limitations *First awareness of becoming "old". *Reaches and maintains a satisfactory performance in career. *Readies self both financially and psychologically for retirement.	Speak clearly. Allow for patient to vent.
Normal vital signs: Heart rate: 60 - 100 Rest. rate : 16 - 24 SBP: 100-140 DBP: 70 - 90				

Age Specific Guidelines: Geriatric (> 65 Years of Age)

Physical Characteristics	Motor/Sensory Adaptation	Cognitive	Psychosocial	Unit Specific Interventions (All Staff)
Decreased tolerance to heat/cold	Decreased mobility	Decrease in memory, slowing of mental functions.	Concerns for health increases.	Make eye contact and speak clearly. Keep voice level even and calm. Address patient with respect.
Normal vital signs: Same as Adult	Hearing loss			Environment / Safely: Keep room clutter free, orient patient well to surroundings, remind patients to use call bell if assistance is needed. Frequently assess room temperature to patient comfort/provide extra blankets if needed. Consider additional lighting at night. (Night lights in bathroom).
Bones become more prominent/stiff joints	High sensory threshold	Memory losses affect the more recent events, whereas events of long ago are remembered.	Depression related to decreased physical, motor and cognitive abilities.	
Shrinkage in intervertebral discs	Reduction in metabolism			If hearing aids used, ensure they are functioning properly. If patient wears glasses, encourage their use.
Increased wrinkles			Concern related to limited income.	Use orientation/reorientation tactics when necessary. If patient is disoriented, utilize measures to ensure safety.
Skin changes	Hesitant to respond; declining skills.	Drop in performance.	Decreased authority and autonomy.	Communication: Explain all instruction well, involve the patient in the examination. Use therapeutic touch as appropriate. (Make sure your presence is known before touching the patient).
Increased susceptibility to high blood pressure	Decreased ability to respond to stimuli.	Slower in learning.		Patient and Family Education: Explain any instructions well to the patient & family. Don't assume that the patient understands anything. Ask the patient questions to verify understanding. Review important points repeatedly.
Declining cardiac/renal function		Skills and abilities tend to become obsolete from disuse rather than from deterioration of mental capacity.		
Skeletal changes	Decreased tolerance to pain.		Retirement/May pursue second care, hobbies.	**Specific Interventions for Nursing Staff**
Decreased organ functioning, decreased drug clearance and distribution			Children leave home, become grandparents,. reestablish as a couple	Venipuncture: Consider using less pressure with tourniquet and a small needle gauge. Consider paper or hypo-allergenic tape for patient's fragile skin.
Increased susceptibility to infection			Acceptance of death.	Skin care: Perform risk assessment on all admitted patients and institute protocols where applicable. Handle patients carefully due to increased risk for bruising and skin tears. Turn q2h.
				Medication administration: If subcutaneous fat is diminished significantly, consider administering SQ injections at an angle rather than at 90 degrees. Be familiar with proper dosage regime. Observe for symptoms of toxicity.

Age Specific Care

Name _____ Date _____
Last four numbers of Social Security _____

1. When caring for an infant it is important to do all the following **except**
    A. Keep crib sides up when not in attendance
    B. Cover to protect the skin from coldness
    C. Have a bulb syringe available for suctioning
    D. Don't speak to the infant during procedures as they can not understand the spoken word

2. The adolescent (13 to 18 years of age) will ask lots of questions.
    A. True
    B. False

3. The adolescent's identity is threatened by hospitalization because they have concerns about
    A. Body changes and appearance
    B. Belonging to a peer group
    C. Think they are invincible and that bad things won't happen to them
    D. All of the above

4. When caring for an adolescent it is important to do all the following **except**
    A. Provide privacy and minimize physical exposure
    B. Do not allow the adolescent to make decisions or have control over their needs
    C. Encourage visits from family and friends
    D. Encourage communication of frustrations and ideas

5. Because we take care of adult patients most of the time, we do not have to be concerned with age specific guidelines from this age group.
    A. True
    B. False

6. When teaching adults 18-65 years of age consider all the following **except**
    A. Focus on time constraints because adults only want to learn what is practical.
    B. Adult learning is influenced by the individual's environment, educational level, personal values, perceptions, and previous experiences and attitudes.
    C. Repetition is not beneficial because it wastes the busy adult's time
    D. Thinking and learning patterns are centered on problem solving.

7. When speaking with the older adult patient (>65 years of age) make eye contact, speak clearly, keep your voice level, even and calm.
    A. True
    B. False

8. Environmental safety for the older adult includes all the following **except**
    A. Keep the room clutter free
    B. Keep the room dark at night because the older adult sees better in the dark
    C. Remind the patient to use the call bell if assistance is needed
    D. Orient the patient to their surroundings

9. To assess understanding of instructions given to the older adult, assume that the patient understands without asking the patient questions to verify their understanding.
    A. True
    B. False

10. As the adult ages the skin becomes thinner, drier, and losses its elasticity. There is also a loss of fat and connective tissue which weakens the support around blood vessels and makes the patient more susceptible to bruising. Therefore skin care should involve all the following **except**
    A. Handling the patient carefully
    B. Assess for skin tears, bruises, and pressure ulcers
    C. Turning the patient occasionally
    D. Use paper tape

Core Orientation

Day 3

McLaren FLINT

Professional Development

0700 – 0745	**Documentation Guidelines**
0745 – 0845	**Case Management / SW / Home Care / Hospice**
0845 – 0900	**Break**
0900 – 1030	**Stroke Patient**
1030 – 1100	**Adverse Events / Event Documentation**
1100 – 1145	**Lunch**
1145 – 1215	**Patient Experience**
1215 – 1230	**Pharmacy**
1230 – 1300	**Cardiac Diagnostics**
1300 – 1345	**Core Measures / SCIP**
1345 – 1400	**Break**
1400 – 1445	**Post Surgical Wound Care / WoundVac / Ostomy Care**
1445 – 1530	**Bariatric Surgery**

Documentation Guidelines

Clinical Documentation Management Program (CDMP)

Nursing Orientation
FY 2015

Agenda

- CDMP Team
- Defining CDMP
- CDMP Process
- DRGs & RWs
- Case Mix Index
- Principal Diagnosis
- Common Co-morbid Conditions
- Queries
- Nursing Support
- DRG Adjustment Example
- Program Importance

CDMP TEAM

Consists of:

- CDMP Director
- CDMP Manager
- CDMP Coordinators
- Clinical Nurse Documentation Specialists
- Coding Professionals
- Physician Advisor
- Data Analysts

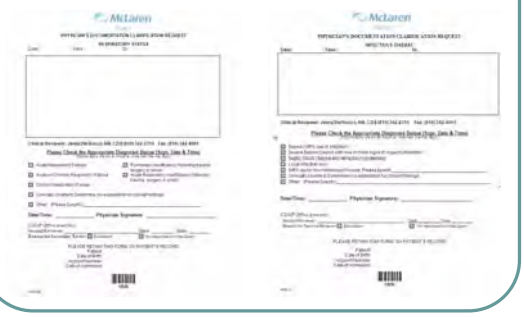
Defining CDMP

- CDMP is a clinical approach to improving documentation and managing DRG assignments to reflect Severity of Illness & Resource Consumption using a multidisciplinary team.
- Increases the quality and integrity of the medical record
- Assures appropriate reimbursement
- Follows CMS/Coding guidelines
- Reflective in Physician & Hospital Profiles

CDMP Process

- Concurrent chart reviews by clinicians
- Query if needed for clarification and/or additional documentation (see example)
- Please remember that the Coding Professional can only code what is **documented** by the provider (however, there are exceptions to the rule)

Query Example



ED Case Example

- 75 year old female presents to ED with c/o shortness of breath (SOB) stating a history of COPD with O2 sat 87% on room air. The patient was placed on 15L NRB and sats improved to 96%. Once admitted for COPD exacerbation, the patient tells the admitting nurse she's also been having chest pain on and off for the last 3 days and has a questionable history of CAD. Her SOB was slightly relieved with SVNs and IV Solumedrol. She is now having that same chest pain again. Further assessment and evaluation also reveals this patient has been chair bound for a couple of weeks. The ED nurse was unaware of this and decided not to do a skin assessment in the ED due to time constraints and the acuity of other patients. However, the admitting nurse is aware of the patient being bound to the chair and finds the patient to have a small reddened area on her buttock.

DRGs & RWs

- DRG – Diagnosis Related Grouping
  - Driven by Principle Diagnosis and can be supported by comorbid conditions
  - Relative Weight assigned to each
  - Avg. LOS assigned to each
- Relative Weight (RW)
  - intended to reflect the relative resource consumption and severity of illness associated with each DRG.

Case-Mix Index (CMI)

- The sum of all DRG relative weights, divided by the number of Medicare cases
- A low CMI may denote lower acuity patients but this may not be reflective of the resources used, or it may reflect that education is needed to help documentation reflect a higher Severity of Illness.
- The budgeted CMI for McLaren Flint is 1.85

Principal Diagnosis

- The condition established **after study** to be chiefly responsible for occasioning the admission to the hospital for care.

Common Co-morbid Conditions

- Accelerated HTN (Malignant)
- Acute Blood Loss Anemia
- Atelectasis
- Atrial Flutter
- Cellulitis
- COPD Exacerbation
- Hypo/Hypernatremia
- Ileus
- Malignant Neoplasms
- Malnutrition
- Paraplegia
- Shock (unspecified)
- SIRS
- Thrush
- UTI
- Pulmonary Infiltrate
- Rhabodomyolysis

Common Major Co-morbid Conditions

- Acute Cor Pulmonale
- Acute MI
- Acute Pulmonary Edema
- Acute Tubular Necrosis
- Cardiac Arrest
- Pancreatitis
- Quadriplegia
- Encephalopathy
- Pulmonary Embolism
- Sepsis
- Severe Malnutrition
- Ventricular Fibrillation/Flutter

Queries

- Query for clarification/additional documentation for:
  - Conflicting & Incomplete documentation
  - Ambiguous Information
  - Clinical indicators of a higher degree of specificity
  - Clinical Indicators present but no documentation of the condition
  - Uncertainty of Present on Admission

Answered Query

Case Examples

Nursing Support

- Nursing Documentation
  - Is supportive and backs up the physician's treatment plans and assigned diagnoses
  - Reflects Resource Consumption
  - Supports Severity of Illness

Nursing Documentation that Impacts Severity of Illness

- All S/S
- Supplemental Home O2
- Wounds (pressure etc)
- Obesity
- BMI (Body Mass Index)
  - Based on Ht & Wt
- Complete History including:
  - Weakness (hemiparesis) from CVA
  - Current TX for UTI
  - Chest Pain/Angina
- Document all Diagnosis given for Treatment (as stated by the physician/patient

Examples of Nursing Documentation

- Obtain the diagnoses when clarifying orders from the provider:
  - Transfuse 2 units PRBC for Acute Blood Loss Anemia
  - Cipro 500mg PO daily for UTI
  - Supplemental O2 3L for Post-Op Acute Respiratory Insufficiency

DRG Adjustment Example

PDX: Pneumonia
DRG Assignment:

195 w/o cc/mcc Rw 0.6997 LOS 3.4

194 with cc Rw 0.9771 LOS 4.7

Documented Chronic Resp. Failure

after query based on nursing documentation of supplemental home oxygen use

193 with mcc Rw 1.4550 LOS 6.1

Documented Acute Respiratory Failure

after query based on nursing documentation of SpO2 70% on 4L/nc with labored respirations

FY 2015

Program Importance

- Risk of Mortality compared to Mortality Rates
- Physician Profiling
- Severity of Illness
- Reimbursement (For services rendered)
- Equipment (State of Art)
- Hospital/Physician Report Cards

Questions?

Case Management

CASE MANAGEMENT DEPARTMENT Overview

Professional Practice

Case Management Process

- Involves extensive teamwork and collaboration with: Physicians, nurses, PT, OT, patients/families, SW
- Monitors operational processes, resource utilization and quality outcomes
- Facilitates continuity of care and patient throughput
- Advocates for patients and family while working towards organizational goals
- Provides resources for community resources, third party authorizations and reimbursement

Departmental Teams

- **Leadership:**
  Director Tamar Swain, RN, BSN, MBA, ACM
  Manager, Case Management Cherie Payne, BSN, RN
  Lead Social Worker, Janet Popp, MSW
- **Case Manager's** BSN prepared.
  Unit based and float CM available from 7am-9:30 pm M-F,
  9am-9:30pm weekends and holidays.
- **Social Worker's** Masters prepared
  Unit based available M-Sat
- **Administrative/Clerical Support** available M-Sat.

What Does This Model Mean For McLaren–Flint?

- Efficient continuity of care throughout the health care continuum
- Coordinated and cost effective utilization of resources
- Proactive, and coordinated discharge planning
- Improved customer service, reimbursement and quality of care outcomes.
- Expanded access and availability of services and support services.

