Prescribing & drug use should be based on the Rule of RIGHTS

- Right drug
- given to the Right patient
- at the Right time and duration
- with the Right dosage
- and the Right route of administration

RATIONAL DRUG USE

Medication Errors

- Mainly due to misunderstanding
 - Difficult to read (illegible?) writing of doctors or verbal orders that are wrongly transcribed by nurses or other health professionals
- Inadequate education regarding the specific type of drug that must be given for specific routes e.g. Benzathine Penicillin (IM) vs. (Aqueous) Pen G Na (IV)

MEDICATION ERROR: DEFINITION

- US National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP)
- "A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient, or consumer.

Fontaine AL: Drug Saf. 2004;27(8):579-89

MEDICATION ERROR: definition

- Such events may be related to
 - professional practice,
 - healthcare products, procedures, and systems, including prescribing;
 - order communication;
 - product labeling, packaging, and nomenclature;
 - compounding;
 - dispensing;
 - distribution;
 - administration;
 - education; monitoring; and use".

Where Do Errors Occur?

Prescribing 39%

Transcribing 11%

Dispensing 12%

Administering 38%

Table 4. **Types of Errors in 2002** (*n* = 174,930)

Type of Error	No. (%) Records
Omission	44,786 (25.60)
Improper dosage/quantity	44,593 (25.49)
Prescribing error	32,416 (18.53)
Unauthorized drug	19,409 (11.10)
Wrong time	12,103 (6.92)
Extra dose	8,704 (4.98)
Wrong patient	8,196 (4.69)
Wrong drug preparation	7,204 (4.12)
Wrong dosage form	3,611 (2.06)
Wrong route	2,738 (1.57)
Wrong administration technique	2,372 (1.36)
Type not determined ^a	103 (0.06)
Deteriorated product ^a	55 (0.03)
Expired product ^a	26 (0.01)

^aSelections were added to the pick list in December 2002.

Hicks RW et al: Am J Health Syst Pharm. 2004 May 15;61(10):993-1000

Parts of the Prescription

- Superscription
- Inscription
- Subscription
- Signa
- Name and Signature of the prescriber

Parts of the Prescription

- Superscription date the prescription is written, name, address, weight and age of the patient
- Inscription or the body of the prescription –name and amount or strength of each ingredient to be compunded
- Subscription instruction to the pharmacist ("make a solution", "dispense 30 capsules")

Parts of the Prescription

- Signa or "sig" is the instruction for the patient as to how to take the prescription, interpreted and transposed onto the prescription label by the pharmacist [avoid Latin abbreviations e.g. TID, PO]
- Name and signature of the prescriber

Contents of a complete prescription:

- 1. Patient's full name (with address)
- 2. For pediatric or geriatric patients: their age (or weight where applicable)
- 3. Drug name, dosage form and strength; if a drug is new or rarely prescribed, print this information
- 4. Number or amount to be dispensed

Contents of a complete prescription:

- 5. Complete instructions to the patient, including the purpose of the medication
- 6. When there are recognized contraindications for a prescribed drug, indicate to the pharmacist that you are aware of this fact (i.e. when prescribing potassium salt in a patient receiving ACE-inhibitor write "K level being monitored")

Written Medication Orders: Complete Information

- Patient's Name
- Patient-Specific Data
- Generic and Brand Name
- Drug Strength
- Dosage Form
- Amount
- Directions for Use
- Purpose: ideal
- Refills