



Ensuring that all pathways have a consistent look and feel is important for user learnability, experience, and satisfaction.

It is critical to consider users and context when designing a clinical pathway. [Human factors engineering](#) is an interdisciplinary area of study that focuses on designing and improving products and environments to ensure maximal usability by humans, performance, and safety. Within this domain, there is a specific subset of study that focus on human-computer interaction and many of the principles for this domain can be applied to clinical pathway design. [Zhang et al.](#) developed a 14 item heuristic evaluation, which is a usability inspection method that is easy to use and apply, that can be adapted for pathway design, development and evaluation.

- All nodes should be connected to each other
- Double check all nodes for spelling errors and consistency with capitalization and punctuation.
 - First word capitalized
 - No periods at the end of sentences in a list

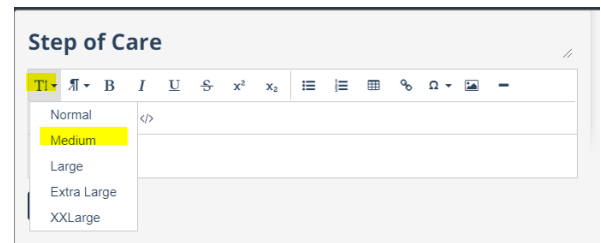


Figure 1: Change default text size from normal to medium

- Set the node body text size to **medium**. (see Figure 1)
- Center all non-bulleted text, including titles
- Starting node repeats pathway title and contains a description of ‘inclusion and exclusion’ criteria to define pathway scope
- Design ‘choice’ nodes consistently e.g. “yes” always flows to the right and “no” always flows to the left, or vice versa
 - Change all ‘choice’ nodes to gray background
 - Repeat ‘decision node’ language in ‘choice’ node ie; “Yes, patient has temperature” “No, patient does not have temperature’ (see example pathway below)
- Inequality symbols:** use the “insert symbol” function rather than “>=” (see figure 2)

- Remove **white spaces** within and between nodes
 - Inside the node text: ‘shift-enter’ helps cut lines
 - Compress the distance between nodes - make it easier to “fit” to screen and ultimately print too.

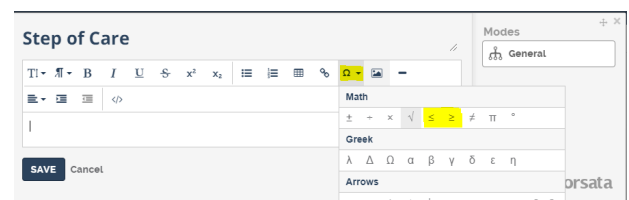


Figure 2: Insert symbol function

- Use **color** sparingly – use stop light analogy to guide color selection
 - Red = warnings/stop/avoid/hazard;
 - Orange = potential hazard/to wait;
 - Green RED should be used to indicate a hard stop or critical alert



Best practices for pathway design

- **Abbreviations, acronyms, and units of measure:**
 - Ensure that all labs have units with them e.g. blood counts (platelets <100k)
 - Avoid acronyms unless they are accepted as standard (e.g. pro/cr). Also for diagnostic studies, be specific, urine, serum, body fluid, etc.

- **AND/OR** = represent in bold caps as “**–AND–**” and “**–OR–**”

- **Metadata:** include at a minimum, the clinical owner, email, stakeholder team members (try to be as specific as possible, avoid just listing departments), publish and last updated dates, and metrics
 - Description text box- after final publication, log all major edits/changes with dates here to enable users a visual log of updates to the pathway

- **Supporting documents and links:** When including document attachments in a pathway, we recommend when possible citing these documents within a pathway node. Users are not always aware of documents in the attachment section and referring to them within the pathway will help ensure that they are reviewed at the right time in the process.
 - In some cases, it may be helpful for users to include references to online calculators or other supporting documents. We recommend using hyperlinks. See Figure 3 for how to add these links.

- **Final QA:**
 - Review the pathway in “step” mode to make sure all nodes are correctly connected (see figure 4)

- Complete [Posting Questionnaire](#)

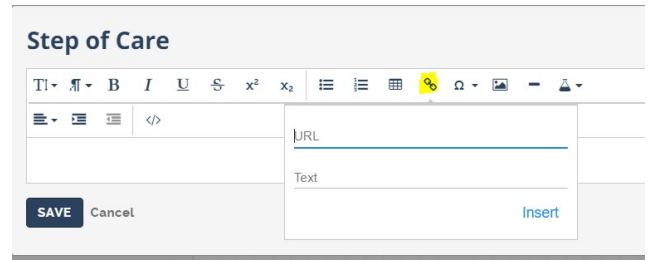


Figure 3: Click on the "Insert Link" icon to add hyperlinks to websites

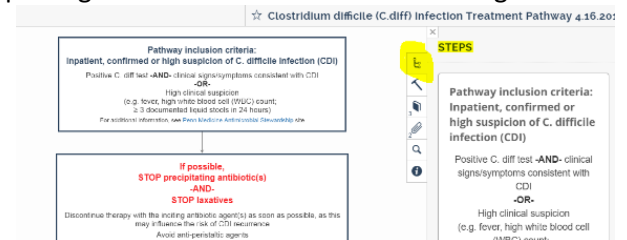


Figure 4: Review the pathway in "Step" mode to ensure all nodes are properly connected

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Best practices for pathway design