What is your role?

Expedite timely, effective continuum of care, discharges and transfers:

- complete all needed forms
- provide discharge materials
- respond to physician orders in a timely manner
- assure consults, labs, diagnostics are completed timely
- report barriers/questions to management and CM team timey

What is your role?

Report all signs of abuse/neglect to SW in a timely, detailed approach.

Refer coverage questions to CM:

- medication
- services
- equipment

Refer all CM/Home Care questions/needs to CM Team

What is your role?

Provide CM Team with any information which could impede the treatment/discharge plan:

- -code status
- -patient choice
- -patient/family dynamics.

Provide appropriate, timely ambulatory support to all patients and order PT/OT as appropriate.

What is your role?

- You are our "Eyes and Ears"!!
- We can't do what we do without you!!

QUESTIONS???

Stroke

Center of Excellence in Primary Stroke Care

Sue O'Brien
RN, MSN, CCRN, CEN
Coordinator, Neuro Program

U.S. Stroke Statistics

Every 45 seconds someone strokes; every 3.1 minutes someone dies of a stroke.

Annually 700,000 Strokes = $62.7 billion

- 500,000 New
- 200,000 Recurrent

Fourth Leading Cause of Death

Surpassed by Heart Disease, Cancer & Pulmonary Disease

#1 Cause of Disability

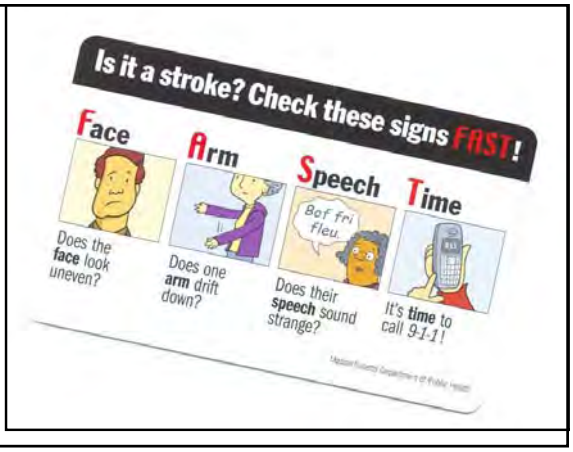
What is Stroke?

- Stroke is a rapidly evolving syndrome of sudden onset, non-epileptic neurologic deficit.
- Cell death due to interruption of blood flow to the brain
- Neurological impairment lasting beyond ONE hour

Stroke / Brain Attack

Brain Attack aligns with Heart Attack conveying early identification of symptoms followed by Emergent 911 Transport for early intervention.

Time is Brain !



Cincinnati Prehospital Stroke Scale

- Facial Droop
- Arm Drift
- Speech
  - Normal versus Abnormal

Stroke Emphasis on Coordinated Care

Stabilization
Acute Care & Treatment
Early Rehabilitation
Risk Factor Modification
Prevention of Recurrent Stroke

Acute Onset Stroke

…..Priority in the Emergency Department

- Confirm ***Time Last Known Well***
- Stroke Alert - Emergent Patient
- NIHSS: National Institute of Health Stroke Scale
- Blood Sugar: bedside finger stick
- Stroke to CT Scan / Stroke to CT Results
- Stroke Lab Panel Turn-Around-Time
- NPO until Nursing Swallow Screen Completed
  - Omni-cell Aspirin

Stroke Alert Process

- Emergency Department : Stroke Alert
- Rapid Response Team Stroke Alert :
  - In-patient Location
  - Nursing Empowered to Activate
  - Critical Care Areas
- Neuro Team Alert
  - Interventional Neurology
- Policy: PC-133 Stroke Alert

CT Scan Head Without Contrast

- ***Door to CT Scan ≤ 25 minutes***
- **Door to CT Scan Results ≤ 45 minutes**
- #1 Diagnostic Tool:

Hemorrhagic Stroke?

Ischemic Stroke?

Two Types of Stroke Ischemic & Hemorrhagic

80% Ischemic
– Closely aligned with major cardiovascular risk factors

20% Hemorrhage
– Intracerebral & Subarachnoid
– Pathologic mechanisms are diverse

Hemorrhagic Stroke

- Assess GCS: E=4, M=6, V=5
- Do NOT Administer ASPIRIN / Antithrombotic
- Consult Neurosurgery & Neurology
- ICU Admission
- Control of Blood Pressure
- Monitor Blood glucose
- Initiate supportive therapy/ treat co-morbidities

Ischemic Stroke

- Consider Fibrinolytic Therapy:
  - Time Last Known Well Less Than 4.5 hours
- Assess for IV-tPA exclusion criteria
- Repeat Neurologic Exam: NIHSS
  - Are deficits resolved to ZERO?
    - Document repeat NIHSS
    - Documents IV-tPA Exclusion Criteria

Patient Fibrinolytic Therapy Candidate?

- **Exclusion Criteria**
  - Evidence of ICH on CT Head without contrast
  - Clinical presentation suggestive of SAH
  - CT show multilobar infarction > 1/3 cerebral hemisphere
  - History of ICH
  - Uncontrolled HTN: SBP> 185mmHG, DBP> 110 mmHG despite repeated measures
    - (labetalol 10 – 20 mg IVP over 1-2 min, may repeat x 1)
    - Nicardipine infusion, 5mg/hr, may titrate up by 2.5mg/h
    - If BP remains > 185/110 mmHg, do not administer tPA
  - Known AV malformation
  - Seizure with post-ictal residual neurologic impairment
  - Active internal bleeding/ Trauma/ Fracture

Patient Fibrinolytic Therapy Candidate?

- Exclusion Criteria
  - Acute Bleeding
    - Platelet count< 100,000/mm3
    - Heparin received within 48 hours
    - Elevated APTT / INR
    - Current use of anticoagulant- warfarin INR> 1.7
    - PT> 15 seconds
  - Within 3 months of previous stroke, intracranial or intraspinal surgery, serious head trauma
  - Arterial puncture at a noncompressible site within past 7 days?

tPA 3 to 4.5 Hours
from Symptom Onset

Additional Exclusion Criteria:

- Age greater than 80 years
- Severe Stroke: NIHSS greater than 25
- Taking an oral anticoagulation regardless of INR
- History of Both Diabetes AND Prior Ischemic Stroke

YES, tPA Candidate

- Implement TPA Ischemic Stroke & Critical Care Admission Order Set in CPOE
- 0.9 mg/kg maximum 90 mg
- Infusion
  - 10% over 1 minute IVP
  - Followed by 60 minute infusion for Total Dose
- Activase (alteplase)

Stroke t-PA Assessment Flow Sheet

- Documentation for ALL IV-tPA administration
- 24 hour paper documentation
- ED RN to ICU handoff
- ICU to ICU RN handoff
- Charge Nurse ED & ICU
- Scanned in EMR

Stroke t-PA Assessment Flow Sheet

- Location: 3 Ring Stroke Book ED & ICU
  - Nursing Supervisor
- Paper documentation 24 hours
- Time Documentation Increments
- VS, Neuro Checks every15 min x 2 hrs, then 30 minutes x 6 hours then hourly x 16 hours.
- NIHSS after 60 min infusion completed
- Narrative Charting

tPA Criteria Not Met

- Candidate for Neuro Intervention?
- Implement Ischemic Stroke/TIA Order Set
- Initiate NIH Stroke Scale Assessment
  - Q 12 hours x 48 hrs; increase frequency with any neurological change
  - Neuro Checks q 2 x 4hrs then q 4hrs x 24hrs
- Nursing Swallow Screen: prior to oral administration
  - Care Glance: Swallow Screen Tab

Stroke Order Sets x 4

- Hemorrhagic Stroke
  - SAH & ICH (2014)
- Ischemic Stroke / TIA
- Stroke (TPA, Activase used)
  - TPA Ischemic Stroke & Critical Care Admission Order Set
- URLs : Hard Copy Stroke Orders
- MHCC: Hard Copy
  - Order Sets
    - Location: S = Stroke

CPOE Stroke Order Pathway

- CPOE Verbal Orders (yelling man)
- Select Ordering Physician
- Select Order Source: Verbal
- Enter New Order
- All: Order Sets
- Search: Stroke

Stroke 3 Ring Note Book

- Stroke Order Sets
- IV-tPA patient/family education
- NIHSS
- Swallow Screen
- IS Guidelines
- Contact information for Sue O'Brien, Coordinator Neuro Coordinator
- IV-tPA tri-flow documentation sheet

Nursing Swallow Screen

- NPO until Nursing swallow screen completed and DOCUMENTED
- Administer aspirin per rectum
  - Emergency Department Omnicell Hard Stop
- Nursing Liability

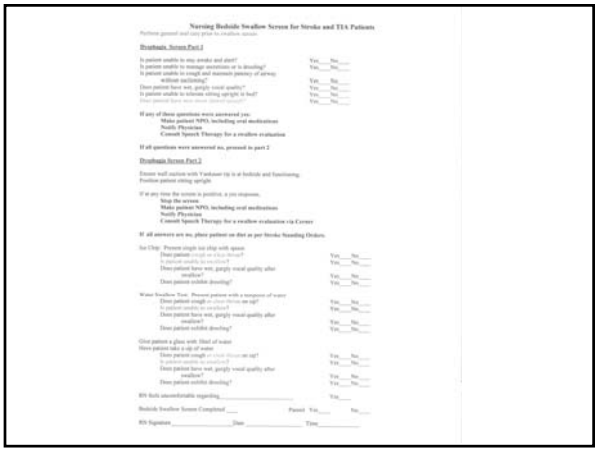
Nursing Swallow Screen

Required Education

- MHCC Intranet
  - Nursing Education
    - Continuing Education
    - Stroke & Dysphagia
      - Stroke & Dysphagia PowerPoint
      - Stroke & Dysphagia Competency
      - Dysphagia Competency Quiz
      - Stroke & Dysphagia Video

MUST COMPLETE During Unit Orientation:

Provide copy of competency & quiz to Nurse Manager for File.



Nursing Bedside Swallow Screen for Stroke and TIA Patients

Perform general oral care prior to swallow screen

Dysphagia Screen Part 1

Is patient unable to stay awake and alert? Yes___ No___
Is patient unable to manage secretions or is drooling? Yes___ No___
Is patient unable to cough and maintain patency of airway without incliming? Yes___ No___
Does patient have wet, gurgly vocal quality? Yes___ No___
Is patient unable to tolerate sitting upright in bed? Yes___ No___
Does patient have new onset fever? Yes___ No___

If any of these questions were answered yes:
Make patient NPO, including oral medications
Notify Physician
Consult Speech Therapy for a swallow evaluation

If all questions were answered no, proceed to part 2

Dysphagia Screen Part 2

Ensure well cushion with Yankauer tip is at bedside and functioning
Position patient sitting upright

If at any time the screen is positive, a yes response,
Stop the screen
Make patient NPO, including oral medications
Notify Physician
Consult Speech Therapy for a swallow evaluation via Cerner

If all answers are no, place patient on diet as per Stroke Standing Orders.

