

CHECKLIST DESIGN TIPS

Here are a few simple design techniques you can use to help make your checklist easy to read and navigate.

Make the font comfortably large

Use a sans serif font that is large enough for most people to comfortably read at the intended viewing distance in typical lighting conditions.

The following sizes are minimums:

Letter-size page (held in hand):

- 10 to 13 pt. for items and small headings
- 13 to 16 pt. for middle-weight headings
- 18 to 24 pt for largest headings

Poster (readable at 12 feet):

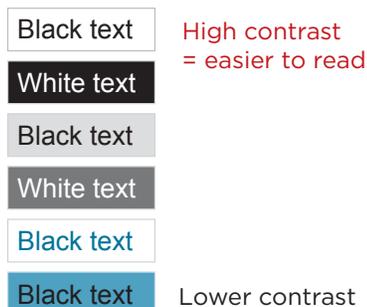
- ½-in. tall (~50 pt. Arial) items
- ¾-in. tall (~75 pt. Arial) headings

Keep formatting simple

- **Use sentence case:** capitalize only the first letter in a sentence or phrase
- **Avoid all caps or small caps:** words written in capital letters are more difficult to read because the top and bottom edges are uniform, eliminating some of the visual clues we use to help recognize letters
- **Avoid emphasizing ‘really important’ items:** all items on a checklist should be important; highlighting one or two adds a distraction

Maximize contrast

Black text on a white page is easiest to read. White text on a black background is also high contrast. Colored text, or text on a background has less contrast and is therefore more difficult to see.



Be consistent in language and formatting

Inconsistency tends to be visually distracting and may introduce the potential for confusion. By being consistent you add clarity and free viewers from making interpretations.

- **Format each type of information only one way**
 - e.g., if the name of each role will appear bold and underlined (“**Surgeon** shares”), don’t use that formatting for other text
- **Use parallel constructions**
 - e.g., if one role description is followed by an action (“shares”), all roles should have similar action verbs: “confirms”, “says”, “discusses”

Use white space to help group information

Use white (i.e., empty) space to help viewers see chunks of related content.

- **Add space above headings** (as on this page)
- **Indent content within sections**
- **Minimize boxes, lines, and arrows** — they often cost more in distraction than they add in clarity

Use color sparingly, with purpose and consistency

Design your checklist so that it is easy to read in black and white. Colors easily capture attention and can become a distraction if not used purposefully.

If you choose to add color:

- **Use color to help viewers:**
 - Distinguish one checklist from another
 - Find content intended for different roles
 - Identify different points in time (e.g., before anesthesia, after closing)
- **Use each color with rigid consistency:**

Once a color has been assigned one meaning (e.g., green is used to mean information is intended for Anesthesia Professionals), it should not be used in any other context.

CHECKLIST DESIGN TIPS — EXAMPLE

Original

Time Out
Entire Surgical Team: <input type="checkbox"/> Is everybody ready to perform the time out? Please state your name and role. <input type="checkbox"/> Patient <input type="checkbox"/> Essential imaging <input type="checkbox"/> Procedure <input type="checkbox"/> Blood born path
<input type="checkbox"/> Has antibiotic prophylaxis been given within the last 60 minutes? -Plan for redosing discussed
Briefing
Surgeon shares: <input type="checkbox"/> Operative plan <input type="checkbox"/> Possible difficulties <input type="checkbox"/> Expected duration <input type="checkbox"/> Implants or special equipment
Anesthesia Provider shares: <input type="checkbox"/> Anesthetic plan <input type="checkbox"/> Other concerns
Circulating Nurse and Scrub Tech share: <input type="checkbox"/> Sterility, including indicator results <input type="checkbox"/> Any equipment issues and other concerns
Perfusion Team shares: <input type="checkbox"/> Anticoagulation strategy <input type="checkbox"/> Temperature management <input type="checkbox"/> Cannulation strategy <input type="checkbox"/> Cardioplegia strategy <input type="checkbox"/> Other concerns
<input type="checkbox"/> Surgeon says: "Does anyone have any concerns? If you concerns you during the case, please speak up"

The size and shadow of this bullet character grabs too much attention

A simpler character identifies each line with less distraction

Revised

Before Incision

TIME OUT

Circulating Nurse asks:
*"Is everyone ready for the time out?
 Please state your name and role."*

Entire Surgical Team confirms:

- Patient identification
- Procedure matches consent
- Essential imaging available
- Bloodborne pathogen
- Antibiotic prophylaxis given within last 60 minutes?
- Antibiotic redosing plan discussed?

