

HEMS C Q I Training

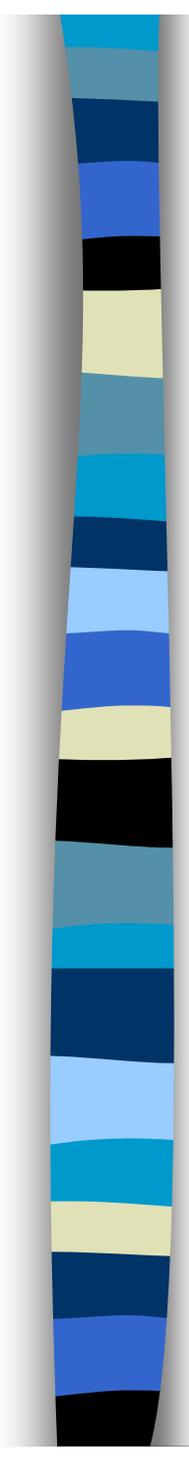
■ OVERVIEW

- Continuous Quality Improvement (CQI) is a very important part of Emergency Medicine today, and in the future.
- CQI is an on going process, whose sole purpose is to improve quality.
- This is done many ways.
 - It is conducted privately, because CQI are not discoverable in court, if the rules are followed. CQI Must is an organized program.
 - All CQI documents should be marked as CQL Everything discussed in a CQI Meeting stay in the Meeting.
 - Personal identifying information should be removed. This includes the patient's name, and personnel's name.
 - Personnel should be identified by a number or code, which is only known to that person and the QC'I Director.



HEMS C Q I Training

- Topic is chosen by physician director, at least 1 per six month report.
- Current topics:
 - *AMA,*
 - *Child Birth,*
 - *Medications,*
 - *Airway,*
 - *Spinal Indicators,*
 - *Documentation*
 - *Communicable Disease*
 - *IV's,*
 - *Mental Status Changes,*
 - *Chest Pain,*
 - *Splinting,*
 - *Priority #1*
 - *Trauma*



HEMS C Q I Training

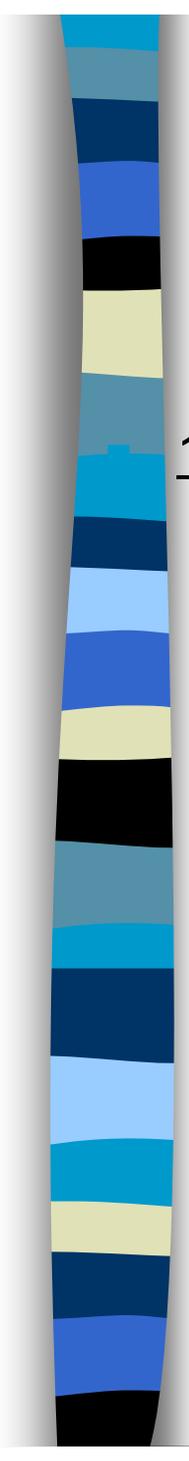
INDICATORS

Indicators, markers, monitors all mean, basically, the same thing, HEMS has already chosen a list of indicators, for each CQI topic.

QCI Reports: 2 reports are required every year. Work with you physician director to review and complete.

All QCI Reports contain 4 elements

- 1 Data
2. Analysis of Data
3. Summary of Data
4. Plan for future



HEMS C Q I Training

1. DATA

- For each QCI topics there are data collection sheets.
- Each sheet lists the dictator for each study.
- How many Runs do you need to review?
- Depending on the topic and the company size will make a difference in data collection. For example a large company may have 1000 chest pain runs in :1 month, and a small company may only have 10 Runs in 6 months. So, the smaller company will need to review all its runs, in order to get a larger enough sample size, and the large company will only need to a percentage of the runs. If using sample system, you need to pull enough runs , so that you get at least a few chart from everybody. If your sample size is very small, like with OB, a review course may be substitute, but only with the approval the physician director.



HEMS C Q I Training

2. **DATA Analysis:**

- Adding up all the data collection points and comparing it against -the threshold and other companies and individuals within your own company, or prior reviews.

3. **DATA Summary:**

- How did you do? Did you meet **and surpass the goal and where did you fail?**

4. **Plan for the Future:**

- After your review and summary, what are your plans to correct and problems that you discovered, i.e. training program, peer review, and repeat markers in six months, or everything was good and no further review is indicated

HEMS C Q I Training

Participating Agency _____

Counties represented _____

Sort as indicated by the Wayne County Protocols

	Occurrence Performance	Percent	Threshold
			95%
			95%
			95%

i.e. " performance number" is the number of deviations that were documented.

Completed By:

Report Date:

HEMS C Q I Training

HEMS Quality Improvement Clinical Indicators

EMT-B

EMT-S

EMT-P

Title: Splinting

Standard: The patient with a suspected Fracture, will be provided assessment, treatment and transport

Reference: This standard may be referenced to the SEMRP splinting procedure

Specific clinical indicators	Total
Mechanism of Injury:	
1. How did the patient injury occur	
A. Fall assault, mva	
2. Impact description	
Assessment:	
3. Extremity fracture above hand or foot	
4. Motor and /or sensory deficit	
5. Deformity opened or closed	
Treatment:	
6. Treatment by another HCP prior to arrival is documented	
7. Immobilization:	
a. immobilization not indicated	
b. pt. injury immobilized prior to arrival	
Motor/ sensory pulse assessed after immobilization	
9. Motor sensory/pulse at time of TOT ED staff	
10. Any deviations from standard care is documented	



HEMS C Q I Training

Continued

- (1) Total number should remain constant 4-10
- (2) The total of deviations should equal those patients who did not get the expected performance. The Treatment # 7 only