Ice Chip: Present single ice chip with spoon
Does patient cough Yes___ No___
Is patient unable to swallow? Yes___ No___
Does patient have wet, gurgly vocal quality after swallow? Yes___ No___
Does patient exhibit drooling? Yes___ No___

Water Swallow Test: Present patient with a teaspoon of water
Does patient cough Yes___ No___
Is patient unable to swallow? Yes___ No___
Does patient have wet, gurgly vocal quality after swallow? Yes___ No___
Does patient exhibit drooling? Yes___ No___

Give patient a glass with 30ml of water
Have patient take a sip of water
Does patient cough Yes___ No___
Is patient unable to swallow? Yes___ No___
Does patient have wet, gurgly vocal quality after swallow? Yes___ No___
Does patient exhibit drooling? Yes___ No___

RN feels uncomfortable regarding_____ Yes___

Bedside Swallow Screen Completed ___ Passed Yes___ No___

RN Signature_____Date _____ Time_____

Nursing Documentation in Paragon Clinical Carestation / CareGlance NIHSS & Education Tab

- NIHSS: Upon admission to nursing unit & every12hrs
- Pupil & Neuro Checks: *Order Specific* Every 1-4 hours
- Stroke Education Packet to Patient:
  - Blue Stroke Folder
- Risk Factor Modifications
- Core Measures: STK1-10

Primary Stroke Center

Performance Measures

1. Venous Thromboembolism Prophylaxis
2. Discharged on Antithrombotic Therapy
3. Anticoagulation Therapy: A-fib/flutter
4. Thrombolytic Therapy
5. Antithrombotic Therapy: End of Day 2
6. Discharged on a Statin Medication
7. Dysphagia Screening
8. Stroke Education
9. Smoking Cessation
10. Assessed for Rehabilitation

Primary Stroke Care

- Sue O'Brien – Neuro/Stroke Coordinator
- Sunita Tummala MD, Medical Director of Stroke
- 10 South – Jennifer Fishwick NM
- ICU – Keith Ford NM
- 6 C Step-down – Tammie Rubel NM
- 4 C Surgical Care Unit – Mike Stanton

Neuro Interventional Services

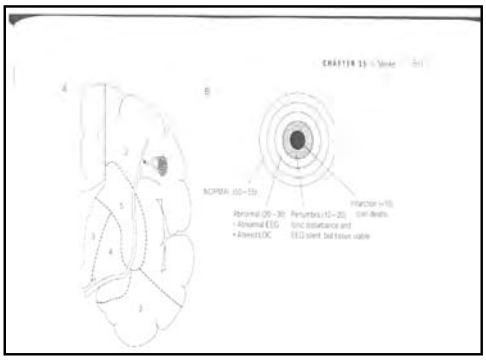
- Services 24/7: February 13, 2012
- Neuro Interventional Physicians
  - –Andrew Xavier, MD
  - –Aniel Majjhoo, MD

Penumbra

Zone of compromised neuronal cells

- Unable to function
- Remain viable
- Located around area of lethal injured cells

Zone is amenable to reversal from ischemia



CT Perfusion

- NIHSS greater than or equal to 8
- NIHSS Less than 8
  - Aphasia
  - Dysarthria
- Outside of IV-tPA window; onset less than 12 hours.
  - Case by Case evaluation and plan of care

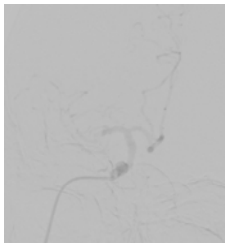
CT Angiogram

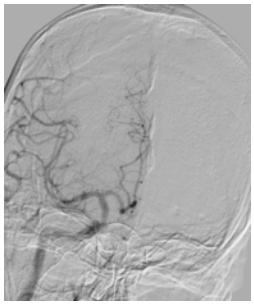
- Head & Neck
  - Internal Carotid Arteries
  - Vertebral Arteries
  - Basilar Artery

Neuro Team Alert

- Neuro Interventionalist MD: Activates Alert
  Ext 22222
- Cath Lab/Anesthesia
- Nursing Supervisor
- ICU: Triage Bed Availability
- Patient Registration

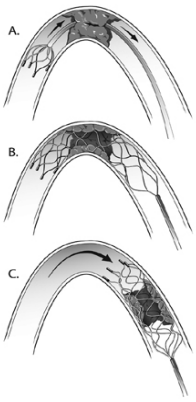
AP – Pre and Post



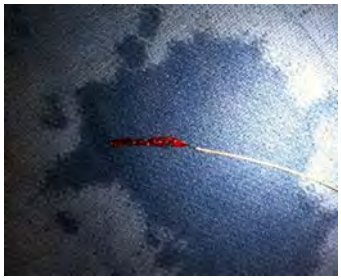


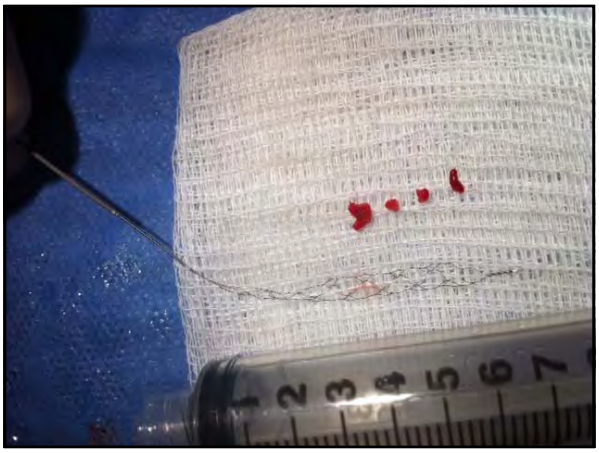
Stent Alternative "Stentriever"

- Recanalization rates comparable to that of an acute stent
- No requirement for acute or long-term anti-platelet therapy



Thrombectomy- One pass with Solitaire





Transient Ischemic Stroke: TIA

- Brief episode of neurologic dysfunction caused by focal brain or retinal ischemia with clinical symptoms typically lasting less than one hour (60 minutes).
- TIA most often a few minutes and without evidence of acute infarction.
- Resolution of S&S of Stroke: FAST

❖ Albers GW, Caplan LR, Easton JD, Fayad PB, Mohr JP, Saver JL, Sherman DG; TIA Working Gourp. Transient ischemic attack-proposed for a new definition. NEJM 2002;347(21):1713-1716.

Transient Ischemic Stroke: TIA

Temporary focal brain or retinal deficits
- Caused by vascular disease
- Reversal complete less than 24 hours
- TIA Classified in Vascular Territories:
  - Carotid
  - Vertebrobasilar

Ischemic / TIA

Carotid

Ophthalmic / Middle / Anterior Circulation

Lateralizing signs: ipsilateral ischemia

Ophthalmic Artery

Transient graying, fogging or blurred vision
A "Shade" descending over line of vision
Amaurosis Fugax: temporary monocular blindness

Middle Cerebral Artery

Hemiparesis: more arm than leg weakness
Hemianesthesia: Contralateral motor or sensory deficits to face or limb

Anterior Cerebral Artery

Hemiparesis: more leg than arm weakness

Posterior Circulation Stroke Vertebrobasilar

Diffuse Signs:

Dysarthria, Dysphagia, Diplopia
Bilateral Blindness
Unilateral or Bilateral Motor & Sensory Deficits
Quadriparesis

Cerebellar Arteries

Vertigo, Dizziness, Ataxia

Ischemic Stroke

- Cerebral artery becomes narrowed or occluded, interrupting CBF / O2 delivery decreases causing brain ischemia
- Lack of O2 halts ATP production-renders neuron inactive
- Energy supply remains insufficient / further decreases numerous biochemical and molecular cascades are triggered – Produces cytotoxic edema and neuronal death

Ischemic Stroke

Large-Artery Atherosclerosis: 20%

Lacunae small vessel (penetrating) artery: 25%

Cardiogenic Embolic: 20%

Cryptogenic: 30%

Other: 5%

Large-Artery Atherosclerosis

- Significant ≥50% stenosis or occlusion of a major brain supplying artery or branch cortical artery presumably due to atherosclerosis: infarct size ≥ 1.5cm.
- Cortical impairment; brain stem or cerebellar dysfunction.
- Clinical findings should support diffuse atherosclerosis (no evidence of cardioembolic mechanism).

Water Shed

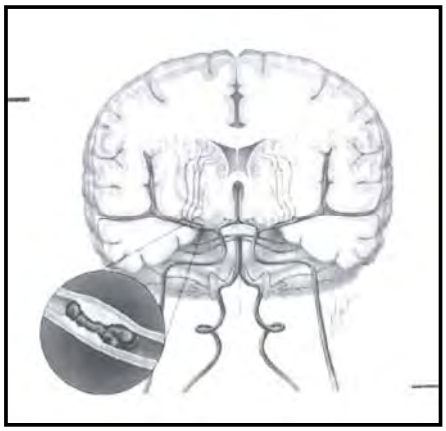
Infarction between the terminal distributions of two adjacent cerebral arteries.
(ACA & MCA)

Vulnerable to low arterial pressure

First to fail when Systolic BP drops:
(Do Not lower BP > 25% in 1st 24 hrs)

Lacunar Stroke

- Hypertension : principal risk factor
- Small Penetrating Artery Stroke Lenticulostriate Branches of
  - ACA, MCA, PCA
- Symptoms:
  - Hemiplegia, sensory, dysarthria, etc

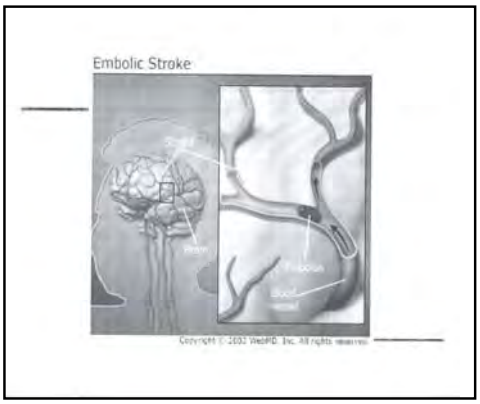


Cardiogenic Embolic Stroke

- 20% of ischemic strokes
- Atrial Fibrillation
- Patent Foramen Ovale (PFO)
- PFO: 20-25%>30 yrs old
- Valvular Disease
- Ventricular Thrombi
- Myocardial Infarction
- Congestive Heart Failure
- Atrial Septal Aneurysm
- unstable plaque
  - microemboli
- left middle cerebral artery
- abrupt onset
- awake & active
- Other Cardiac

Cardiogenic Embolic Stroke

- Emboli Originate from
  - Atherosclerotic plaque
  - Atrial fibrillation of mural thrombus
  - Infection-septic emboli from vegetative valves
  - Particulate matter-CABG-disruption of aorta
  - Fat
  - Air
  - Hypercoagulability
  - Clots from vascular injury



Cryptogenic Stroke

- 30% of Ischemic Strokes
- Cause unknown after diagnostic evaluation

Other Causes

- 5% ischemic strokes
- Nonatherosclerotic vasculopathies
- Hypercoagulable states
- Hematologic disorders
- Arteritis
- Migraine/vasospasm
- Cocaine use

Hemorrhagic Stroke

- Rupture of a blood vessel within the cranium: Intracerebral, Subdural, Epidural and Subarachnoid Hemorrhage.
- ICH compresses and irritates cerebral tissues causing:
  - Ischemic cellular response
  - Cerebral edema
  - Intracranial hypertension
  - Compromise of CPP

Etiology

- Hypertensive vascular disease
- Ischemic stroke with hemorrhagic conversion
- Vasculitis, vascular brain tumor or venous sinus thrombosis
- Use of anticoagulants and antiplatelets
- Use of illicit drugs-cocaine, amphetamines
- Increased age, race (young and middle age blacks have a higher incidence than whites of the same age, Asians highest)

Hemorrhagic Stroke

- Intracerebral Hemorrhage (ICH)
  - primary rupture of a vessel
  - 30-day mortality rate threefold to fivefold greater than ischemic stroke
    - 38% die within 30 days after ICH
    - 50% of 38% die by Day 2

ICH versus SAH

- Intracerebral Stroke / Intraparenchymal Stroke
  - Rupture of a small artery, deep, penetrating
- Subarachnoid Hemorrhage
  - Bleeding into subarachnoid space
    - Ruptured aneurysm
    - Arteriovenous malformation

Intracerebral Stroke

- Spontaneous Hemorrhage
  - Rapid onset: worsening symptoms minutes to 24 hours
  - HTN
    - Older person with hx poorly controlled HTN
    - Asymptomatic
    - Straining, severe HA, active lifestyle
    - decreased consciousness
    - Hemiplegia
    - Possible focal seizures
    - Vomiting

Subarachnoid Hemorrhage 5%

- Bleeding into the subarachnoid space
- Spontaneous SAH occurs in relatively young adults > poor prognosis
- Aneurysmal

  Familial Occurrence 10%

  Non-Aneurysmal
- Vertebral artery dissection
- Rare Conditions

Subarachnoid Hemorrhage

- Vasospasm: gradual neurological deterioration r/t a vascular territory.
  - Angiographic Vasospasm
  - Symptomatic Vasospasm
- Vasospasm develops 3-14 days after SAH
  - Peaks 7-10 days
  - Onset may be delayed up to 21 days

SUMMARY

- FAST
- Time Last Known Well
- Stroke Activation
- NIHSS
- CT Scan
- tPA Candidate
- CPOE Stroke Order Set
- Swallow Screen
- Stroke Education Packet
- Documentation
  - Core Measure - Stroke
  - Risk Factor Modifica
  - Exercise / Diet / 911
  - Smoking Cessasation

Believe in the Power of Nursing

Questions?

Thank you!

Risk Management

Risk Management

The goals of the overall risk management program are to identify areas of actual or potential risk, prevent, as much as possible, injuries to patients, visitors and employees, and to prevent or limit financial loss to the hospital and its staff.

The Medical Record

•Provides information which serves as the basis for financial reimbursement to hospitals, health care providers and patients;

•Serves as a legal document for use by an injured patient against other parties or for use in other legal proceedings;

• Is used by hospital quality assurance and peer review committees, State licensing agencies, State regulatory agencies, and other entities in accessing the quality of patient care by hospitals and health care providers;

•Is a key portion of accreditation processes such as that of the TJC.

