MEDICATION ADMINISTRATION CROSS CHECK (MACC)

I. PURPOSE

To define the proper use of Medication Administration Cross Check (MACC) in the Chicago EMS System.

II. DEFINITION

The Medication Administration Cross Check (MACC) is a team-based communication method to standardize the medication verification process and reduce medication errors.

III. USE

A. Safe medication administration is a process that optimally involves two EMS providers to collaboratively cross check the administration of medication.

B. When two EMS providers are available, MACC should be used by both EMTs and Paramedics prior to medication administration on all events.

C. When only one EMS Provider is available, the MACC cannot be applied.

D. If Provider 1 is a Paramedic and Provider 2 is an EMT, the MACC procedure should still be used with a slight alteration to the role of Provider 2. Provider 2 should visually verify the drug name, concentration, and expiration date.

IV. PROCEDURE

A. Provider 1 initiates the procedure by stating “Medication Cross Check”.

B. Provider 2 responds that he or she is “Ready”. It is important to avoid using ambiguous responses such as “okay” and to participate in an engaged manner.

C. Provider 1 states the phrase “I am going to give . . .” and provides the following information: the dose, drug name, route, reason/indication. If there is concurrence from Provider 2, continue the cross check procedure. If there is not concurrence, stop and resolve any disagreement at this point.

D. If Provider 2 agrees, he or she responds with the question “Are there contraindications?”
E. Provider 1 must check the expiration date if he or she has not done so already, verify that the patient’s vital signs are appropriate, and any drug allergies. Provider 1 should either respond by saying “No contraindications” or by stating and discussing the presence of any contraindications.

F. If Provider 2 concurs, he or she responds with the question “What is your volume?” or “Quantity?” for pills/tablets.

G. Provider 1 should state the drug concentration, the volume he or she intends to deliver, and should show the container to Provider 2.

H. If Provider 2 agrees and makes a positive visual verification, he or she should respond with the phrase “I agree; give it”.

V. CONSIDERATIONS

A. Contraindications include:
   1. Verification of appropriate vital signs;
   2. Known patient allergies; and
   3. Expiration date.

B. If a discrepancy, disagreement, or need for clarification is encountered at any step in the process, it must be resolved prior to continuing the cross check.

C. Provider 2 can authorize the administration of the medication.

D. The Medication Administration Cross Check must be completed prior to the administration of any medication when two EMS providers are available.

E. If there is an interruption or change in patient condition of any kind, the process must be re-initiated by Provider 1.

F. Avoid ambiguous statements or confirmations like “okay”.

VI. DOCUMENTATION

Use of the Medication Administration Cross Check (MACC) should be documented in the patient care report.

VII. REPORTING

Medication administration errors should be reported to the receiving hospital.
Medication Administration Cross Check

Provider 1
Giving the Medication

Request:
“Medication Cross Check”

“I am going to give...”
- Dose
- Drug name
- Route
- Reason/Indication

State and discuss contraindications.
If none, state: “No contraindications”

State volume in mL
State concentration
Show container

Provider 2
Verifying the Medication

“Ready”

If concurrence on all 4, ask:

“Are there contraindications?”

If concurrence, ask:

“What is your volume?” or “quantity” for pills/tablets

Only if positive identification and agreement on all, state:

“I agree; give it”

“Contraindications” include: 1) verification of appropriate vital signs, 2) known patient allergies, and 3) expiration date.
If a discrepancy, disagreement, or need for clarification is encountered at any step in the process, it must be resolved prior to continuing the cross check.
Provider 2 can authorize the administration of the medication.
The Medication Administration Cross Check must be completed prior to the administration of any medication when two EMS providers are available.
If there is an interruption or change in patient condition of any kind, the process must be re-initiated by Provider 1.
Avoid ambiguous statements or confirmations like “okay.”

RED RULE of Medication Administration
(A Duty to Avoid Causing UNJUSTIFIABLE Harm)
NEVER give the contents of a syringe that is not labeled or without visualizing the vial from which it was immediately drawn.

Adapted with permission from Wichita-Sedgwick County EMS System
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