Methods: Data collected through retrospective run review

Screen: Review Priority 2 & 3 patients for a 6 months period

Audit start:

Audit completed:

Comments/ Audit exceptions:



HEMS C Q I Training

HEMS EMS SYSTEM
INTEGRATED AGENCY/SYSTEM QUALITY IMPROVEMENT (QI) PLAN
CONFIDENTIAL MONITORING AND EVALUATION REPORT

This document is part of the professional/peer review process of the Wayne County Medical Control Authority and the generating EMS provider agency. This document, any attachments (whether or not specifically labeled QA/QI material), and any records, documents, data, knowledge or discussions involved in the preparation and/or review of this document are confidential, not public record, and not subject to subpoena subject to one or more of MCL 331.531, 331.532, 331.533, 333.20175, 331.21513, 331.21515 and other State and Federal laws. Unauthorized duplication, distribution, or disclosure is prohibited.

EMS AGENCY: _____ PERIOD REPORTED: _____

AREA OF EMPHASIS: _____

INDICATOR 1: _____

INDICATOR 2: _____

THRESHOLD: _____

FINDINGS	CONCLUSIONS	RECOMMENDATIONS/ ACTIONS TAKEN	FOLLOW-UP/ EVALUATION OF ACTIONS TAKEN

SIGNATURES

REPORT PREPARED BY: _____ TITLE: _____ DATE: _____

(TRAINING OFFICER OR OA LIAISON)

CHIEF/DIRECTOR OF AGENCY: _____ DATE: _____

PHYSICIAN ADVISOR: _____ DATE: _____

HEMS C Q I Training

HEMS QUALITY IMPROVEMENT CLINICAL INDICATORS

Paramedic-Specialist-EMT-B

Participating Agencies: _____

Counties Represented: _____

Title: Combitube insertion - Adult patients 16 yrs. and older

Standard: Combitube insertion- will be established to secure and maintain a patent airway in specific pre-hospital patients as indicated by the Wayne County Protocols

Reference: This standard may be referenced to the SEMRP Airway Management/Oxygen Procedures

Specific Clinical Indicators	Totals	Occurrences Performance	Percent	Threshold
1. Combitube insertion must occur in a patient with a compromised airway: and ET intubations n/a or unsuccessful) a. Cardiac Arrest b. Unconscious c. Decreased LOC with GCS < 8 d. Severe respiratory compromise (patients indicated and patients attempted, not number of attempts)	(indicated)	(attempted)		95%
1 a. Combitube must occur in a patient with a compromised airway: a. Cardiac Arrest b. Unconscious c. Decrease LOC with GCS<8 d. Severe respiratory compromise (patients indicated and patients attempted, not number of attempts)	(indicated)	(success)		95%
2. Combitube insertion occurs within 2 attempts				95%

HEMS C Q I Training

3a. If the Combitube is not established. Assist ventilations as indicated until the patient has arrived to the receiving facility (This total indicated should equal number of unsuccessful Combitube insertions) (please note the exceptions such as pediatrics)	(indicated)	(attempted)	95%
Bob. If Combitube insertion is established, assist ventilations as indicated until the patient has arrived to the receiving facility (patients Combitube attempted and patients with attempted and success)	(attempts)	(success)	95%
4. Advanced airway insertion must occur with verification of initial tube placement by auscultation and CO2 detector and receiving physician (total successful Combitubes)	(success number)		100%
5. Verification of correct tube placement following any patient movement (total successful Combitube insertions)			90%
6. The combitube is secured and tube depth is marked (total successful Combitube insertions)			100%

Methods:

Screen:

Audit due:

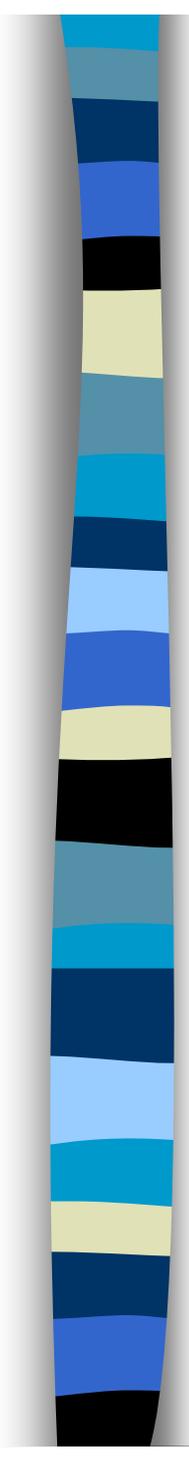
Comments/ Audit exceptions:

Data collected through retrospective run review

Review Priority 1 patients until 25 patients can be entered into audit

Audits Completed:

Summary Report Date:



HEMS C Q I Training

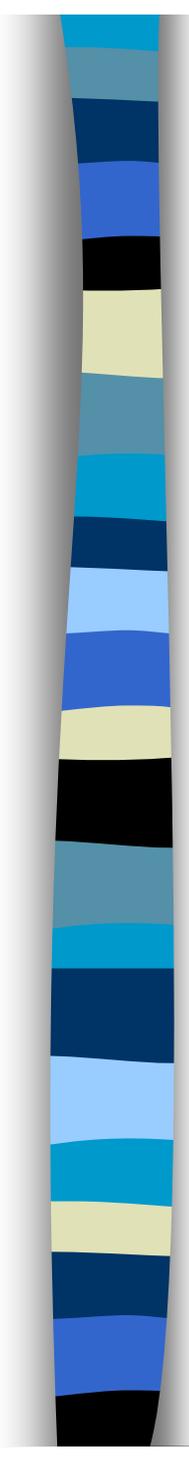
CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

On scene when an Emergency may still exist:

If a patient or a minor patient's family refuses care or ambulance transportation to the hospital:

1. Explain indications for transport.
2. Explain possible complications that could arise without transport.
3. If any treatment procedures have been initiated, contact Medical Control. Clearly **explain to all concerned the wishes of the physician providing medical control**.
4. Do not initiate any patient care after ambulance transportation is refused. Obtain medical control clearance to leave the scene.