The Medical Record cont…

A means by which health care providers can document factual and relevant information is by specifically charting information based upon what is:
Seen - charting observations regarding bleeding, deformities, drainage, color of urine, patient posture and/or attitude;

1. **Heard - the patient's complaints/statements, moaning, breathing abnormalities, bowel sounds;**
2. **Smelled - malodorous drainage, alcohol or acetone on breath, fecal or vomitus odor;**
3. **Felt - areas of induration, hot, cold, dry or moist skin, motion at a fracture site.**

What to Avoid in the Medical Record

Avoid the use of words that subjectively categorize a patient's treatment or condition, such as unintentionally, inadvertently, unexplainably, accidentally and unfortunately. Do not leave loose ends in the chart. Follow-up on diagnostic tests ordered with results not yet received, and/or abnormal test results.

The medical record should never be used as a forum for remarks to "cover" yourself. Never make statements in the record which criticize or cast blame upon others, or are intended to serve as gratuitous remarks. Do not engage in battles in the chart over treatment decisions. When disagreements regarding a patient's treatment plan occur, a case conference should be called to resolve them.

The Medical Record cont…

OBJECTIVE STATEMENTS	vs.	SUBJECTIVE
1. Half of breakfast eaten		1. Diet taken fairly
2. No complaints of pain		2. Had a good day
3. Surgical incision healing - no sign of infection		3. Wound okay
4. Thrashing in bed		4. Appears restless
5. IV site clear and infusing at 40 drops per minute		5. IV running well

Documentation of Incidents and Unanticipated Patient Outcomes

Because these occurrences may form a basis for litigation even when there has been no negligence, the best defense is a record which contains timely, accurate and properly charted information.

Entries regarding an incident should include the date and time of the incident, a brief factual and objective description of what was seen and heard, using exact quotes when possible of the patient's description of the event, along with the findings of any physical examination and follow-up care. When there is no apparent injury as a result of the incident, this should be clearly documented in the record. The record should not make reference to the preparation of an incident report and/or notification of the hospital's Risk Management Department.

Medical Record…

When unanticipated patient outcomes occur, documentation of the complication(s) should also be accurately recorded. Entries should include information regarding the complication in an objective fashion without judgment as to whether the complication is acceptable, unacceptable or anyone is to blame. The entry should indicate that the patient was informed of the complication and its consequences, as well as any change in his or her treatment plan, should it be necessary.

From the risk management perspective, the medical record is a crucial element in preventing and minimizing the potential adverse consequences of malpractice litigation. Ultimately, it serves as the basis for the defense of malpractice claims and lawsuits

Sentinel Events

- Serious Occurrence:
- An unexpected occurrence/event involving death or major permanent loss of function or the risk thereof, not related to the natural course of the patient's illness or underlying condition.
- Suicide of any patient receiving care, treatment and services in a staffed around-the-clock care setting or within 72 hours of discharge
- Unanticipated death of a full term infant
- Abduction of any patient receiving care, treatment and services
- Discharge of an infant to the wrong family
- Rape
- Hemolytic transfusion reaction involving administration of blood or blood products having major blood group incompatibilities

Sentinel Events cont…

- Surgery on the wrong patient or wrong body part
- Unintended retention of a foreign object in a patient after surgery or other procedure
- Severe neonatal hyperbilirubinemia (bilirubin greater than 30 milligrams/deciliter
- Prolonged fluoroscopy with cumulative dose greater than 1500 rads to a single field or any delivery of radiotherapy to the wrong body region or greater than 25% above the planned radiotherapy dose.
- An event for which a recurrence carries significant chance of a serious adverse outcome or result in an adverse event. This is often referred to as a "near miss".

Patient Advanced Directives

The Federal Patient Self-Determination Act requires hospitals to develop policies and procedures that recognize a patient's right to accept or refuse medical treatment and to formulate advance directives in accordance with state law.

Advanced Directives are only activated when it had been deemed by the physician that the person has lost competency.

Lawsuits

Medical malpractice and negligence lawsuits are brought in the civil court system, usually under state, but occasionally under federal law. In these lawsuits, the person bringing the claim (the plaintiff) must establish the following four elements:

1. **A legal duty was owed to the plaintiff.**
2. **The standard required to meet that duty was breached.**
3. **A causal relationship existed between that breach and the injury claimed.**
4. **Damages were sustained by the plaintiff directly as a result of that breach and the injury caused by it.**

Lawsuit Time Frames

- **Typically 1-2 years after an adult injury.**
- **Can be up to 3 years in death cases**
- **Longer for birth injuries**

This is why good documentation is crucial !

Questions

Julie Borowski
Risk Management Specialist
342-2097
389-1877

REQUIREMENTS FOR REPORTING ABUSE AND NEGLECT

	Section 722, Public Act 258 of 1974, (Mental Health Code-Recipient Abuse)	Public Act 238 of 1975 (Child Protection Law)	Public Act 519 of 1982 (Adult Protective Services Law)	Section 723, Public Act 258 of 1974 as amended (Mental Health Code-Criminal Abuse)
WHERE is the report made?	**The Office of Recipient Rights www.mi.gov/recipientrights**	**ADULT OR CHILDRENS PROTECTIVE SERVICES REPORTING HOTLINE 855-444-3911**		**Police MSP 517-332-2521**
	Michigan Department of Community Health Community Mental Health Service Programs Licensed Private Psychiatric Hospitals or Units	Michigan Department of Human Services (DHS)	Michigan Department of Human Services (DHS)	State Police County Sheriff Local Police Department
WHAT must be reported?	Sexual, Physical, Emotional or Verbal Abuse, Neglect, Serious Injury, Death, Retaliation or Harassment	Sexual, Physical or Mental Abuse, Neglect, Sexual Exploitation	Sexual, Physical or Mental Abuse, Neglect, Maltreatment, Exploitation	Assault (other than patient-patient assault/battery), Criminal Sexual Abuse, Homicide, Vulnerable Adult Abuse, Child Abuse
WHO is required to report?	All employees, contract employees, or volunteers of Michigan Department of Community Health, Community Health Services Programs, Licensed Private Psychiatric Hospitals or Units	Physicians, nurses, coroners, medical examiners, dentists, licensed emergency care personnel, audiologists, psychologists, social workers, school administrators, teachers, counselors, law enforcement officers, and child care providers.	Any person employed by an agency licensed to provide, anyone who is licensed, registered, or certified to provide health care, education social, or other human services, law enforcement officers and child care providers.	All employees, contract employees of: Michigan Department of Community Health, Community Mental Health Services Programs, Licensed Private Psychiatric Hospitals or Units, all mental health professionals.
WHAT is the CRITERIA for reporting?	**You must report if you:** Suspect a recipient has been abused or neglected or any allegations of abuse or neglect made by a recipient.	**You must report if you:** Have reasonable cause to suspect a child has been abused, neglected, or sexually exploited.	**You must report if you:** Have reasonable cause to suspect or believe an adult has been abused, neglected, exploited or maltreated.	**You must report if you:** Suspect a recipient or vulnerable adult has been abused or neglected, sexually assaulted, or if you suspect a homicide has occurred. You do not have to report if the incident occurred more than one year before your knowledge of it.
WHEN must the report be made and in what format?	A verbal report must be made immediately. A written report on an incident report form must be made before the end of your shift.	A verbal report must be made immediately. A written report on DHS form 3200 must be made within 72 hours.	A verbal report must be made immediately. A written report at the discretion of the reporting person.	A verbal report must be made immediately. A written report must be made within 72 hours of oral report (330.1723)
TO WHOM are reports made?	To your immediate supervisor **and** to the Recipient Rights Office at your agency or hospital	Report to Protective Services Reporting Hotline 855-444-3911	Report to Protective Services Reporting Hotline 855-444-3911	The law enforcement agency for the county or city in which the alleged violation occurred or the State Police. A copy of the written report goes to the chief administrator of the agency responsible for the recipient.
If there is more than one person with knowledge must all of them make a report?	Not necessarily. Reporting should comply with the policies and procedures set up by each agency.	Someone who has knowledge must report or cause a report to be made in the case of a school, hospital or agency, one report is adequate.	Everyone who has knowledge of a violation or an alleged violation must make a report. DHS has typically accepted one report from agencies.	Someone who has knowledge must report or cause a report to be made.
Is there a penalty for failure to report? **YES**	Disciplinary action may be taken and you may be held civilly liable.	You may be held civilly liable. Failure to report is also a criminal misdemeanor.	You may be held civilly liable and have to pay a $500 fine.	The law states that failure to report or false reporting is a criminal misdemeanor.
Is it necessary to report to more than one agency? **YES**	Each of these laws requires that the designated agency be contacted, if an allegation suspected to have occurred, falls under its specific jurisdiction. There are several references in each law indicating that reporting to one agency does not absolve the reporting person from the responsibility to report to other agencies, as statutorily required.			
Are there other agencies to which a report can be made? **YES**	**The Bureau of Health Systems (LARA)** is responsible for investigating abuse and neglect in **Nursing Homes.** Call the **NURSING HOME ABUSE HOTLINE 1-800-882-6006** **The Michigan Attorney General's Office** has an **Abuse Investigation Unit** which may also investigate abuse in Nursing homes. **ATTORNEY GENERAL 24 hour Health Care Fraud Hotline 1-800-24-ABUSE/ 1-800-242-2873** **The MDHS Bureau of Children and Adult Licensing** is responsible for investigating abuse or neglect in a licensed foster care home. **MDHS-BCAL Compliaint Intake Unit 1-866-856-0126**			

Michigan Department Of Community Health

MDCH

Do you have a complaint about a health care organization?

What is The Joint Commission?

The Joint Commission "accredits" health care organizations, such as hospitals. We visit organizations to make sure they meet our standards of care. Organizations that meet our standards are accredited for three years. After three years, we go back to the organization to make sure it still meets our standards.

What do you need to know before making a complaint?

The Joint Commission cannot help with all complaints. We do not:

- Take complaints about organizations that we do not accredit.
- Deal with billing, insurance or employment problems. These are not covered by our standards.

The Joint Commission cannot find out what went wrong with a patient's care.

- We will not be able to tell you if a patient's care was poor.
- We cannot determine wrong doing.
- We do not settle differences between a patient and an organization.

What can you do about complaints that The Joint Commission cannot help with?

- You may want to talk to the organization about your concern.
- Your state's department of health may be able to help.

What information do you need to include in the complaint?

- The name and address of the organization.
- Tell us about your concern in one or two pages.
- Give us your name, address or e-mail address if you would like follow-up information sent to you.

The Joint Commission

Do you have a complaint about a health care organization?

How do you file a complaint?

Online: http://www.jointcommission.org/report_a_complaint.aspx

E-mail: complaint@jointcommission.org

Fax: 630-792-5636

Mail: Office of Quality Monitoring
The Joint Commission
One Renaissance Boulevard
Oakbrook Terrace, Illinois 60181

What happens to your complaint?

- We check for other complaints about the organization.
- We may write to the organization about your concern.
- Sometimes, we visit the organization to see if there is a problem in meeting the standards that deal with your concern.
- We will not share your name with the organization unless you say it is OK.

Can The Joint Commission tell you what happens with the complaint?

We can give you some information. We can tell you if we:

- Have other complaints about the organization
- Wrote to the organization about your concern
- Visited the organization
- Asked them to make improvements
- Changed our decision to accredit the organization

We can give you a list of the standards that deal with your concern. For example, concerns about dirty equipment are covered in the “Infection Prevention and Control” standards.

