

## **The MedSafe Project**

# **Glossary of Commonly Used Terms and Measures in the ISMP Medication Safety Self Assessment<sup>®</sup> Survey and Analysis Reports**

**Age-Specific Medications**

Medications packaged in concentrations and/or volumes of varying sizes that are intended for ease of administration and control of waste for a specific age group (e.g., neonatal, pediatric, adult).

**Core Characteristics**

Each of the ten key elements the ISMP Medication Safety Self Assessment<sup>®</sup> Survey is further defined by one or more broad categories of distinguishing characteristics of a safe medication system

**Distribution of Scores**

When the mean and median values are equal, the distribution of scores is said to be near normally distributed among respondents, meaning that an equal number of respondents scored less than and greater than the mean. When the mean and median values are different, the distribution of scores is said to be skewed across respondents, indicating that an unequal number of respondents scored less than and greater than the average.

**Error -Prone Abbreviations**

Certain medical abbreviations, symbols, and dose designations that are considered “dangerous” and have often contributed to serious medication errors. A complete list can be found on the ISMP website ([www.ismp.org](http://www.ismp.org)).

**Failure Mode and Effects Analysis (FMEA)**

A proactive risk assessment method based on the simultaneous analysis of possible failure modes, their consequences, and associated risk factors. Also referred to as Failure Mode Effects and Criticality Analysis (FMECA) and Healthcare Failure Mode and Effects Analysis (HFMEA).

**Floor Stock**

Medications that are not labeled or stored for a specific patient that are available outside the pharmacy. This would include medications stored in medication rooms, storage cabinets, and automated dispensing cabinets for potential administration to various patients.

**High-Alert Medications (or Drugs)**

Medications that have a high risk of causing serious injury or death to a patient if they are misused. Errors with these products are not necessarily more common but their results are more devastating. Examples of high-alert medications include heparin, warfarin, insulin, chemotherapy, concentrated electrolytes, opiate narcotics, neuromuscular blocking agents, thrombolytics, and adrenergic agonists. (A complete list can be found at [www.ismp.org](http://www.ismp.org).)

**Human Factors**

The study of the interrelationships between humans, the tools they use, and the environment in which they work.

**Implemented**

Accomplished or achieved in practice, not just in policy: to carry into effect.

**Independent Double Check**

A procedure in which two individuals, preferably two licensed practitioners, separately check each component of the work process. An example would be one person calculating a medication dose for a specific patient and a second individual independently performing the same calculation (not just verifying the calculation) and matching results.

**Interfaced**

A direct link between two information systems such that the information from one system is immediately available to the user of the second system and integrated into the system in a way that supports clinical decision making (e.g., interfacing the laboratory and pharmacy computer systems would immediately provide corresponding laboratory data to the pharmacist while he/she is entering or reviewing a specific medication order). This may or may not include a bi-directional interface of the two systems to allow communication in both directions.

**ISMP Maximum Possible Score**

The highest possible score for each question, core characteristic, key element, or overall survey score.

**Key Elements**

Ten broad categories of the ISMP Medication Safety Self Assessment<sup>®</sup> Survey that most significantly influence safe medication use

**Machine -Readable Coding**

Any encoded identifying mark (e.g., bar code) representing data that can be read with a computerized reading device, such as a scanner or imager.

**Maximum Dose**

The dose of a medication that represents the upper limit that is normally found in the literature and/or manufacturer recommendations. Maximum doses may vary according to age, weight, or diagnosis.

**Mean**

The average value of a group of numbers. The mean is derived by adding numbers together, such as actual hospital survey scores, and dividing by how many numbers were added together, such as the number of hospitals with a score.

**Median**

The median value is the score that splits a data set exactly in half when the scores are ranked in order of lowest to highest. With regard to the ISMP Medication Safety Self Assessment<sup>®</sup> Survey scores, the median signifies that half of the respondents had a score equal to or less than the median, while the other half had a score equal to or higher than the median.

**Medication (or Drug)**

Medication includes: prescription medications; sample medications; herbal remedies; vitamins; nutraceuticals; over-the-counter drugs; vaccines; diagnostic and contrast agents used on or administered to persons to diagnose, treat, or prevent disease or other abnormal conditions; radioactive medications; respiratory therapy treatments; parenteral nutrition; blood derivatives; intravenous solutions (plain, with electrolytes and/or drugs); and any product designated by the Food and Drug Administration as a drug. The definition of medication does not include enteral nutrition solutions (which are considered food products), oxygen, and other medical gases.