HEMS C Q I Training

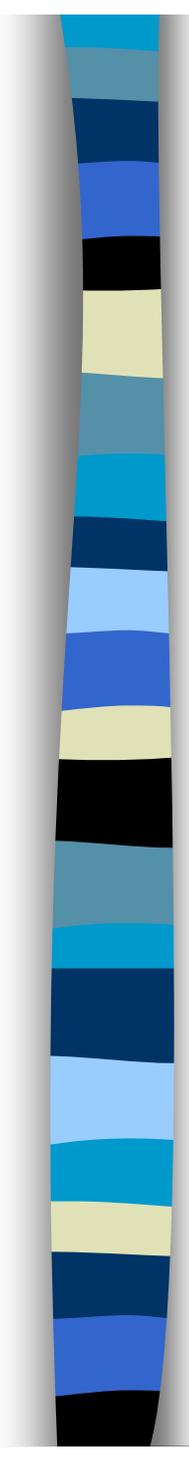
CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

On scene when an Emergency may still exist:

If a patient or a minor patient's family refuses care or ambulance transportation to the hospital:

5. Document the discussion with and obtain names, addresses and telephone numbers of all witnesses on the Ambulance Report Form and request that it responsible individual sign the Service Refusal Statement on the Report Form. If the patient refuses to sign the Statement of Refusal, make every effort to obtain witness signatures.
- 6 Document on the run report any witnesses to the refusal.
7. Public Act 179, Section 20969- This part and the rules promulgated under this part do not authorize medical treatment for or transportation to a hospital of an individual who objects to the treatment or transportation. However, if emergency medical services personnel, exercising professional judgment, determine that the individual's condition makes the individual incapable of competently objecting to treatment or transportation, emergency medical services may provide treatment or transportation despite the individual's objection unless the objection is expressly based on the individual's religious beliefs.



HEMS C Q I Training

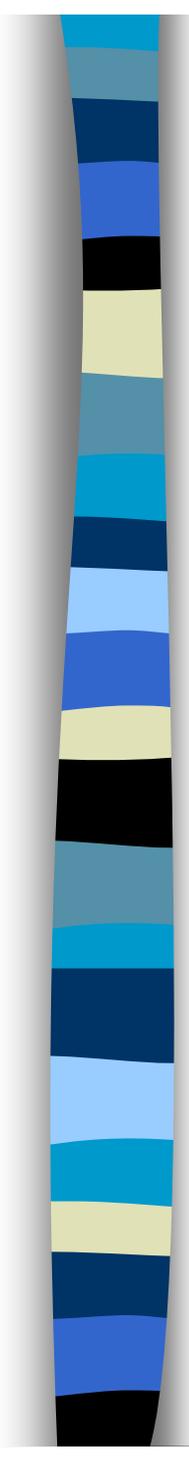
CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Discussion:

Patients who refuse emergency medical care present the EMS system with a wide variety of challenging situations. The problem of refusal of care arises because health care providers must balance the autonomy of the patient against the interests of the State in **maintaining** its citizens' life and health. Patient autonomy requires that the patients be allowed to refuse any care that they find objectionable, for whatever reason. However, the state has an interest in preserving life; of protecting the lives of innocent **third** parties, such as a fetus, children, "incompetents" and other dependents; and of preventing injuries to third parties.

The legal issues are protection from liability related to negligence lawsuits involving patients who have refused care and subsequently suffered a poor outcome, or inappropriate use of restraint and legal action based on battery or false imprisonment.



HEMS C Q I Training

CQI INDICATOR: AMA Documentation Compliance

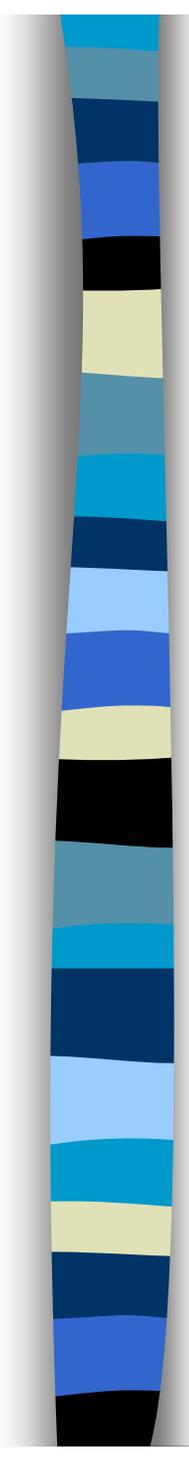
HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Balancing these two competing interests is the challenge in managing patients who refuse care.

A patient's right to be informed and give consent for any medical treatment and transportation is a standard part of medical care. Informed consent includes disclosure of the nature of the disorder; the proposed intervention; the likely benefits, risks, and discomforts; the possible alternatives; and the risk of receiving no treatments. State courts use one of two basic standards that dictate the amount and type of information that must be communicated to provide an informed consent or refusal.

- 1 . Reasonable medical practitioner standard: The quality and detail of the information given to patients that would be imparted by a "reasonable practitioner" with their training and experience under the same or similar conditions.
2. Reasonable patient standard: A consent or refusal is informed if that decision is **one that "a prudent person" in the patient's position would** make if adequately informed of all the significant perils.

The autonomy interests of the patient who refuses care can be addressed by explaining and documenting the risks, benefits, alternatives, and allowing the patient to make an informed consent.