For more information Call 1-800-994-6610

Patient Experience

Pharmacy

Nursing Orientation to Pharmacy Services

Cherryl A. Peterson, Pharm.D.
Director of Pharmacy Services

Nursing Orientation Day 2

Topics to be covered

- Introduction to Pharmacy
- Medication Safety – Quantifi™
- Omnicell and You
- Communication Strategies
- Feedback to the Pharmacy Team

How to contact us

- The main phone number is extension 22299
- When to call us
  - Drug information questions
  - Immediate need for a medication before the next pharmacy delivery (start at the top of every hour)
  - To notify us of an dispensing or order entry error
- When / how we will contact you
  - To request a clarification of a telephone or verbal order entered by you
  - To ask for allergy, height and weight to be entered – we cannot do ANYTHING without this information being entered into Paragon
  - To ask for additional information on non-formulary medications or allergy reactions
  - Preferred method is directly to your mobile hospital phone
    - Keeping tele-tracking updated with your assigned patients and phone number is really appreciated

Medication Safety

Dr. Suzan Kucukarslan - Medications Safety Officer (MSO)

Phone Extension 22426

•Utilize Quanitifi™ to report, track and trend medication errors

•General Nursing log on is 50 and password is nursing 101

•ICON is located on the Novell desktop

•Provide as much detail as possible

•Can remain anonymous, but follow up questions will not be possible

Omnicell and You

- Proactive Diversion Monitoring
  - Electronic
  - Chart reviews
- "Cartless" medication delivery model
  - Omnicell™ is one stop shop for medications
- Access Contacts
  - Daryl Collins, Pharmacy Informatics Tech – 22738

Communications Strategies

Nursing / Pharmacy taskforce

- Members of the Nursing council participate along with members of Nursing and Pharmacy Leadership

Nursing Orientation and In-services

emails

Newsletters

Feedback to the Pharmacy Team

- Omnicell stock changes need to be requested through your manager
- STAR Cards are always welcome
- emails / phone extensions
  - Cherryl.Peterson@McLaren.org – 22731
    - Director of Pharmacy
  - May.Alomari@mclaren.org – 22868
    - Clinical Manager

CompleteRx

Living Pharmacy

Cardiac Diagnostics

Heart & Vascular

Presented by:
Kevin Flynn RN

Departments

- Heart & Vascular Boarding
- Non-Invasive
  - ECG
  - Pacemaker clinic
  - Stress testing
  - Echocardiogram
  - Doppler
- Cardiovascular Care Unit (CVCU)
- Cardiac Cath Lab

Heart & Vascular Boarding

- Scheduling of procedures
- Previous reports/CD's
- Ext 22387
- Afterhours voicemail

ECG

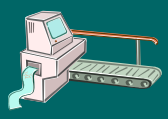
- Staffed 7 days/week
  - 6 A.M.- 10 P.M.
- Phone
  - 22313
- Pager
  - 389-1012 or 389-1011
- Overhead paging if emergency

Pacemaker Clinic

- Pacemaker & ICD interrogation
- Must know brand of pacemaker/ICD
  - St. Jude
    - 1-800-777-2237
  - Medtronic
    - 1-800-851-7223
  - Boston Scientific
    - 1-800-227-3522
  - Biotronik
    - 1-800-547-0394

Stress Testing 22643

- Standard exercise
  - Treadmill
- Imaging
  - Echocardiogram
  - Nuclear
    - Cardiolite
- Pharmocological
  - Dobutamine
  - LexiScan



Echocardiogram (Echo)

- Transesophageal echocardiogram (TEE)
- Stress

Doppler

- Hours of operation
  - Mon-Fri 7 A.M. – 10 P.M.
  - Sat/Sun 8 A.M.- 4 P.M.
  - On call for holidays only
- Ext 22311

CVCU 22046

- Pre & post procedure care
  - Inpatient
  - Outpatient
  - TEE / Cardioversions
- Hours of operation
- Nurses are a great resource
  - Prep & recovery
  - Sheath pulling

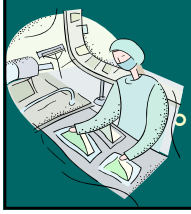
Cardiac Cath Lab

24899

- Heart
  - Cardiac catheterization
  - Percutaneous coronary intervention (PCI/Stent)
  - Internal cardiac defibrillator (ICD)
  - Pacemaker
  - Tilt table test

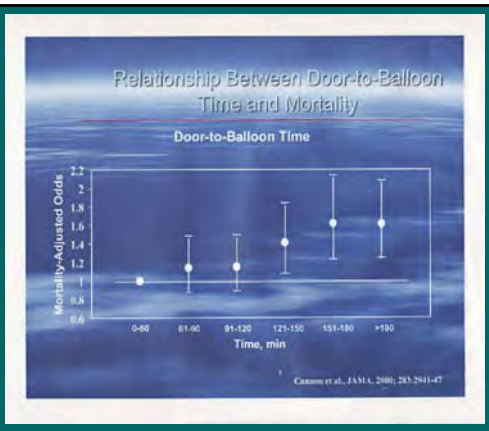
Cardiac Cath Lab

- Electrophysiology study (EPS)
- Radiofrequency ablation (RFA)
- Peripheral vascular intervention
  - Performed by
    - Vascular surgeons
    - Cardiologists
    - Interventional radiologists
- Neuro-interventional Studies
  - Ischemic Stroke
  - Aneurysms Coil and Stent



Door to Balloon

- Cardiac team alert
- ST elevated myocardial infarction (STEMI)
- National Guidelines
  - 90min or less
  - Core measure



Nursing Considerations

- Pre-procedure
  - IV's & medications
  - Chart prep
  - Site prep
  - Labs
  - Consent

Nursing Considerations

- Pre-procedure
  - Patient prep
    - NPO
    - Allergies
    - ID band on
    - Education
    - Family

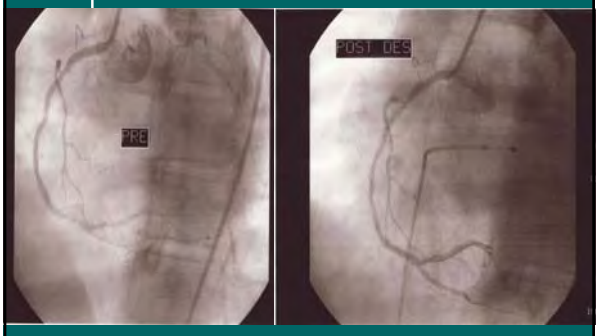
Nursing Considerations

- Post care
  - Contrast induced nephropathy
  - Labs
  - Patient & family education
    - What's next?

Nursing Considerations

- Post care
  - Site complications
    - Infection
    - Hematoma
    - Pseudoaneurysm
    - Retroperitoneal bleed

Before & After A Stent



Core Measures SCIP

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Core Measures & eCQM
2015

Linda Weirauch, RN, BSN, CPHQ
Manager, Quality Management and Infection Control

1

Always in motion is the future.
-- *Yoda*

2

Why Worry About Compliance?

- Third Party Incentive
  - CMS reporting requirement
  - www.hospitalcompare.hhs.gov
    - Quality of care measures & HCAHPS
    - Hospital comparisons
- Government Requirement
  - Electronic clinical quality reporting (eCQM/MU)
  - 2010 Affordable Care Act- Value Based Purchasing
- Public Perception
  - Leapfrog- www.leapfroggroup.org
  - Consumer Reports-www.consumerreports.org
  - Local media

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3

Why Documentation is Key

- Financial incentives are driving change
  - Payers shifting from volume to quality-based reimbursements
- Medicare and Medicaid now determine good performance
  - Assess clinical outcomes
  - Check patient evaluation surveys
  - Financial incentives have heightened the importance of healthcare quality management
- YOU HAVE AN IMPORTANT ROLE IN QUALITY REPORTING

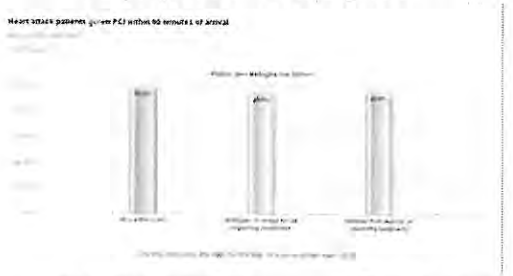
4

Core Measures

- *Acute Myocardial Infarction (AMI) (eCQM)*
- *Pneumonia (eCQM)*
- *Surgical Care Improvement Project (SCIP) (eCQM)*
- *Hospital Outpatient Surgery (HOPS)*
- *Immunizations (eCQM)*
- *Emergency Department Throughput (eCQM)*
- *Pain Management Long Bone Fracture*
- *VTE (eCQM)*
- *Stroke (eCQM)*
- *HBIPS (Psychiatric Measures) (eCQM)*
- *SUB (Substance Abuse)*
- *TOB (Tobacco Use) (eCQM)*
- *Early Elective Delivery (eCQM)*
- *Breast Feeding Mothers (eCQM)*
- *Infant Hearing Screening (eCQM)*

5

Hospital Compare



Data from 10/1/2012 through 9/30/2013

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Acute Myocardial Infarction (AMI)

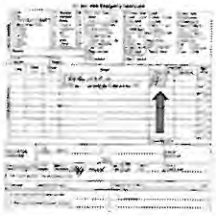
All AMI records must contain:

- Aspirin received within 24 hours of arrival
- Aspirin prescribed at discharge
- Beta Blocker prescribed at discharge
- ACEI or ARB for LVF (EF) ≤ 40% prescribed at discharge
- LDL cholesterol level drawn within 30 days of admission or recent result documented
- If LDL ≥100- patient must have statin prescribed at discharge
- **Reasons for not prescribing/ordering meds must be documented by physician, NP or PA**

7

Aspirin within 24 hours of arrival is documented one of three ways-

1. Given in Emergency Room



2. Given on the floor

3. Given en route and documented on the Ambulance Run Sheet

8

LDL Cholesterol Level

Test Ordered

Test Results

- LDL level drawn within30 days of admission or recent result documented
- If LDL >100- patient must have statin prescribed at discharge

9

AMI Door to Balloon (D2B)

Door to Balloon (D2B) time:

- Known as PCI within 90 minutes

The total time from ED arrival to one of:

- first balloon inflation **or**
- first stent deployment/placement **or**
- first clot aspiration

- **Goal is 90 minutes or less**
- **Reminder: document any delays**

10

Discharge Medication Reconciliation

All AMI records must contain at discharge:

- Aspirin, beta blocker, ACEI or ARB (if EF≤ 40%) and statin
- Make sure electronic discharge assessment is completed prior to patient's discharge from the system

11

Pneumonia (PN)

- Initial antibiotic selection- overall
- Initial antibiotic selection for non-ICU patients
  - Order sets for appropriate antibiotics for:
    - *Community acquired pneumonia*
    - *Health care associated pneumonia*
  - Antibiotics must be given within 24 hours of admission

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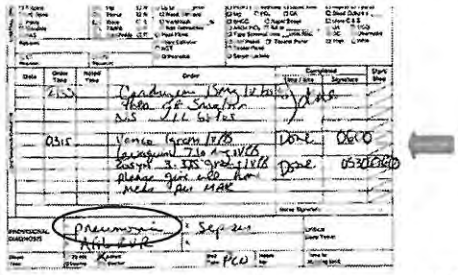
Pneumonia (PN) ER documentation



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Surgical Care Improvement Project (SCIP)

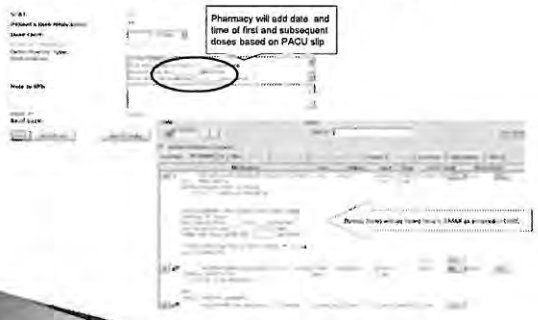
Antibiotic Administration:

- Choose antibiotic from appropriate CPOE order set
- Give antibiotics within 1 hour of surgical incision
- D/C antibiotic within 24 hours of surgery end time
- D/C antibiotic within 48 hours of surgery end time for CABGs (open hearts)

Reminder: physician has to document reasons for delay in start of antibiotic (ex: wound cultures)
OR
for continuing antibiotics for longer than 24 hours
(ex: suspected infection, dirty case)

14

Post Op Order Sets



15

Surgical Care Improvement Project (SCIP)

Foley Catheter:

- Must have urinary catheter removed on post-op day 1 or 2
- Reason not to remove must be documented by physician
  - For example: "continue foley, patient is on bedrest"
  - For example: "keep foley, patient on Diprivan"
- Document d/c foley by using check box in nursing daily assessment

16

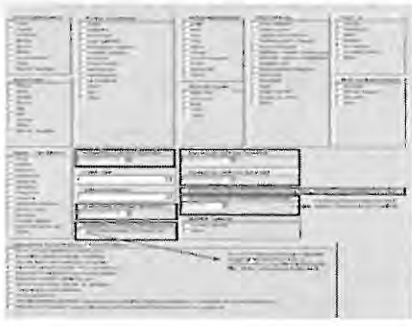
Foley Discontinuation

- Orders are in nursing work queue
- Look for these orders for instructions when to discontinue foley
- If retained, Dr/PA/NP must document WHY

17

Foley Removal Documentation

- Select patient
- Choose daily focused assessment
- Select genito tab
- Add date and time foley removed



18

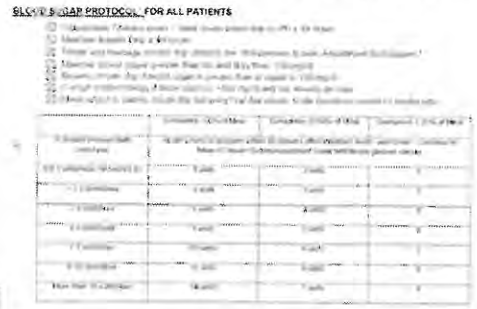
Surgical Care Improvement Project (SCIP)

Post Operative Glucose Control:

- All open heart patients must have a documented controlled glucose < 180 mg/dl during hours 18 through 24 after anesthesia end time.
- Institutional goal is lower
- Post prandial nomogram on order set allows adjustment of insulin to accommodate intake