**Medication Devices**

Equipment such as infusion pumps, implantable pumps, syringes, tubing, patient controlled analgesia pumps, automated compounding devices, robotics, and other related devices that are used for medication preparation, dispensing, and administration.

**Mnemonics**

A limited number of letters and/or numbers that are used to represent a specific medication (e.g., ASA80 may represent aspirin 80 mg tablets).

**Moderate Sedation**

The administration of any pharmacological agent, which will likely cause a medically controlled state of depressed consciousness. This state would be limited to short periods and utilized for diagnostic and therapeutic procedures that: 1) allow protective reflexes to be maintained, 2) retain the patient's ability to maintain a patent airway, respiratory rate and rhythm, and 3) permit expected responses by the patient to physical stimulation and verbal command.

**Nurse-Controlled Analgesia**

The intermittent dosing of a patient controlled analgesia pump or device performed by a nurse or other licensed practitioner rather than the patient. This practice should only be performed by nursing protocol when the patient is capable of requesting a dose of medication within the prescribed limits, but not capable of performing the function himself.

**Patient-Specific Medication (Or Dose)**

A ready-to-administer patient-specific dose of medication that exactly matches the dose ordered by the prescriber. This may or may not correspond to the manufacturer unit-dose package. (See UNIT-DOSE.)

**Pharmacy and Therapeutics Committee**

An interdisciplinary committee that convenes on a scheduled basis, or when necessary, to review the safety, use, efficacy, and monitoring of medications that will be available for use in the hospital. The committee also sets policy and procedures, on behalf of the medical staff and hospital administration, on the safety of the entire medication use process.

**Practitioner**

A licensed healthcare professional such as a physician, physician assistant, nurse anesthetist, nurse practitioner, nurse, pharmacist, or respiratory therapist.

**Rule of 6**

A formula, originally designed for pediatric emergencies, in which the amount of drug to add to a set volume of solution and the rate of infusion are calculated using the following guidelines: 6 x weight in kilograms (kg) equals the amount of drug in milligrams (mg) that should be added to 100 mL of solution. The infusion volume in mL per hour then equals the mcg/kg/minute dose ordered. For example, a drug ordered at 10 mcg/kg/minute would equal an infusion rate of 10 mL per hour using the Rule of 6.

**Score Point Gap**

The difference between a baseline score, such as the ISMP Maximum Possible Score, and a comparison score, such as an individual hospital score or the Maryland mean score. The gap represents the opportunity for improvement in score.

**Smart Pump Technology**

An infusion pump with computer software that is capable of alerting the user to unsafe dose limits and programming errors if standard concentrations and dose limits have been programmed into the pump's library.

**Tall-Man Lettering**

Enhancement of unique letter characters of drug names by use of upper case characters and may also include italics, color background, or a combination of these elements to improve differentiation of look-alike drug names.

**Turnaround Time**

An interval that represents the period of time it takes for a medication order to be processed, typically from the time an order is written or electronically entered into a computer until the medication is available to a practitioner for administration to a patient.

**Unit-Dose**

A single package that contains one dose of a medication intended for one patient (e.g., a package with one tablet, one single-use vial of parenteral medication, 5 mL container holding one dose of liquid medication). (See PATIENT-SPECIFIC MEDICATION.)

**Unit-of-Use**

A supply of medication that is intended for a full course of therapy, or several doses of therapy, for a single patient (e.g., 21 tablet dispenser for a course of therapy that includes one tablet 3 times per day for 7 days or a 120 mL bottle of antacid therapy that may contain four 30 mL doses).

**WalkRounds™**

A formal process in which a core group, including senior executives, conducts weekly visits to different areas of the hospital to ask specific questions about adverse events or near misses and about the factors or systems issues that lead to these events. [Frankel A, Graydon-Baker E, Neppel C, Simmonds T, Gustafson M, Gandhi TK. Patient safety leadership WalkRounds™. *Jt Comm J Qual Safety*.2003;29:16-26.]