HEMS C Q I Training

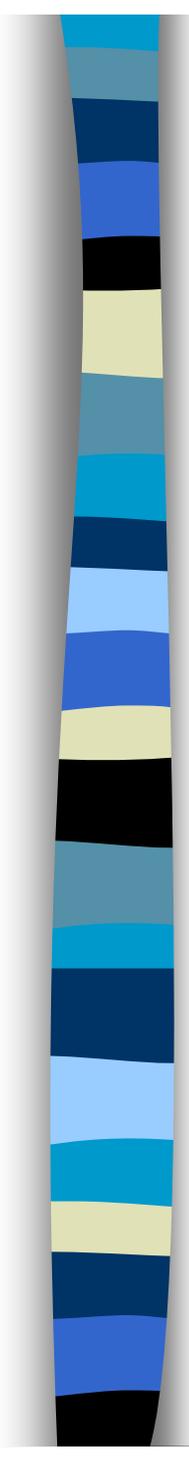
CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Patients who cannot understand all the ramifications of the refusal cannot make an informed refusal of care. These include patients with;

- 1 . Intoxication, hypoxia, acidosis, or any metabolic derangement.
2. New change in mental status
3. Dementia (surrogates may make decisions, except in some emergency situations)
4. Suicidal or homicidal ideation or intent.
5. Any organic brain syndrome that prevents them from acting in a manner that is protective of their life interests.

Refusal of care has a shifting continuum of severity and standard of competency. This is a very gray area. The location on the continuum depends on the severity of the illness, the urgency of treatment required, and the ability of the patient to understand their choices offered and come to a decision. Minor medical problems allow for greater autonomy to refuse. Conversely, the medical care provider has a duty to provide a more in-depth discussion and documentation for medical problems of increasing poor outcome potential. The patient must be informed of the right to reinstate medical care at anytime if they change their mind.



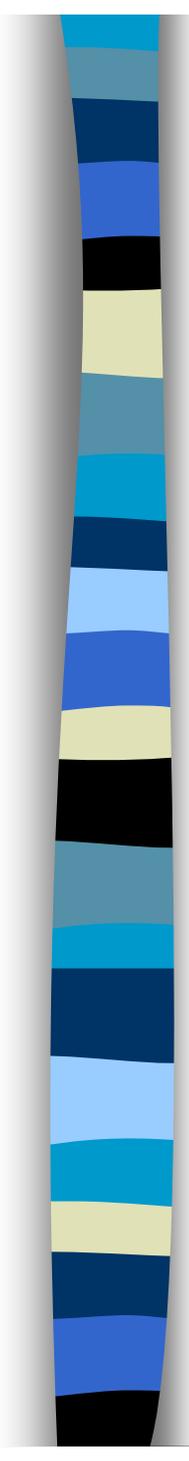
HEMS C Q I Training

CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Patients who cannot understand all the ramifications of the refusal cannot make an informed refusal of care. These include patients with;

- ◆ The patient who refuses care must first have the capacity to understand the ramifications of the refusal. Capacity can be summarized into determination of orientation and judgment. Some form of determination and documentation of capacity, not competency that is a legal determination, must be applied to those patients who desire to leave against advice. There is no standard test required or definitive series of formal mental status tests.
- ◆ Patients must be oriented to person, place, and time and be able to engage in extended conversation about their illnesses and treatment goals. This automatically excludes patients who are uncooperative and non-communicative, or who have a clearly altered mental status. See "altered mental status protocol".



HEMS C Q I Training

CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Special Categories of Patients Who Refuse Care:

1. **Psychiatric patients:** They should be presumed to be competent to refuse care, and their capacity to refuse should be determined as previously described. Patients who refuse a medical screening exam must be held against their will until they allow either treatment or formal mental screening exam evaluation. Suicidal or homicidal patients by thought or attempt do not have capacity to refuse. A mentally ill patient in community residential treatment may be signed against advice to a facility staff member who can vouch that the person is at baseline and will assume responsibility for supervising the patient. The staff member can sign the AMA form for the patient and agree to return if any deterioration occurs.
2. **Alcohol Intoxicated Patients:** These patients are difficult to evaluate because they present with a set of complex medical and social problems and frequently have an altered mental status. Alcoholic and alcohol impaired patients are prone to head and neck injuries and frequently present with hidden or atypical signs and symptoms of their injuries. They are a significant risk at misdiagnosis and should be considered a high-risk patient. Assume the intoxicated patient does not have the capacity to consent to or refuse treatment and has a life-threatening problem until a complete patient evaluation and capacity determination can be made. This is a judgment call and requires significant documentation of capacity to understand all recommended medical care recommendations, alternatives, potential complications and right to reinstate care if they change their mind.



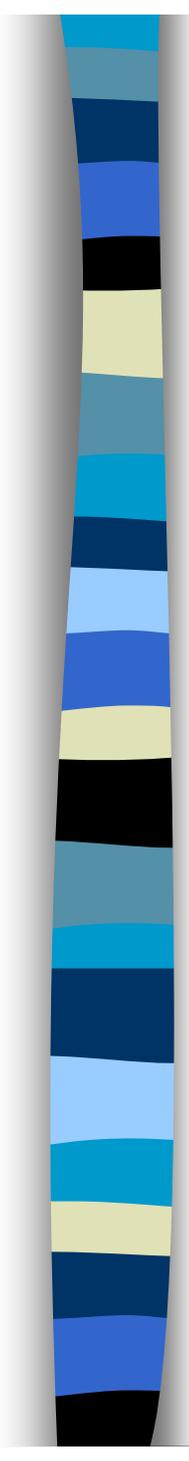
HEMS C Q I Training

CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Special Categories of Patients Who Refuse Care:

3. **Violent Patients:** Violent patients should be treated with reasonable therapeutic restraint. They often refuse care. There is a correlation between violence and organic brain syndrome. The AMA should not be used to get rid of these patients. *EMS* practitioners have no duty to remain in harms way to treat a violent patient. If the patient cannot be restrained for a short time, police should be summoned to assist restraint of the patient as required. If the patient elopes before safe restraint can be accomplished, document the fact that the patient was not restrained because of fear of harm to the EMS practitioner. The patient should be allowed to "escape" and the police should be notified and told that the patient may be a threat to self or others.
4. **Religious Objections:** The general rule is that competent adult patients have a right to refuse any treatment on any grounds including religious. The courts have held that any refusal of lifesaving medical treatment must be contemporaneous and informed. Any refusal of care on religious grounds presents very difficult medical-legal issues and should occur with direction of medical control.