19

Glucose Control: Blood Sugar Protocol



20

Surgical Care Improvement Project (SCIP)

VTE Prophylaxis:

- Includes mechanical and or chemical
- Must be given or applied within 24 hours before or after anesthesia end time

OR

- Physician documented reason held or contraindication

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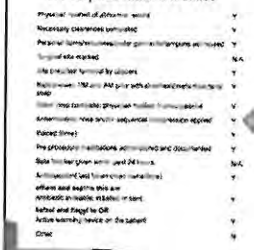
Surgical Care Improvement Project (SCIP)

1. Pre-procedure checklist



2. Intra-operative report

22

Surgical Care Improvement Project (SCIP)

Beta Blocker Therapy:

- Patients on beta blockers prior to admission must receive their beta blocker during the perioperative period
- The PERIOPERATIVE PERIOD is 24 hours prior to surgery and POST OP DAY 1 and/or POST OP DAY 2
- If Beta Blocker not given during this time, a reason/contraindication must be documented
  - For example, "hold BB, heart rate 43"
  - For example, "hold BB, blood pressure 96/54
- Beta blockers can be held for systolic BP<100 or heart rate <50 unless otherwise ordered by physician

23

Held Medication Documentation

Medication Administration History Report

24

Hospital Outpatient Surgery (HOPS)

Antibiotic Administration:

- Choose antibiotic from appropriate order set
  - -Some surgery order sets require ***TWO*** antibiotics
- Administer appropriate antibiotic(s) within 1 hour of surgical incision time

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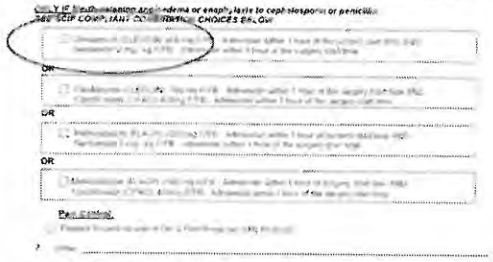
Dual Antibiotic Order Sets



- Some order sets have 2 antibiotics
- Both must be given if box checked

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IMMUNIZATIONS

NOTE: ALL PATIENTS ELIGIBLE FOR MEASURE REGARDLESS OF AGE

- Pneumococcal
  - If status is NO or unknown- vaccinate
  - Document refusals or reasons for not giving
- Influenza
  - If status is NO or unknown during late September through March - vaccinate
  - Document refusals or reasons for not giving

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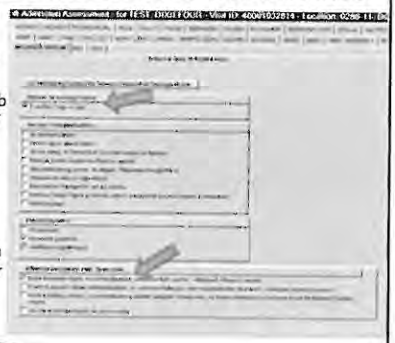
Influenza Vaccine Assessment

- Select admission assessment under patient
- Select influenza tab
- Select 6 months of age or older
- Assess for contraindications
- Select education provided
- Select appropriate box under the plan
- Vaccine will appear on eMAR



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Pneumococcal Vaccine Assessment

- Assess pneumonia vaccine history
- If never received select appropriate screening criteria
- Assess for contraindications
- Select education provided
- Select appropriate box under the plan
- Vaccine will appear on eMAR

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Emergency Department Measures

ED THROUGHPUT

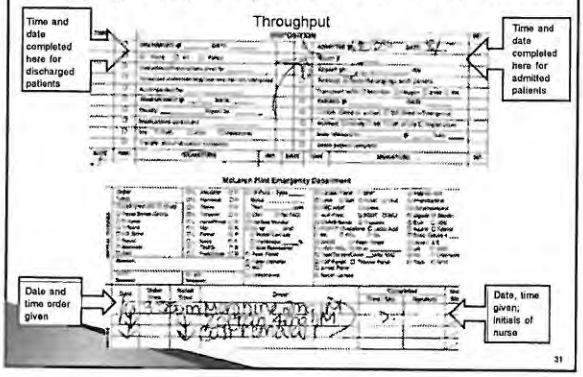
- Document time and date when patient is being ***admitted*** to unit or ***discharged*** home
- Documentation must be in the medical record

PAIN MANAGEMENT LONG BONE FRACTURES

- Document **date** and **time** when patient received oral and parenteral pain medication during ED visit
- Document if patient received pain med in ambulance en route or at home prior to arrival

30

Emergency Department Measures



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Venous Thrombus Embolism (VTE)

- Includes medical and ICU/CCU patients
- Assess and document risk score (Caprini)
  - On admission and with change in condition
- Document if patient on anticoagulants at home
  - To determine if continue during hospital stay
- Assure prophylaxis is ordered and given
  - Mechanical- compression stockings (IPCs)
  - Chemical- Heparin, lovenox, arixtra
- IV unfractionated heparin (UFH) therapy
  - Pharmacy dosing service anticoagulant order set
  - Monitor platelet levels

Reasons therapy not ordered or prescribed must be documented by physician, NP or PA

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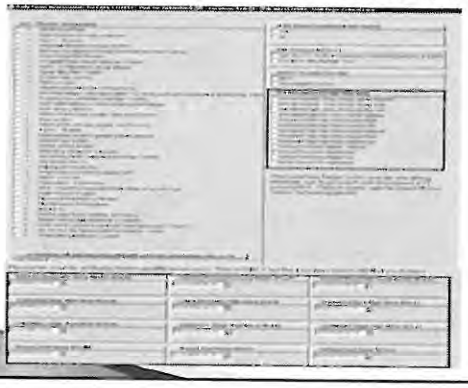
DVT (Caprini) Risk Assessment



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Contraindications to Prophylaxis

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VTE Discharge Education

- Education for patients discharged on Coumadin
  - Importance of taking med as scheduled
  - Importance of monitoring with scheduled labs
  - Coumadin drug information
  - Dietary guidelines
  - When to follow up with physician
- Patient needs to sign/date receipt of instructions

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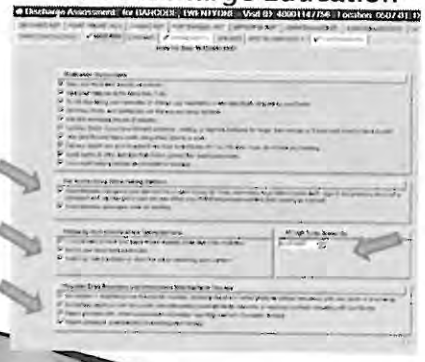
VTE Discharge Education



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Stroke

- Important points to document:
  - Date and time of last known well (LKW)
  - Date and time when TPA started
  - NIH Stroke Scale
  - Swallow assessment
  - Time aspirin was given
    - If NPO, aspirin can be given PR
  - Rehabilitation evaluation for PT/OT/ST

Physician documentation is needed for any reason for medication not being given (ex: GI bleed, etc)

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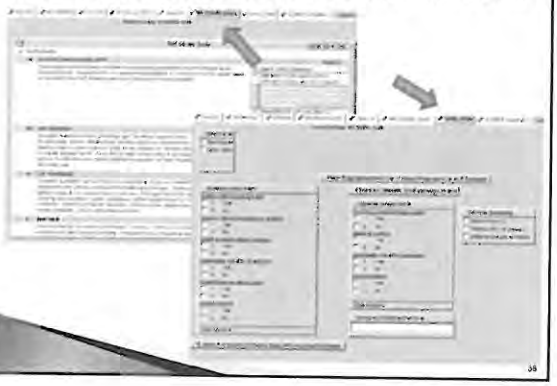
NIH Stroke Scale and Swallow Screens



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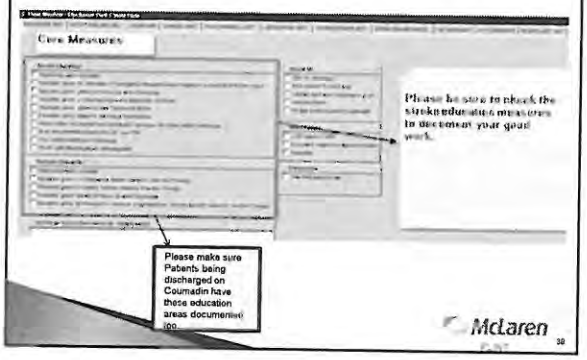
Stroke Discharge Instructions



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Hospital Based Inpatient Psychiatric Services (HBIPS)

- Documentation of:
  - 2 patient strengths
  - Psychological/ trauma history
  - Recent alcohol or substance abuse
  - Recent history of risk of violence to self or others
  - Hours of seclusion and restraint
  - Discharge on multiple antipsychotics
  - Documentation of reason for discharge on multiple antipsychotics
  - Plan of treatment created and sent to next level of care
  - Documentation of treatment plan was sent to next level of care
- Alcohol use (SUB-1)
- Tobacco use (TOB-1; TOB-2)

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Behavioral Health Discharge Orders

- Select discharge diagnosis
- Note if patient is being discharged on 2 or more antipsychotics
- Assure one of the 3 reasons for multiple antipsychotics is chosen

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New Behavioral Health Measures

- SUB-1:
  - Alcohol use assessed within 3 days of admission
  - Use of a valid assessment tool
- TOB-1
  - Tobacco use within 30 days prior to admit assessed
- TOB-2
  - Cessation counseling or FDA approved medication provided to patient

Audit Tool

New Maternal Health Measures

- Early Elective Delivery

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New Maternal Health Measures

- Breast Feeding Mothers

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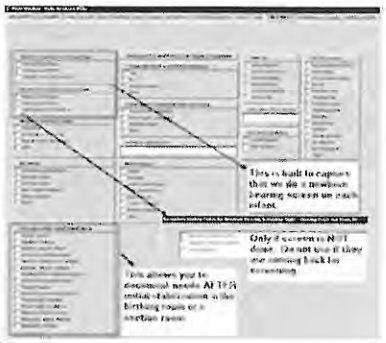
New Maternal Health Measures

- Infant Hearing Screening



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How can you help to achieve Core Measures compliance?

- Generally:
  - If meds not given, document why
  - Document any patient refusals & contraindications
- Vaccines:
  - Talk with patients about flu & pneumonia vaccines
  - Offer & administer vaccinations to eligible patients

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How can you help to achieve Core Measures compliance?

- SCIP:
  - Know start & stop times- antibiotics and foleys
- DVT:
  - Complete DVT risk assessment
  - Document SCD placement
  - Provide & document patient education provided
- Stroke patients:
  - Document time last known well (LKW)
  - Perform NIH stroke scale & swallow exam
  - Assure afib patients have anticoagulant

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How can you help to achieve Core Measures compliance?

- Behavioral health patients:
  - Document care plan sent to next level of care
  - Assess patients with AUDIT tool
  - Assess patients for tobacco use
- Maternal health measures:
  - Document gestational age
  - Document breastfeeding frequency & time
  - Document hearing screening date and time

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If you have questions regarding any of the Core Measures, please call

Quality Management at 342-2005

49

DVT/VTE Risk Assessment

- [ ] 5 Stroke (>/= 1 month)
- [ ] 5 Elective major lower extremity arthroplasty
- [ ] 5 Hip, pelvis or leg fracture (>/= 1 month)
- [ ] 5 Acute spinal cord injury (paralysis) (>/= 1 month)
- [ ] 5 Admit to ICU
- [ ] 5 Multiple trauma (>/= 1 month
- [ ] 3 Age 75 years or older
- [ ] 3 History of DVT/PE
- [ ] 3 Positive Factor V Leiden
- [ ] 3 Elevated serum homocysteine
- [ ] 3 Heparin-induced thrombocytopenia (HIT)
- [ ] 3 Elevated anticardiolipin antibodies
- [ ] 3 Other congenital or acquired thrombophilia
- [ ] 3 Family history of thrombosis
- [ ] 3 Positive prothrombin 20210A
- [ ] 3 Positive lupus anticoagulant
- [ ] 3 Rheumatoid Arthritis (RA)
- [ ] 2 Age 61 - 74
- [ ] 2 Arthroscopic surgery
- [ ] 2 Malignancy (present or previous
- [ ] 2 Laparscopic surgery (>45 minutes)
- [ ] 2 Patient confined to bed (> 72 hours)
- [ ] 2 Immobilizing plaster cast/brace (< 1 month)
- [ ] 2 Central venous access
- [ ] 2 Major surgery
- [ ] 1 Age 41 - 60 years
- [ ] 1 Swollen legs (current)
- [ ] 1 Varicose veins
- [ ] 1 Obesity (BMI greater than 30
- [ ] 1 Minor surgery planned
- [ ] 1 Sepsis (<1 month)
- [ ] 1 Serious lung disease including pneumonia (<1 month)
- [ ] 1 Oral contraceptives or hormone replacement therapy
- [ ] 1 Pregnancy or postpartum (<1 month)
- [ ] 1 History of unexplained stillborn infant, recurrent spontaneous abortic
- [ ] 1 Acute myocardial infarction
- [ ] 1 Congestive heart failure (<1 month)
- [ ] 1 Medical patient currently at bed rest
- [ ] 1 History of inflammatory bowel disease
- [ ] 1 History of prior major surgery (<1 month)
- [ ] 1 Abnormal pulmonary function (COPD)
- [ ] 0 None

Risk Assessment Score

- [ ] Low risk (0-1) early amb. ROM
- [ ] 2 or above, see physician order

DVT Prevention

- [ ] Antiembolic stockings knee on
- [ ] Antiembolic stockings knee off
- [ ] Antiembolic stocking thigh on
- [ ] Antiembolic stocking thigh off
- [ ] Sequential compression device calf on
- [ ] Sequential compression device calf off
- [ ] Sequential compression device foot on
- [ ] Sequential compression device foot off
- [ ] Patient instructed on ankle pumps
- [ ] Amb in halls
- [ ] Amb to BR
- [ ] Other

- [ ] Low risk (0-1) early amb. ROM
- [ ] 2 or above, see physician order

DVT Prevention

- [ ] Antiembolic stockings knee on
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- [ ] Amb to BR
- [ ] Other

Ostomy Care

Cutting, Pasting, Pouching and Praying

The CWOCN's role in the care of the surgical patient

Christina McDougall R.N., BSN;CWOCN
McLaren --Flint

Everything I Needed to Know, I Learned in Kindergarten

Perfection

Welcome to My World!

