

# Safety Enhanced Design Brief

## Effective Table Design

Tables are used exclusively for lists of patients, medications, results, etc.

While tables seem simple, careful design is needed as even small mistakes can have a significant impact on:

- **Patient safety:** e.g. Truncated names will lead to wrong patient selection; column headers scrolling out of view will lead users to read the wrong test result value.
- **Efficiency:** e.g. Users will waste a lot of time scanning and scrolling if no search or sort is provided.

This set of guidelines is just a small sample of the available guidelines for table design.

### 1 To prevent common errors

- Keep the headers visible at all times (*do not allow them to scroll out of sight*)
- Use multiple lines for long column headers (*do not truncate them*)
- If truncation of a table is unavoidable: Try using multiple lines or tooltips for showing what does not fit in the cell
- Avoid using error-prone abbreviations, and provide a long version in a tooltip (see <http://www.ismp.org/tools/errorproneabbreviations.pdf>)
- Never truncate patient names (see Color Use Brief <https://sbmi.uth.edu/nccd/SED/Briefs/sedb-g01.htm>)


- Use alternating shading of rows in wide tables (*every 1 or 2 rows to help track rows across columns*)

### 2 To improve task efficiency

- Place the most important columns on the left
- Group together columns (or rows) that are used together

### 3 To help users find data

- Make the important information stand out (<https://sbmi.uth.edu/nccd/SED/Briefs/sedb-g01.htm>)
- Use light white space between the rows (*instead of heavy gridlines*)
- Use a different style for headers


Patient ▼	Test	Order Date	Review By 	>>
Evans, Anna	MRI / F	Mar 3, 2011	Mar 10, 2011 1:12 AM	
Parker, Amy	MRI / P	Mar 2, 2011	Mar 9, 2011 11:42 PM	

### 4 To make information readable

- Allow user to adjust font size and adjust the table layout accordingly
- Provide tooltips for icons, headers, or abbreviations when pointer is over them
- Avoid leaving any hanging zeros (e.g. 5.0 vs 5)
- Align numeric values to the right while keeping all other values left-aligned

- Align both the time and the date in a date column (*double alignment*)

Mar 10, 2011	1:12 AM
Mar 9, 2011	11:42 PM

Result Due 	Status
February 21, 2011 2:22 PM	Sample drawn and sent

The outside facility should complete the processing of the test and send the results back on this date. (You may change this value)

### 5 To keep the table compact

- Avoid horizontal scrolling if at all possible (*or indicate that there are more columns*)
- Reduce white space by calculating the initial width of each column from the data in that column
- Allow resizing of columns (*but calculate a minimum and maximum*)
- Only the last column should be stretched to fill horizontal space
- Allow enough space between columns to separate them (*but not more*)


Patient ▼	Test	More >>
Hayes, Robert	MRI	
Kraft, Amber	Blood (BMP)	
Masterson, Jane	TSH	

### 6 For large tables

- Provide search functionality
- Permit re-sorting of tables with a click on the column header (*show sort icons and choose the default sorting carefully*)

### 7 To indicate editable columns

- Change the mouse pointer when the user moves over an editable field, and add an icon in the column header (e.g. a pen icon)

Patient ▼ 	Test
Morris, Monica	TSH
Parker, Amy	MRI
Peterson, Audrey	Blood (BMP)