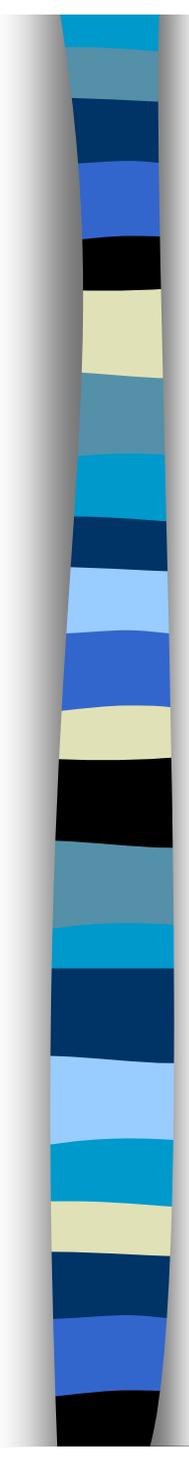
HEMS C Q I Training

CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Special Categories of Patients Who Refuse Care:

5. Refusal of care for a minor: Unless the minor is emancipated, or is a "mature minor" or has one of the special conditions covered by state law, a minor is not cognitively or legally capable of giving or refusing consent for medical treatment. Problems typically occur when an adolescent refuses care. Initiation of care is a gray area if no parent or legal guardian can be found. The more life threatening the medical emergency, the more care that can be provided under the scope of what a reasonable person would provide if consent were available. When a parent or legal guardian refuses medical care for their child, the state and federal courts support parental control over the basic matters affecting children. When parental actions have resulted in inadequate medical care, the courts have stepped in to decide between parent's wishes and physicians' concerns. Under the doctrine *parens patriae*, the state represents the best interests of the child and will not allow a child's health to be seriously jeopardized because of the parent's convictions. Parents do not have the authority to forbid saving their children's lives. Courts invariably rule in favor of physicians who claim that parents are denying standard medical care for their children. If parents withhold consent and there is a threat to a child's life, the EMT should contact medical control for direction and be prepared to take protective custody based on child neglect. Explain to parents that this is a medical obligation under law. The EMT is protected from civil and criminal liability under the child abuse and neglect statutes. If there is no life threat and no potential for serious impairment the parents' refusal should be respected after consultation with medical control. The refusal should be informed and well documented. It should be noted, in the past 30 years, no cases have been reported where a parent successfully sued a medical practitioner for providing non-negligent care to an adolescent without parental consent.



HEMS C Q I Training

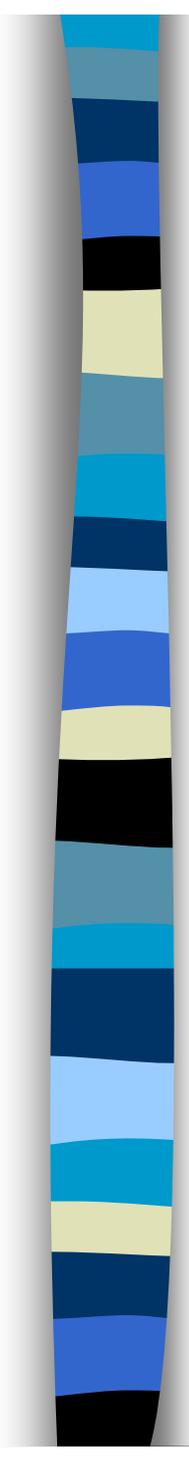
CQI INDICATOR: AMA Documentation Compliance

HEMS Protocol: Patient Refusal of Care or Transportation to a Hospital

Special Categories of Patients Who Refuse Care:

KEY POINTS:

- 1 . Patients who have capacity for decision-making have the right to refuse care under many situations.
2. EMT's must understand the principles of testing a patient for capacity and apply this principle to the situation of a patient refusing care.
3. Patients who lack capacity to refuse care may be treated, transported, and restrained if necessary for needed medical evaluation and care.
4. Patients who possess capacity and refuse care should have this capacity documented, be signed out AMA, and given proper discharge instructions.
5. Most situations of refusal on religious grounds are appropriate, except when the decision involves a minor or pregnant women.



HEMS C Q I Training

AMA Charts:

1. Provide and document education of your agency according to AMA education.
2. Evaluate all AMA runs that are available (max 25) for proper documentation prior to education, and follow all runs subsequent to the education.
3. Evaluate runs for the documentation involving:
 - A. Capacity
 - i. A/0 x 3, extensive conversation about their illness and treatment goals and recommendations given with understanding.
 - ii. Risks, benefits, alternatives, and ability to reinitiate care must be discussed, understood and documented to the best ability of the medical caregiver.
 - iii. Monitor for potential signoff of patients who are high risk.
 1. Intoxication
 2. Psychiatric
 3. New mental status change
 4. Dementia
 5. Organic Brain Syndrome
 - B. Special Category Patients
 - i. Psychiatric
 - ii. Alcohol Intoxicated
 - iii. Violent or aggressive
 - iv. Religious Objection
 - v. Refusal of Care for a Minor

I am looking for significant improvement and understanding of this high-risk patient encounter. Continue sample review of documentation for spot check to maintain gains made by chart documentation review QA. 25 charts.