Just when you think it can't get any worse….

This where the prayer comes in…

Necroizing Fasciitis

Negative Pressure Wound Therapy

Disposable Wound Vac

Miscellaneous NPWT Info

- Dressing changes are typically Monday, Wednesdays and Friday
- Dressing changes are done by members of the Wound Care Team and physicians
- Change VAC canisters when full. Canisters are available form cart.
- If air leak occurs, patch using VAC drape or transparent dressing
- If unable to resolve pump alarm, discontinue VAC and apply saline gauze dressing. Notify wound dept., ext.22282, for VAC reapplication.
- When the patient is transferred to another facility or discharged:
  - VAC therapy must be discontinued.
  - VAC dressing must be removed.
  - Saline gauze dressing placed.
  - VAC pump is placed in the dirty utility room for pick up. **DO NOT PLACE IN A BIOHAZZARD BAG!**

Ostomy Care

Types of Ostomies

- Colostomy
  - Left lower quad, stool thick paste; may have more predictable times of output; fewer dietary changes
- Ileostomy
  - Right lower quad, liquid stool; more constant output; caution with foods that can cause blockage; may have fluid and electrolyte imbalances
- Urostomy
  - Right lower quad, constant flow of urine;need for increased fluid intake;need to connect to night drainage system

What is the most important thing you can teach a new ostomate?

Types of pouches





Things you need to change a pouch

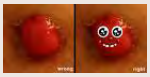





10 common reasons why pouches leak and how to avoid them

- Poor adherence to peristomal skin
- Wrong size pouch opening
- Folds or creases
- Peristomal skin irritation
- Improper pouch angle
- Too infrequent emptying
- Extremely high temperature
- Pouch wear and tear
- Improperly stored appliances
- Aging materials

Thank You!



Bariatric Surgery

Bariatric Surgery

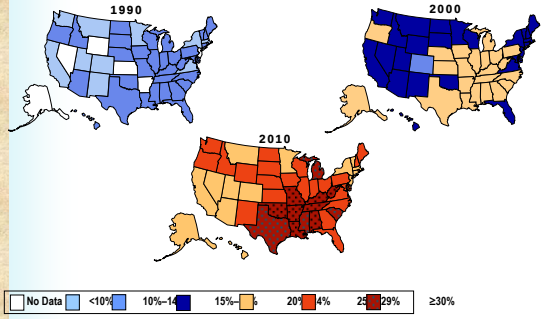
Tanya Brooks RN, BSN, MSN,
Certified Bariatric Nurse,

Family Nurse Practitioner-
Board Certified

Obesity

- Obesity is defined as a body mass index (BMI) of 30 or greater.
- Morbid Obesity is defined as BMI of 40 or greater or a 100 lbs above individual ideal body weight.
- It is a serious public health issue in the US.
- Projected by 2010 there may be 31 million US adults with morbid obesity.
- http://www.cdc.gov/obesity/data/trends.html

Obesity Trends* Among U.S. Adults
BRFSS, 1990, 2000, 2010
(*BMI ≥30, or about 30 lbs. overweight for 5'4" person)



Health Risks

- Coronary heart disease
- Type 2 diabetes
- Cancers (endometrial, breast, and colon)
- Hypertension (high blood pressure)
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Stroke
- Liver and Gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis (a degeneration of cartilage and its underlying bone within a joint)
- Gynecological problems (abnormal menses, infertility

http://www.cdc.gov/obesity/causes/health.html

Impact of Obesity

- Morbid obesity is a disease and it interferes with basic physical functions such as breathing or walking.
- Long term implications of the disease include shorter life expectancy, serious health consequences and a lower quality of life with fewer economic and social opportunities.

Weight Loss Tools

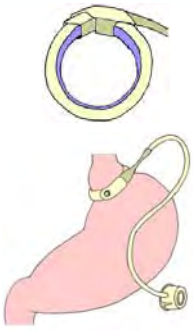
- There are multiple tools to for weight management.
- They include diet:
  - Exercise
  - Behavior Modification
  - Today's Topic Bariatric Surgery

Three Types of Bariatric Surgery

- Gastric Banding
- Roux-en-Y

Gastric Banding

- Laparoscopic
- Restrictive
  - Restricts amount of food that can be eaten
  - Gives feeling of fullness



Vertical Sleeve

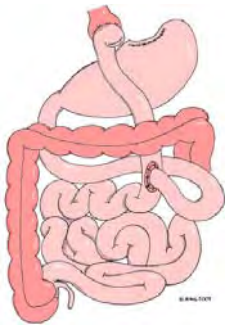
- Open or Laparoscopic
- Restrictive
- Metabolic affects Ghrelin hunger hormone

Gastric Banding Versus Sleeve

- More restriction with the sleeve
- No Metabolic changes Ghrelin with the band

Roux-en-Y

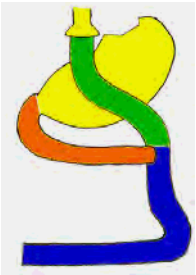
- Open or laparoscopic
- Restrictive and Malabsorption/ Maldigestion
  - Restricts amount of food that can be eaten (like banding)
  - Adds malabsorption and maldigestion
- Metabolic affects Ghrelin hunger hormone



1. Before procedure		2. The gastric pouch if formed by separating the gastric pouch from the rest of the stomach	
3. The jejunum is separated about 50 cm from the stomach with a surgical stapler		4. The jejunum from the stomach is attached to the side of the small intestine forming the Roux limb (100cm - 150cm)	
5. The Roux limb is passed up to the gastric pouch		Roux limb = **Green** Y limb = **Orange** Common limb = **Blue**	

How Roux-en-Y Works

- Roux limb (GREEN) - food enters from esophagus; longer limbs promote greater maldigestion and malabsorption
- Y-limb (ORANGE) - digestive enzymes enter
- Common limb (BLUE) - food and digestive enzymes come together



Metabolic Affects

- Hunger hormone: Ghrelin decreases the appetite.
- Improves or resolves Type II Diabetes caused by obesity.

Nursing Care and Early Complications (<30 days Post-Op)

Airway Management

Complications

- **Respiratory depression**
  - Residual effects of anesthesia, pain meds, sedatives
  - Poor positioning – pushing diaphragm up into lungs
  - Hypoventilation
    - Sleep apnea
    - Atelectasis

Early Ambulation

- Patients should be up walking every 2-3 hours post-op.

Airway Management

Nursing Care

- Lung assessments
- Monitor SPO2
- Incentive spirometry
- Coughing and deep breathing
- Reverse Trendelenburg; HOB 30-45 degrees
- Monitor LOC
- CPAP/BIPAP mask when asleep

Pain Management

- Patient controlled analgesia
- Ice packs
- Repositioning
- Oral meds until after gastrografin swallow

Cardiovascular

May have

- Pulmonary hypertension
- Right-sided heart failure (cor pulmonale)
- Increased workload on heart

May lead to

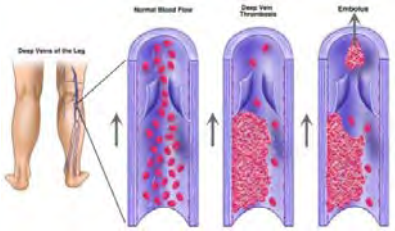
- CHF
- Myocardial ischemia
- Dysrhythmias
- Sudden death

Cardiovascular Interventions

- Give fluid carefully – dehydration versus CHF
- Regular assessment of skin (warm/cool)
- Regularly Assess:
  - Trends in VS
  - Lung sounds
  - I & O
  - SPO2

Deep Vein Thrombosis (DVT)

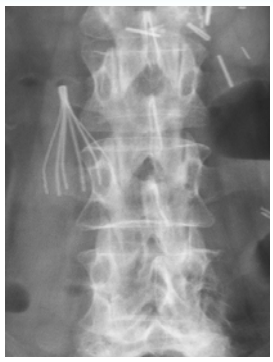
- **Risk Factors**
  - Obesity
  - Immobility
- **Signs and symptoms**
  - Pain/tenderness, ↑swelling, venous distention



Deep Vein Thrombosis (DVT)

- **Diagnosis**
  - Venous doppler
- **Treatment**
  - Early & frequent ambulation
  - SCDs – on at all times
  - Anticoagulation LMWH
  - Inferior vena cava filter – pre-op

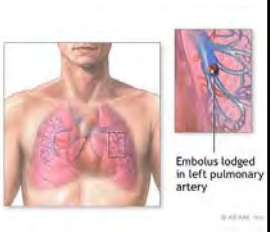
Inferior Vena Cava Filter



Pulmonary Embolism

PE is leading cause of death

- **Risk Factors**
  - Obesity
  - Immobility
- **Signs/Symptoms**
  - SOB, CP, anxiety, feelings of impending doom, decreased SPO2, tachycardia, cough, crackles, wheezing, or hemoptysis



Pulmonary Embolism

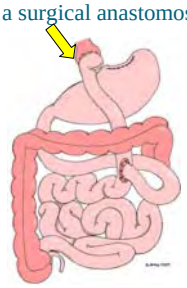
- **Diagnosis**
  - CT scan, Doppler study, and/or V/Q scan.
- **Treatment**
  - Anticoagulants, oxygen, vena cava filter, or surgery

Pulmonary Embolism

- Lovenox is given pre-op
- Administer 30mg Lovenox twice a day post-op.

Anastomotic Leak

- Leakage of gastric or intestinal fluid into the abdomen caused by breakdown of the surgical suture line of a surgical anastomosis



Anastomotic Leak

Signs and Symptoms

- Unexplained tachycardia (HR>120 12 hours post-op)
- Pain in back or left shoulder
- Worsening pain
- Fever
- Shortness of breath
- High respiratory rate
- Thirst
- Abdominal pain
- Abdominal distention
- Pelvic pain
- Substernal pressure

Anastomotic Leak

Signs and Symptoms

- Hiccups
- Restlessness
- Bile in JP drain
- Decreased SPO2
- Hypotension
- Unexplained oliguria
- Elevated WBCs
- Persistent nausea/vomiting
- ↑drainage from JP drain removal site; discoloration

Anastomotic Leak

- **Diagnosis**
  - Upper GI with gastrograffin
    NPO until after test
  - CT scan
  - CBC with diff.

Anastomotic Leak

- **Treatment may include:**
  - Surgical correction
  - Drain placement
  - Radiological drainage
  - Antibiotics
  - Initiation of TPN
  - Supportive therapy
  - If clinically unstable, operative intervention should occur, and patient should be transferred to ICU.

