



Be Compassionate. Be Safe. Be Reliable.

Validate and Verify

Error types prevented in the Generic Error Modeling System (GEMS)

Skill-based	Rule-based	Knowledge-based
Slip	Wrong rule	Decision-making
Lapse	Misapplication	Problem solving
Fumble	Non-compliance	

Note: Primary shown in bold red: secondary shown in red.

The least you should know

- Questioning Attitude is a habit of the mind that ensures our choices are best for the given situation. Questioning Attitude is both asking questions and questioning the answers.
- Rule-based and knowledge-based errors occur when we are not thinking clearly. Since patient safety is our first priority, we will be thinking about what we are seeing and doing.
 Stop if things do not make sense.

Validate the information Verify the information

QV&V was developed by Dr Chong Chiu, Failure Prevention Incorporated.

How should we use this tool?

- Use questioning attitude every time you interpret information and every time you choose a rule from memory. First, qualify the source of the information. Is this source a good source for this information? Does this source have a history of being correct? Next, validate the information. Validation is an internal consistency check. Does this information make sense? Is the information consistent with what I would expect?
- Last, verify the information using an independent, qualified source when: the information is very important (high-risk), the information fails the source qualification or validation tests, or the information appears to have changed.

Did you know?

- 1. Questioning Attitude is the first of 20 critical thinking skills.
- 2. Rule-based errors are sometimes called errors of the head (not errors of the hand) because the execution of the act is correct it's the choice of the act that is incorrect.
- About 22% of acts that lead to harm in delivery of health care are a result of non-compliance. Since people do not violate policy with the intent to cause harm, every noncompliance is also a critical thinking error.
- 4. Dr Jerome Groopman devoted an entire book, *How Doctors Think*, to critical thinking in physician care. Gaie Rubenfeld did the same for nursing with *Critical Thinking Tactics for Nurses*.

A Case in Point

An environmental services worker was headed into the magnet room of a MRI suite with a blower. His coworker's validation meter went off: "The MRI is a magnet. Can we take a blower into the MRI suite?" "Sure," said the first worker, "it's plastic." So they proceeded into the MRI suite. The blower – having a motor with steel and iron – immediately flew to the center of the magnet, causing significant damage to the scanner of the MRI machine.