



Center for Clinical Trials

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Memorandum

To: Center for Clinical Trials Students, Staff, and Faculty

Fr: Curtis Meinert

Re: Tables 101: Table layout

Layout matters. If you want "proof" just compare the button layout in the two elevators in the BSPH to the 9th floor cafeteria. The number of the floor is on the buttons in the old elevator and beside them in the new elevator. The layout in the new elevator is horizontal and vertical in the old elevator.

Two bits says it takes you a nanosecond longer to find your floor in the new elevator than in the old one.

The problem with the layout in the new elevator is that the floor numbers are centered between the floor buttons. As a result, you are left confused as to whether you push the button in front or after the indicated number. To get "unconfused" you have to "eye down" to the first row of buttons and read up.

If you want more proof of the effect of layout on "read time" pay attention to those tickers running at the bottom of TV screens. Compare the time you need to figure out if the Orioles won by watching ESPN2 versus ESPNNews. On ESPN2 you see

NYY 6 Bal 7

On ESPNNews you see

NYY 6
Bal 7

The trouble with the ESPN2 layout is that the visual clue provided by spacing is deceiving. For a split second one takes the 6 as the score for Baltimore until you discover it is for the Yankees. My recommendation to ESPN2 is that they fire their graphic artist and hire a new one with a better eye for spacial relationships. Maybe then we would see

NYY 6 Bal 7

or better still

**NYY Bal
6 7**

Now with respect to tables, if we regard the length of a page as the y-axis and the width as the x-axis, then the first decision that the table master has to make is what goes on the x-axis.

Broadly, there are two classes of tables in multicenter trials: Those involving comparison of treatments and those involving comparison of clinics.

In regard to treatment, one has the option of running treatment down the page or across the top as illustrated in Panels A and B below.

Panel A

| Trt | % dead |
|------|--------|
| Test | 17 |
| Ctrl | 23 |

Panel B

| | Treatments | |
|--------|------------|------|
| | Test | Ctrl |
| % dead | 17 | 23 |

Similarly, if one has several test treatments as in the illustration below, the layout is as in panels A and B below.

Panel A

| Trt | % dead |
|-------|--------|
| Trt A | 21 |
| Trt B | 23 |
| Trt C | 20 |
| Ctrl | 20 |

Panel B

| | Treatments | | | Ctrl |
|--------|------------|-------|-------|------|
| | Trt A | Trt B | Trt C | |
| % dead | 21 | 23 | 20 | 20 |

Either layout works, so it comes down to preference and the arrangement considered "best". The preference, at least mine, is to array treatment as in Panel B. I think it is easier to compare by reading across instead of down, especially when the trial involves more than two treatment groups. In the example above one has to compare each of the three test-treated groups with the control-treated group and perhaps also each test-treated group with each of the other test-treated groups.

OK. So then what about clinic comparisons? If the layout is with treatment running across the top of the pages, why not have clinic running the same way? Maybe, but what about trials with lots of clinics? Further, even a trial that starts with a few clinics it may end up with lots of clinics. The CDP started with 5 and ended up with 55.

Consider the case of ADAPT. It started with four clinics and eventually grew to six, leading to the shoe-horning seen in the table cited with homework assignment # 1. There is, of course, the option of "turns" to accommodate more clinics. But even if one abides "turns" (I hate them) there is a limit to the columns available across a page. So for clinics in multicenter trials, the most robust design is with "clinic" on the y-axis.

One could, for the sake of consistency, also array treatment on the y-axis, but it is unlikely for a trial to have so many treatments as to deplete column space and rare for that number to increase once the trial has started. Besides "a foolish consistency is the hobgoblin of little minds" (Ralph Waldo Emerson).

So, where does all this leave the table master in regard to establishing layout principles for reports? Start with these:

1. Require all tables to be arrayed portrait-style
2. Require content of all tables to fit within established right, left, top, and bottom margin requirements
3. Array treatment on the x-axis for treatment comparisons
4. Array clinic on the y-axis for clinic comparisons

(Fri 10:27am) 15 Jul 05

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