HEMS C Q I Training

1 of 2

HEMS Quality Improvement

Participating Agencies:

Clinical Indicators

EMT-B EMT-S EMT=P

Counties Represented:

Title: **Chest Pain Of Cardiac Origin**

Standard: The Patient With chest pain, suspected to be cardiac in origin, will be provided assessment, treatment and

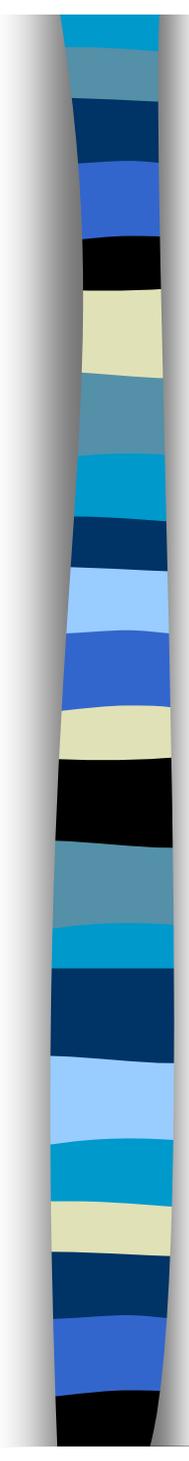
and transport, as indicated by the Wayne County Protocols

Reference: This standard may be referenced SEMRP protocol for Chest Pain Patients

Specific Clinical Indicators	Total	occurrence performance	Percent	Threshold
Predisposing Events/ Hx of Present Illness				95%
1. Predisposing event, activity, or enviromental exposure is documented.				
2. Time Of Onset				
3. Patient attempts to alleviate pain				
;a. Patient took own prescribed medication				
4. Assessment: Quality of pain (dull,stabbing,etc)				
5. Radiation of pain				
6. Severity of pain (quoted description of 1-10 scale)				95%
7. Patient position				
8. Skin color, temportature, moisture (all 3)				
S. Breath sounds				
10. Nausea vomiting, JVD				
I 1. Peripheral edema present				
12. BP prior to NTG given				
13. Treatment: Treatment PTA by other HCP documented				95%
14. Oxygen Administration *				

HEMS C Q I Training

a. Administered prior to arrival				
b. Within 2 min of arrival				
c. >2min but < 6min				
d. >5 min but <10min				
e. > 10 min				
15. EKG is obtained				100%
First IV is attempted:				
a. Administered prior to arrival				
b. Within 5 min of arrival				
c. >5 min but < 10 min				95%
d. >10 min but < 15 min				
e. > 15 min				95%
17. ASA administered prior to arrival				
a within 5 minutes (of arrival at pt.)				
18. First Nitro given:				
a. Nitro is not indicated in this patient				
b. Nitro given prior to arrival				
c. within 5 min of ALS arrival				
d. >5 and < 10 minutes				
e. >10 and< 15 min				
f. greater than 15 minutes				
19. If Nitro -oven without IV started, Hx of nitro use, BP (Systolic > 120 or above)				
20. NTG given every 3-5 min, until pt pain free up to 3 NTG or until contraindicated				
21. BP is checked after each NTG or MS is administered				
22. Scene time is				
a. <10 min				
b. >10 min but < 20 min				
c. >20 min but < 30 min				
d. > 30 min				
23. If pain present after 3 NTG, MS is requested				
24. Effects of treatment are documented				
25. Any deviation from standard of care is documented				



HEMS C Q I Training

* All EMT-B participate up to line 14 EMT-S up to line 16 and EMT-P continue to line 25

* Variation of 2 minutes is allowed

1. Total number should remain constant 1-23

2. Total for a,b,c,d should equal total number in audit.

3. The Total number is the total deviations. (When performance did not occur as indicated.)

This indicator Performance number is number of deviations documented.

Methods: Data Collected through retrospective run review.

Screens,: Review Priority 1 & 2 chest pain pt's until 26 cardiac chest pain pt's can be entered into audit

Audit Due:
Summary Report Date

Audit Completed:

**HEMS Quality Improvement
Clinical Indicators**

Participating Agencies

EMT-B

EMT-S

EMT-P Counties Representec

Title: Obstetrical / Child Birth/ APGAR Chart

Standard: The pregnant patient with suspected miscarriage, delivery will be provided with assessment treatment and transport, as indicated by the Wayne County Protocols

Reference: This standard may be referenced to the SEMRP protocol for Obstetrical/ Child Birth

Specific Clinical Indicators	Total	Occurrence Performance	Percent	Threshold
1) Predisposing events G- P- Ab-				
2) How many gestational weeks is the patient				95%
3) Last menstrual period				
Assessment:				
4) Vaginal Drainage				
a. has water broke, vaginal bleeding, discharge (mucus plug)				
5) Pain assessment				
a. Contractions (time duration)				95%
b. Back pain				
c. urge to -have a bowel movement				
Treatment:				
1) Administer High Flow O2				
2) consider placing pt left lateral recumbent if hypotensive				
3) Is baby delivering (crowning)				
a. Suction baby's mouth and nose as soon as head is delivered				
b. Check to see if cord is wrapped around neck if so attempt to unwrap the cord, if unable clamp cord and cut immediately				100%
c. Double clamp cord 4" from baby and cut between the clamp				
d. Dry baby, keep warm, place baby with mother during transport				
e. Externally massage uterus until placenta is delivered don't attempt to manually remove placenta)				95%
record the time of birth				

HEMS C Q I Training

Baby's assessment APGAR Score:							
	0	1	2				
Pulse	blue,pale	body pink pink					100%
Grimace	absent	hands blue					
Activity	none	< 100 > 100					
Resp	flaccid absent	grimace cough, cry some active weak, slow good					

4. Effects of all treatments are documented

5. Any deviation from standard of care is documented

All OB patients must be cleared to go to L&D unless otherwise directed by the ER DR.

