Carefully used colors can dramatically improve the efficiency and safety of health information systems by drawing attention to important items and making it easier to perceive differences and trends.

Incorrectly used colors can make a display hard to use, hard to interpret and misleading.

To maximize the communication benefits of color, design
- Use gray scale, then add color sparingly

To group items into different categories
- Use no more than 7 colors (4 recommended)

To show sequential ranges of quantitative values
- Use 1 color (for sequential) and 2 colors (for diverging) values
- Vary color intensity from pale (low values) to darker (extreme values)

To ensure consistency, learnability, and to prevent misinterpretation, create rules for:
- Colors for critical values
- Colors for severity of warnings and alerts, etc.
- Colors for different categories of items
- Colors combined with differentiators ( tooltips, symbols, icons, positions)

To ease understanding and learnability of colors
- Use text, tooltips or legends

Use color-blind friendly colors (10% of men and 5% of women are color-blind). Combine color with an image, shape, position, or text to convey same meaning. In prefixes L (low) and H (high) are in separate columns to reinforce color

To select appropriate color schemes, tools that match schemes to data types and support color-blind safe choices (see http://colorbrewer2.org/) Use tools that preview design as it would be seen by a color blind user (see http://www.color-blindness.com/coblis-color-blindness-simulator)