Skin and Wounds

- **At risk because:**
  - Poor blood supply to adipose tissue
  - Excessive moisture
  - Accumulation of bacteria in skin folds
- **Signs/Symptoms**
  - Redness, swelling, and drainage at the incision or JP drain site
  - Poor healing may lead to poor approximation of the incision, hernia or dehiscence
  - Bruising
  - Sub Q Hematoma formation

Stenosis

Connection between the new stomach pouch and intestine become blocked, edematous, or scarred; caused by erosion, ulceration, loose staple, or foreign body (such as food)

- **Signs/symptoms**
  - Vomiting without nausea
  - Vomiting fluids and solids
  - Increased saliva
  - Inability to advance to solid foods
  - Fluid reflux when supine
  - Assessment and

Stenosis

- **Diagnosis**
  - Upper GI, EGD
  - Monitoring of electrolytes, liver enzymes, amylase, and lipase.
- **Treatment**
  - Dilation by EGD
  - Removal of foreign body
  - Anti-reflux medication
  - Dietary supervision (slowly advance from clears and full liquids)

GI Hemorrhage

- **Signs and symptoms**
  - Vomiting blood
  - Blood in stool
  - Bloody drainage in JP
  - S/S of blood loss/anemia (weakness, sweating, pallor, faintness, thirst, tachycardia, thready pulse, hypotension, orthostatic hypotension)

GI Hemorrhage

Treatment

- Call Physician STAT
- Lab work (Type and Cross, PT/PTT, CBC, H/H, platelets)
- Large bore IV/fluids (NS or LR)
- Blood Products
  - PRBCs (low H/H),
  - Platelets (low platelets)
  - FFP (prolonged clotting times)
- **Depending on severity of bleeding, patient may require surgery**

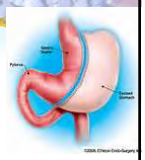
Small Bowel Obstruction

- An anastomosis can become blocked, edematous or scarred. This can occur because of adhesions, internal hernia, or bands of fibrous tissue.
- **Signs/symptoms**
  - retching
  - abdominal pain that radiates to back or shoulder
  - firm abdomen
  - elevated amylase/lipase

Small Bowel Obstruction

- **Interventions**
  - NPO
  - Fluid replacement
  - Alternative form of nutrition
- **Treatment**
  - Swelling may resolve after a couple days
  - May need surgical correction

Vertical Sleeve Gastrectomy



Delayed outlet, due to swelling and Edema, can cause nausea.

Complications very similar to the gastric bypass, leak is the major complication to monitor for. Persistent nausea vomiting, can cause dehydration.

Efficacy of VSG

- Average EWL 60% at 5 years similar to the LRNY
- Resolution of comorbidities comparable to those seen with other restrictive procedures
- T2DM 66%, HTN 54%, OSA 62%, GERD 69%
- Postoperative 30 day mortality rate -0.1% (2003-2009 data collected)

Advantages & Disadvantages

- *Advantages*
- Preservation of pylorus
  - Prevention of dumping syndrome
- No malabsorption
- Weight loss comparable to GBP
- Feasibility of 2nd procedure if needed

Disadvantages

Lack of long-term data for durability of procedure compared to GBP and LAGB

Complications

- Similar to the gastric bypass
  - Gastric Leak
  - Bleeding
  - Stricture & Obstruction
  - Pulmonary embolism/DVT
  - Infection
  - Dehydration
  - Nausea & Vomiting

Gastric Leak

- Incidence: 0-2.2%
  - Proximal staple line leaks-1.3%
  - Distal staple line leaks-0.5%

Causes:

Staple line dehiscence
- related to high intraluminal pressures post op
- at criss-cross of stapling (staples over staples)
- patient-induced

Ischemic
- due to electrocautery of vessel sealing systems

Bleeding

- Incidence: 2%
- Endoluminal and/or extraluminal

- Causes:
  - Increased risk due to long suture line
  - Stomach has thick wall with 3 layers of very well vascularize muscle

Bleeding

- Melena
- Hematemesis
- Hypotension
- Tachycardia
- Decreased hemoglobin/hematocrit
- Drain output (65% place a JP drain)

Treatment: Call the surgeon
Blood Transfusion
Reoperation

Gastric Stricture & Obstruction

- Incidence: 0-0.63%
- Causes:

  Iatrogenic-size of bougie

  "Floppy" sleeve

Symptoms:

Nausea/Vomiting

Preoperative Care for VSG

- Labs
- Appropriate Clearances
  - Pulmonary, Cardiac, Psychological, Nutrition

Preoperative diet

Improve surgical risks

Evaluate patient adherence

EDUCATE, EDUCATE,EDUCATE

Patient/Family teaching

Postoperative Care of VSG

- In hospital: Airway stability, Auto PAP
  - Monitor for complications
  - Pain Management – Avoid over sedation
  - Early Frequent Ambulation
  - HOB elevated 45 degrees to 90 degrees
  - Continued VTE prophylaxis
  - Nutrition-Gradual diet progression (no solid foods for 3 months)
  - Reinforce educaiton (vitamins, diet small bites/sips, when to call surgeon)

Post Op Care

- Phenergan 12.5mg po/IM q6 hrs (low cost) with alterating Zofran 4mg ODT/po q6 hrs for nausea
- Levsin 0.25mg po/SL q 4hrs(esophageal spasms)
- Valium (esophageal spasms)
- Carafate 1g susp po tid (antiulcer)
- Prilosec 20mg po bid
- IV Tylenol

- Pain Management PCA, then Lortab Elixir,

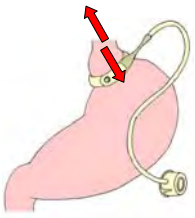
Emergency Signs to call surgeon

- Severe abdominal pain denies improving with pain medication or position changes.
- Severe Nausea and Vomiting, unable to tolerate water.
- Urine output reduced, urine tea colored
- Fever temp greater 100.5
- Redness, warm, tenderness or drainage at incision sites.

Gastric Banding Complications

Band Slippage

- Band can slip anterior or posterior
- **Signs and Symptoms**
  - Nausea
  - Vomiting
  - Abdominal pain
- **Diagnosis** is made with upper GI series
- **Treatment** is repositioning or replacement of the band.



Gastric Banding Complications

Band Erosion

- Ischemia from pressure of band on gastric wall
- Generally asymptomatic; may have non-specific abdominal pain, GI bleeding, cessation of weight loss, abdominal abscess, or **port abscess/infection.**
- **Pay attention to the port site- can be subtle and a positive indicator of erosion**.
- Diagnosis made with barium swallow, upper endoscopy, or CT scan
- Treatment is hospital admission, band removal and IV antibiotics
- Symptoms can include: port and incision infection, pain and or hematoma

Nutrition

- **Surgery can lead to nutritional deficiencies**
  - Life-long vitamins and minerals
- **Nausea and Vomiting**
  - Dehydration
  - Eating too fast
  - Eating too much
  - Not chewing adequately
  - Pain medication
  - Dumping syndrome

Dumping Syndrome

- Occur in Roux-en-Y patients
- Caused by sugars or carbohydrates entering the small intestine without being diluted by gastric secretions

Dumping Syndrome

- **Early dumping syndrome**
  - occurs within 30 to 60 minutes of eating
  - can last up to an hour.
  - Signs and symptoms:
    - nausea, light-headedness, tachycardia, palpitations, fullness, diarrhea, cramping and pain
  - Self-limiting and non-life threatening
  - Treatment includes the avoidance of refined sugars, high glycemic carbohydrates, or other foods that cause symptoms

Dumping Syndrome

- **Late dumping syndrome**
  - Occurs one to three hours after eating
  - Caused by hypoglycemia
  - **Signs and symptoms** of late dumping syndrome are those associated with hypoglycemia:
    - sweating, shakiness, decreased LOC, hunger, fainting, and loss of consciousness.
  - **Treatment**
    - treatment of hypoglycemia per protocol

Bariatric Diets at MRMC

- Clear liquids
  - Diluted fruit juice
  - No carbonated beverage
  - No coffee
  - Broth
- Bariatric full liquids

Nutrition Interventions

- Monitor constipation and diarrhea
- Give anti-emetics
- Minimize complications by:
  - Avoid foods with high levels of refined sugar
  - Chewing thoroughly; small bites and chew 30 times
  - Eat and drink slowly
    - Don't drink – sip continuously
  - Drink between (not with) meals
  - Eating balanced meals, protein first
  - Do not "gulp" foods

Nutrition Tips

- No straws
- Drink from 30cc med cups
- Patients may drink 15cc to 30cc every 15 minutes post-op (6oz to 8oz per hour) – sip continuously

Nutrition Tips

- Fruit must be unsweetened
- Only skim or lactaid milk
- Scrambled eggs and cottage cheese allowed on the puree diet
- No stringy foods
- Toasted bread only
- No BBQ sauce, baked beans, sweetened fru topping or relishes

Nutrition Tips

- No tomato soup (V8 juice is OK)
- No desserts permitted
- No sugar, brown sugar, honey, syrup, or jelly
- No carbonated beverages

Snack Items

- Sugar free high protein jello
- Sugar free pudding
- Sugar free sorbet
- Light yogurt (Not “Fruit on the Bottom” varieties)
- Sugar free Popsicles
- Cottage cheese
- Unsweetened applesauce

Pharmacotherapy

- Give IV instead of IM or SQ; possible poor absorption
- No pills larger than an regular plain M&M
- No Glucola for Glucose Tolerance Testing (RNY)

Psychosocial Support

- May have experienced prejudice
- May have shame, embarrassment, fear
- Need to support, encourage, and maintain professional attitude

Patient Education

- Diet
- Activity
- Lovenox (if high risk or IVC filter)
- Pain management – Rx for liquid lortab given
- Signs of complications

Late Complications (>30 days post-op)

- Incisional hernia
- Nutritional deficiencies of protein, iron, calcium, and vitamin B-12 occur because of poor absorption, vomiting and food intolerance
- Cholelithiasis
- Dilation of Gastro-Jejunal Anastomosis

Late Complications (>30 days post-op)

- Ulcers
- Redundancy of skin folds
- Erosion
- Pouch dilation

Re-hospitalization for Complications

- Nutritional consult for *appropriate bariatric diet*
- DVT prophylaxis
- Obtain consult with bariatric surgeon

The End

My McLaren

McLaren University Courses

Teletracker
Novell Window go to MHCC Intranet
Change IP address to http://10.14.28.62/XT_TEST/default.aspx
User ID: nursetraining (one word, no capital letters)
Password: 1111
Click on "patient tracking portal"
Select a unit
Instructor proceed with training

Emmi

Signing on
Novell Window go to **My McLaren**

- Sign on with first name as it appears on pay stub with last four of social security number
- Password is birth date in numbers (example 05121964)
- Change your password
- Find number including all zeros next to your name and remember this
- Go to McLaren University
- Type in that number as user including the zeros and repeat as password
- Go to Profile and change password and set a password reminder and email

For All:

- **Go to** *"My Learning" tab*
- Assigned learning select **HCAHPS**
- Click on and proceed with following
    - Knowledge check
    - HCAHPS
    - Post assessment
    - Evaluation
- **RNs** under catalog tab in search space type in:
    - **Omnicell**
    - Select MHC (Bay Region)Pharmacy Color touch Omnicell—Working in non-profiled environment
    - Enroll in Class

Proceed with all the different parts under "Learning Activity"

- **RNs following areas Resource, Emergency department, 2C (Observation), 6C (PCU),12S, 10S, 8S, SCU, ICU, CCU <u>do first</u> before other assigned learning:**
- On MHCC Intranet, Nursing Education, Continuing Education, Stroke
    - Review Stroke and Dysphagia Powerpoint, complete and turn in quiz
- Under catalog tab of McLaren University in search space type in:
    - NIH stroke
    - Select **Hemisphere Stroke Competency Series NIH Stroke Scale Training** and Certificate
    - Enroll in Class

Proceed with all the different parts under "Learning Activity"
All RNs Complete assigned learning activities as time allows
**Once you add your license information under my profile, manage discipline and license information, you will be able to print off a CEU certificate for this program

STROKE AND DYSPHAGIA
COMPETENCY CHECK OFF

COMPETENCY GUIDELINES	DATE COMPLETED	TRAINER INITIALS
Attend in service or watch video.		
Take competency test.		
Demonstrate accurate completion of dysphagia screen.		

Employee: _____

Date: _____ Unit: _____

Trainer: _____

WRITTEN TEST SCORE: _____

Name _____ Date _____ Unit_____

Dysphagia Competency Quiz

1. What is dysphagia?_____

2. What percentage of patients admitted to the hospital for stroke had swallowing difficulty?

   a. 40%
   b. 20%
   c. 65%
   d. 45%

3. How many stages are there of dysphagia?_____
What are they?_____

4. What is aspiration?_____
_____

5. Aspiration of food/liquid into the lungs would indicate what stage of dysphagia? _____

6. Oral stage dysphagia can include:

   a. Difficulty opening the mouth
   b. Difficulty chewing
   c. Holding the bolus in the mouth
   d. Difficulty moving the bolus to the back of the mouth
   e. All of the above

7. Esophageal Stage Dysphagia can result in poor Upper Esophageal Sphincter opening and _____.

8. Name 3 signs and symptoms of oral and pharyngeal stage dysphagia?

1._____

2._____

3._____

9. Which sign and symptom does NOT indicate esophageal stage dysphagia?

a. Difficulty chewing
b. Food sticking in the throat
c. Recurrent pneumonia
d. Unexplained weight loss

10. T or F If a person does not cough/choke on liquid or food then we know they are not aspirating.