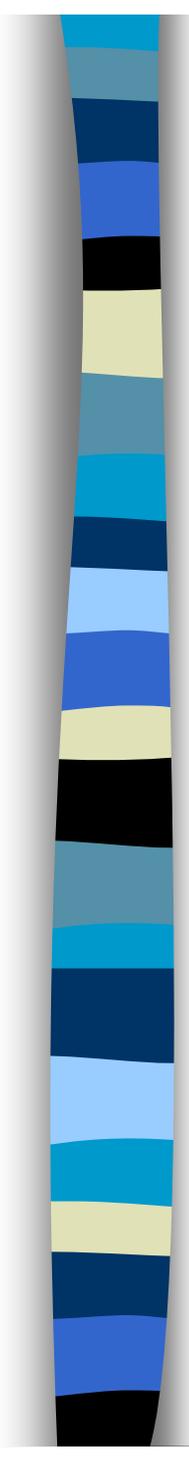
1. -Total number should remain constant 1-5
2. Total for a,b,c,d,e,f should equal total number in audit
3. The total number is the total deviations (when performance did not occur as indicated)

Title: Spinal Injury Patient: MVA

Standard: Spinal immobilization will be established to prevent further potential for injury in specific patients, as indicated by the Southeast Michigan Regional Protocols.

Reference: This standard may be referenced to the SEMRP Spinal Immobilization procedure.

Specific Clinical Indicators	Total	Occurrence/ Performanc e	Percent	Threshold
Mechanism of Injury:				
1. a. Patient position before crash is documented.				
b. Patient position after crash is documented.				
c. Patient position upon arrival is documented. (1).				
2. Seat belt use identified.				
3. Air bag deployment (or not) identified.				
4. Impact description (T-bone, rollover, etc.)				
5. Area of external damage describe including windshield.				
6. Area of internal damage.				
Assessment:				
7. Altered mental status				
8. Evidence of intoxication				
9. Extremity fracture above hand or foot				
110. Motor and/or sensory deficit				
11. Spine pain and/or tenderness				
12. Motor / sensory / pulse evaluated X 4 extremities (prior to tx)				
Treatment:				
13. Treatment by other HCP prior to arrival is documented				
14. Immobilization: (2).				
a. Immobilization not indicated				
b. Patient immobilized prior to arrival				
c. If patient found sitting, KED applied				
d. If patient found standing, immobilized from standing				
Position				
e. If patient horizontal, log-rolled onto LBB				
15. Motor / sensory / pulse assessed after immobilization				
16. Motor / sensory / pulse assessed at time of TOT ED staff				
17. Any deviation from standard of care documented. (3).				



**HEMS QUALITY IMPROVEMENT
CLINICAL INDICATORS**

Agency_____

- (1) **Total Number should remain constant 12-16. (Exceptions: #14, should only be evaluated on patients with position found documented, #12 May not be evaluated on patients already immobilized - may be less than total number, # 13 May not equal total number of patients.)**
- (2) **Total of 14 a,b,c,d,e should equal total number of performance in # 1. (if Immobilization provided PTA, method is not evaluated.)**
- (3) **The total of deviations should equal those patients who did not get the expected performance. The "performance number" is the number of deviations that were documented (Treatment indicator # 14 only).**

Methods: Data collected through retrospective run review.

Screen: Review Priority 2 & 3 patients for a 6 month period.

Audit start:

Audit completed:

Report date:

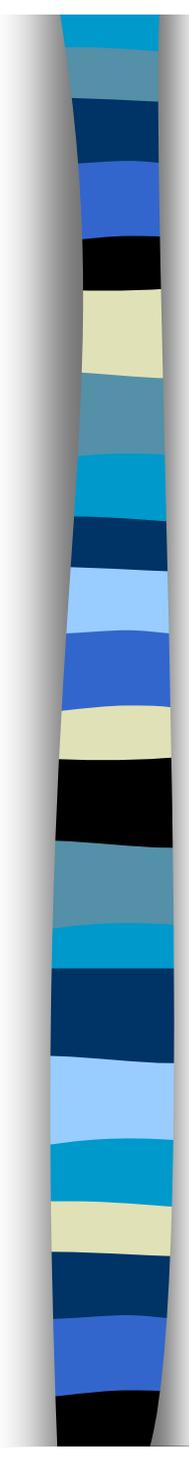
Comments / Audit Exceptions:

Title: Spinal Injury Patient: **Other than MVA**

Standard: Spinal immobilization will be established to prevent further potential for injury in specific patients, as indicated by the Southeast Michigan Regional Protocols.

Reference: This standard may be referenced to the SEMRP Spinal Immobilization procedure.

Specific Clinical Indicators	Total	Occurrence/ Performance	Percent	Threshold
Mechanism of Injury:				
1. Patient position upon arrival. (1).				
2. Description of mechanism. (distance of fall, etc.)				
Assessment:				
3. Altered mental status				
4. Evidence of intoxication				
5. Extremity fracture above hand or foot				
6. Motor and/or sensory deficit				
7. Spine pain and/or tenderness				
B. Motor / sensory / pulse evaluated X 4 extremities (prior to tx)				
Treatment:				
9. Treatment PTA by other HCP documented				
10. Immobilization indicated by protocol: (2).				
a. Immobilization not indicated				
b. Patient immobilized prior to arrival				
c. If patient found sitting, KED applied				
d. If patient found standing, immobilized from standing position				
e. If patient horizontal, log-rolled onto LBB				
11. Motor / sensory / pulse assessed after immobilization (3).				
12. Motor / sensory / pulse assessed at time of TOT ED staff (3).				
17. Any deviation from standard of care documented. (4).				