Surgeon shares:

- Operative plan
- Possible difficulties
- Expected duration
- Implants or special equipment

Anesthesia Professional shares:

- Anesthetic plan
- Other concerns

Nursing Team shares:

- Sterility, including indicator results
- Any equipment issues
- Other concerns

Perfusion Team shares:

- Anticoagulation strategy
- Temperature management
- Cannulation strategy
- Cardioplegia strategy
- Other concerns

Surgeon says:
*"Does anyone have any concerns?
 If you have concerns during the case, please speak up."*

'WHEN' is most prominent

'WHO' is next most prominent — Role has it's own unique formatting (bold underlined)

Action verbs specify 'WHAT' the role does

Space above headings visually groups content

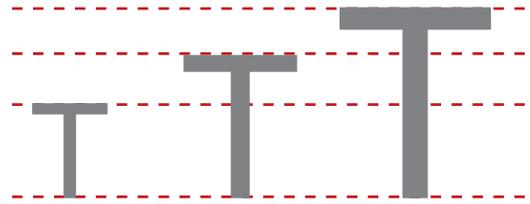
'SAY THIS...' Unique formatting: italic is only used for language that is to be read aloud

Key design changes

- Sans serif font
- White space between groups of items
- Indented checklist items
- Smaller, simple bullets, consistently spaced
- All check items share the same type style, indicating they are equally important
- Language to be spoken aloud has unique style

POSTER TIPS – Type size and readability

Letter height and readability

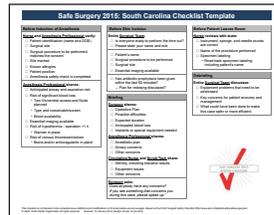


Height of capital letter: $\frac{1}{2}$ inch $\frac{3}{4}$ inch 1 inch
 Comfortable distance: ~10 feet ~12.5 feet ~15 feet

Poster size

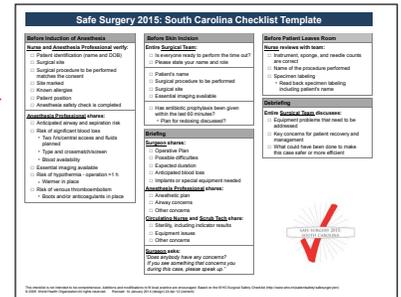
To be readable in a typical operating room, a letter-size checklist using 10.5 pt Arial type needs to be enlarged 500%.

8½ × 11 inch page



Enlarged 500%
 for minimum readability

56 × 44 inch poster



Font examples

HEADING: 75 point Arial Bold

Surgeon

ITEM: 50 point Arial Regular

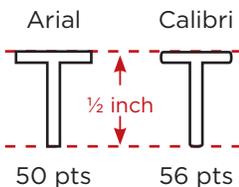
BULLET: 36 point Webdings, 50% black

□ Operative pla

ROUND BULLET OPTION: 36 point, 50% black

• Airway

NOTE: Different fonts vary in height at the same point size.



POSTER TIPS — Size target

WHAT THIS IS: A portion of checklist poster has been reproduced here on a letter-size page to illustrate the intended size of the type.

HOW TO USE IT: Print this page and tape to a wall in your operating room to help judge the size of type you need to suit typical distances from the surgical field to the poster your facility.

Before Anesth

Nurse and Anesthes

- Patient identific
- Surgical proced
- Site marked
- Known allergies