

Safety Enhanced Design Brief

Reducing Wrong Patient Selection Errors

Wrong patient errors are a major issue for patient safety as patients may be harmed from not receiving the test or treatment they need, or from receiving a medication or treatment intended for someone else.

Careful design of the user interface can mitigate the problem by helping providers recall their patients identity, accurately select their name, and realize that an error has occurred before the order is submitted.

Icon can notify clinician that similar sounding names exist

Loading ...

When a table row is selected, use animated transition to focus user attention on the selected patient for a fraction of a second.

1 To help remember patients identity, and locate them in lists

- Never truncate patients' full names
- In addition to the name include photos and/or other patient information (e.g. date of birth, main complaint or diagnosis, etc.)

- Facilitate narrowing list by diagnosis or location e.g. ICU (could use floor plan)
- Provide sorting and search (especially for long lists)
- Notify clinicians if similar names exist *

List of Patients

Patient's name or id: Room#: Physician: Group by: none

(Show map)

Image	Name	Id	Sex	Age	Complaint	Admitted on	Room
	Walsh, Nancy	988242	F	75	Liver	7/24/2011	E435
	Johnson, Emma	988238	F	54	Muscle pain	7/23/2011	M300
	Holmes, Danny	988239	M	52	Kidney	7/23/2011	C200
	Fateesh, Aboud	988237	M	54	Burn	7/24/2011	C211
	Evans, Rachel	988236	F	58	Arthritis	7/24/2011	B423

Wing A (Cardiology) Wing B (Emergency) Wing C Wing D ICU

2 To help select a patient in a list

- Maximize font size and contrast to increase readability
- Highlight the row under pointer to make more clear what is selected
- Insert an inactive gap between rows to minimize mouse slips
- Allow selection via keyboard (e.g. typing "Sm" can filter the list to show only names starting with "Sm". It updates as users type)

- Provide access to short lists (e.g. the user's own patients, the patients of other providers the user is covering for, or custom lists created by the user by copying patients from other lists)
- See <https://sbmi.uth.edu/nccd/SED/Briefs/sedb-G02.htm> for more information about Effective Table Design

3 To help verify that the correct patient has been selected

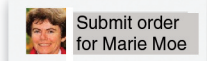
- Use animated transitions to focus user attention on the selected patient for a fraction of a second (e.g. leave the selected row visible on the screen while the screen is being fetched)

- Detect anomalies as order is being specified (e.g. Viagra for a young woman?)
- The banner with patient information should ALWAYS be visible (i.e. never cover it when opening a window such as order sets or other forms, unless it also includes the banner).

4 To help verify patient identity again when the order is submitted

- Consider shopping cart metaphor for several orders to be confirmed at once

- Display patient's information in the submit button
- Or place the submit button near the patient information



5 System Design

- Consider allowing only one patient chart opened at a time (exceptions may be allowed e.g. for comparisons - but you should warn users of danger and provide clear visual differentiation between the records e.g. different background colors)

- Allow and encourage the reporting of near misses and errors
- Consider identification technology such as barcode or RFID (Can facilitate login-logout of clinicians, or facilitate selection of nearby patient)