- 
- (1) Total Number should remain constant 1-9. (Exceptions: #10, should only be evaluated on patients with position found documented.
 - (2) Total of 10 a,b,c,d,e should equal total number of performance in # 1.
 - (3) Total same as total for #10.
 - (4) Number should equal total patients minus total performance (equals the deviations).

This indicator performance number is number of deviations documented.

Methods: Data collected through retrospective run review.

Screen: Review Priority 2 & 3 patients for a 6 month period.

Audit started:

Audit completed:

Report date:

Comments / Audit Exceptions:

HEMS Quality Improvement Participating Agencies:

Clinical Indicators

EMT-P

Counties Represented:

Title: Vascular access/Fluid Administration

Standard: Vascular access will be established and fluid administration will be provided to pre-hospital patients as indicated by Wayne County Protocols Reference: This standard may be referenced SEMRP Medication Administration Procedures

Specific protocols

Specific Clinical Indicators	Total	occurrence performance	Percent	Threshold
1. Vascular access will be obtained in pre-hospital patients as indicated by specific protocols	(indicated)	(attempted)		90%
A. Vascular access will be obtained in pre-hospital patients as indicated by specific protocols.	(indicated)	(success)		
2. Vascular access will be maintained until the patient arrives to the ER (a + b = success #)	success#			90%
B. Saline Lock in place				
3. The proper rate for intravenous fluid administration will occur (saline locks not included)	success#2a			90%
4. The proper amount of intravenous fluid will be administered	success #			
				90%

1. Specific documentation on patency of IV must be present. " Transferred over to ER staff without change not acceptable"
2. For audit purposes for amount of fluid, "TKO", "Bolus" or "Saline Lock", as appropriate. With use of Saline Lock, flush with 3ml up to 10ml is appropriate. TKO rate (25cc/hr) evaluated when flush for medications is not needed. TKO rate < 50ml acceptable for patient care time < one hour. (may include flush)
3. All crew LID needs to be given when review is completed and a high attempt rate is seen with a low success rate that crew member may need more IV training.

Methods: Data collected through retrospective run review

Screen: Review 50 charts at random with IV start.

Audit due:

Summary Report date:

Comments/ Audit exceptions:

Title: Medication Administration

Standard: Paramedics may administer medications as permitted by Wayne County Protocols in specific Pre-hospital patients

Reference: This standard may be reference SEMRP Medication Administration Procedures

Participating Agencies:

Counties Represented:

Specific Clinical Indicators	Total	occurrence performance	Percent	Threshold
1.The medication that is indicated is administered (Omissions)(Evaluating to determine medications indicated and if that medication was given)	(indicated)	(total meds administered)		95%
2. The medication administered is indicated for the patients condition (Errors) (Evaluating all medications given and determining if medication was indicated)	(indicated)	Correct Meds		100%
3. The medication will be administered in correct dose (total number of meds given)	(indicated)	number correct		100%
4. The medication will be administered with correct frequency of dose. (Each med repeated as needed per protocol)	(Total admin)	number correct		95%
6. The medication will be administered by the correct route.	(total adm)	(number correct)		95%

1. Review the condition to determine if a medication is indicated. Review to determine if the medication that is indicated was given. Individual meds are counted. Do not count meds repeated. There may be more than one medication per patient 2. Review all medications to determine if the medication was indicated. This indicator is looking for medication errors. "Total" is all of the meds given. Performance is the total meds that were indicated. There is no true relation between the data ill #1 & #2 3. Review the total number of meds given to determine if they were given correct dose. 4. Review each type of med given to determine if it was repeated as needed, or as indicated by protocol. "Total number of meds not the number of individual meds. If medication is indicated to only be given once ie, ASA then count in total and in performance. For audit reason allow 2 minutes variance.

Methods: Data collected through retrospective run review

Screen:

Review 50 charts at random any meds given

Clinical Indicators

EMT-P Title: Altered Mental Status Standard: The patient with altered Mental Status will be provided assessment, treatment and transport, as indicated by the Wayne County Protocols for Altered LOC Reference: This standard may be referenced SEMRP protocol for Altered Mental status

Participating Agencies:

Counties Represented:

Specific Clinical Indicators	Total	occurance performance	Percent	Threshold
Predisposing Events/ Hx of Present Illness 1 - Predisposing event,activity,or enviornmental exposure is documented.				95%
2. Time Of Onset				
3. Pertinent Past Medical History Medications pt is taking				
14. Assessment: Position patient found				
5. Description of Level of Consciousness				
6.Glasgow Coma Scale is evaluated				
7.Skin color,temperature,moisture(all 3)				
8. Peripheral motor and sensory status				
9. Pupils				
10.Signs of trauma are evaluated				
11.Glucometer is used if avaiable				
12.Treatment by other HCP prior to arrival is documented				
13.Oxygen is administered per protocol				
14. Medication(s) are administered according to protocol when indicated				
15. Response to any treatment is documented				
16. Deviations from protocol are documented				

Total number should remain consistent 1 -10

16. This total number is the total deviations This indicator Performance number is number of deviations documented

* All EMT-B and EMT-S participate in all except line #14

Paramedics will perform lines 1-16

Methods: Data collected through retrospective run review

Screen:

Review Priority 1 & 2 Altered Mental Status Patients until 25 Patients can be entered into audit

Audit due:

Summary Report date:

Comments/ Audit exceptions:

